Due to the limited number of changes required for coding instructions in 2009, the 2b Instruction Manual will not be reprinted this year. The 2b Errata for Year 2009 provides replacement pages for the 2008 2b Instruction Manual. Please discard the pages indicated on the errata cover sheet and insert the replacement pages provided. This will update the coding instructions for 2009 classification purposes.

<table>
<thead>
<tr>
<th>Page#</th>
<th>Content to be Corrected</th>
<th>Corrections</th>
</tr>
</thead>
<tbody>
<tr>
<td>4-5</td>
<td>Major revisions from previous manuals</td>
<td>Corrected page attached</td>
</tr>
<tr>
<td>17-20</td>
<td>Edit created code categories I610-I694 to include “bilateral”</td>
<td>Corrected page attached</td>
</tr>
<tr>
<td>35</td>
<td>Add “associated with” to the list of terms</td>
<td>Corrected page attached</td>
</tr>
<tr>
<td>80a</td>
<td>Add a new Intent of Certifier for A099 as the first category in Section III.</td>
<td>Corrected page attached</td>
</tr>
<tr>
<td>87</td>
<td>(ii) Replace 1st sentence</td>
<td>Corrected page attached</td>
</tr>
<tr>
<td>118</td>
<td>Delete the one-sentence explanation</td>
<td>Corrected page attached</td>
</tr>
<tr>
<td>119</td>
<td>Delete the Intent of Certifier for Pneumonia /Bronchopneumonia (#30)</td>
<td>Corrected page attached</td>
</tr>
<tr>
<td>138</td>
<td>Change in table contents</td>
<td>Corrected page attached</td>
</tr>
<tr>
<td>170</td>
<td>Change instruction letter from (c) to (b)</td>
<td>Corrected page attached</td>
</tr>
<tr>
<td>202</td>
<td>Instruction # 7, 1st sentence, change code span ending in A09 to A099</td>
<td>Corrected page attached</td>
</tr>
<tr>
<td>203</td>
<td>Instruction 8, b, delete “A chronic condition or”</td>
<td>Corrected page attached</td>
</tr>
</tbody>
</table>

continued....
## 2b Errata for Year 2009 continued…

<table>
<thead>
<tr>
<th>Page#</th>
<th>Content to be Corrected</th>
<th>Corrections</th>
</tr>
</thead>
<tbody>
<tr>
<td>204</td>
<td>Instructions 9 and 10, b, delete “A chronic condition or”</td>
<td>Corrected page attached</td>
</tr>
<tr>
<td>205</td>
<td>1st sentence, edit the span of codes to exclude I672 and I673. Instruction 11, b, delete “A chronic condition or”. Instruction 11, c, edit code spans and delete the modifier “chronic”</td>
<td>Corrected page attached</td>
</tr>
<tr>
<td>206</td>
<td>Change 1st example. Instruction 11, d, edit span of codes to exclude I672 and I673 and delete chronic.</td>
<td>Corrected page attached</td>
</tr>
<tr>
<td>210</td>
<td>Add “Etiology uncertain” to the list</td>
<td>Corrected page attached</td>
</tr>
<tr>
<td>288</td>
<td>Last example, change code for (b)</td>
<td>Corrected page attached</td>
</tr>
<tr>
<td>297</td>
<td>Add <strong>Exception</strong>: preceding the 3rd paragraph</td>
<td>Corrected page attached</td>
</tr>
<tr>
<td>348</td>
<td>Change span of codes beginning with A09 to A090</td>
<td>Corrected page attached</td>
</tr>
<tr>
<td>368</td>
<td>Instruction “b”, delete “chronic”</td>
<td>Corrected page attached</td>
</tr>
<tr>
<td>369</td>
<td>Delete instruction “c” and example and re-label instructions</td>
<td>Corrected page attached</td>
</tr>
<tr>
<td>371</td>
<td>Delete instruction “d” and examples and re-label instructions</td>
<td>Corrected page attached</td>
</tr>
<tr>
<td>372</td>
<td>Re-letter instruction “e” and “f” to “d” and “e”</td>
<td>Corrected page attached</td>
</tr>
<tr>
<td>373</td>
<td>Re-letter instruction “g” to “f”</td>
<td>Corrected page attached</td>
</tr>
<tr>
<td>394</td>
<td>Add “Bed and breakfast” to list</td>
<td>Corrected page attached</td>
</tr>
</tbody>
</table>
SECTION I

Introduction

The multiple cause-of-death codes are used as inputs to the ACME program (Automated Classification of Medical Entities) developed by NCHS to automatically select the underlying cause of death, and the TRANSAX program (Translation of Axes) used to produce multiple cause-of-death statistics, beginning with deaths occurring in 1968. As inputs, the computer programs require codes for each condition reported on the death certificate, usually in the order in which the information is recorded.

The outputs of the ACME program are the traditional underlying cause-of-death codes selected according to the selection and modification rules of the Classification, the same cause that would be selected using manual underlying cause-of-death coding instructions specified in Instruction Manual Part 2a. Thus, a single cause is associated with each decedent.

Using the same input codes, the TRANSAX program generates two sets of outputs: “entity-axis” codes that reflect the placement of each condition on the certificate for each decedent; and “record-axis” codes that, where appropriate, link two or more diagnostic conditions to form composite codes that are classifiable to a single code, according to the provisions of the Classification. Record axis codes are preferred for multiple cause tabulation to better convey the intent of the certifier, and to eliminate redundant cause-of-death information (see Instruction Manual Part 2f).
INSTRUCTIONS FOR CLASSIFYING MULTIPLE CAUSES OF DEATH, 2009

SECTION I  Introduction

Major revisions from previous manuals

1. Terms in the A09 category are no longer assumed to be noninfectious in developed countries. A09 has been expanded to include 4th characters; code assignments and code spans were corrected throughout the manual.

2. Section II, Part A, Created Codes, the created code categories involving multiple cerebrovascular diseases have been edited to also include the modifier “bilateral.”

3. Section II, Part C, Format, 2. Connecting terms, Not indicating a “due to” relationship, added “associated with” to list of terms implying that the conditions are meant to remain on the same line.

4. Section III, Intent of certifier, added a new category for A099 as a # 0. When reported due to infectious categories, A099 terms are assigned to A090; when reported due to noninfectious categories, A099 terms are assigned to K529.

5. Section III, Intent of certifier, #5. Organisms and Infections NOS (B99), corrected instruction a (1) (c) (ii) to allow assignment of certain modifiers from the Index (i.e. bacterial, infectious, etc).

6. Section III, Intent of certifier, #29. Varices NOS and Bleeding Varices NOS, deleted inappropriate explanation following 2nd example.

7. Section III, Intent of certifier, deleted instruction #30. Pneumonia and Bronchopneumonia. Since terms meaning immobility are now assigned to R263, this instruction can be handled by the automated system.

8. Section IV, Part A, instruction 8 h (4) (c), relabeled so that instruction is now correctly identified as a (b).

9. Section IV, Part F, Sequela, references to “chronic” were removed from sequela instructions for categories: E640-E649, E68, G09, I690-I698 and O97.

10. Section IV, Part F, Sequela, 10. I690-I698 Sequela of cerebrovascular disease, code spans were adjusted to exclude I672 and I673 from sequela instructions and example changed.

11. Section IV, Part G, Ill-defined and Unknown Causes, instruction 3. Unknown cause (R97), added “Etiology uncertain” to list of terms assigned to category R97.
INSTRUCTIONS FOR CLASSIFYING MULTIPLE CAUSES OF DEATH, 2009

SECTION I  Introduction

12. Section V, Part Q, 5. Intoxication (acute) NOS, added a header “Exception” that was inadvertently omitted preceding “intoxication (acute) NOS, “due to” drug(s)…..”.

13. Section V, Part S, 1. Sequela of injuries, poisoning and other consequences of external causes (T900-T983) and 2. Sequela of external causes (Y850-Y899), references to “chronic” were removed from instructions.

14. Appendix D, Code for Place of Occurrence, added “Bed and breakfast” to place code 0.

Other manuals relating to coding causes of death are:

Part 2a, NCHS Instructions for Classifying the Underlying Cause of Death, 2008 and 2a Errata for Year 2009

Part 2c, ICD-10 ACME Decision Tables for Classifying the Underlying Causes of Death, 2009

Part 2s, SuperMICAR Data Entry Instruction, 2008 and 2s Errata for Year 2009
B. MEDICAL CERTIFICATION

The U. S. Standard Certificate of Death provides spaces for the certifying physician, coroner, or medical examiner to record pertinent information concerning the diseases, morbid conditions, and injuries which either resulted in or contributed to death as well as the circumstances of the accident or violence which produced any such injuries. The medical certification portion of the death certificate includes items 32-44. It is designed to obtain the opinion of the certifier as to the relationship and relative significance of the causes, which he reports.

A cause of death is the morbid condition or disease process, abnormality, injury, or poisoning leading directly or indirectly to death. The underlying cause of death is the disease or injury, which initiated the train of morbid events leading directly or indirectly to death or the circumstances of the accident or violence, which produced the fatal injury. A death often results from the combined effect of two or more conditions. These conditions may be completely unrelated, arising independently of each other or they may be causally related to each other; that is, one cause may lead to another which in turn leads to a third cause, etc.

The order in which the certifier is requested to arrange the causes of death upon the certification form facilitates the selection of the underlying cause when two or more causes are reported. He is requested to report in Part I on line (a) the immediate cause of death and the antecedent conditions on lines (b), (c), and (d) which gave rise to the cause reported on I(a), the underlying cause being stated lowest in the sequence of events. However, no entry is necessary on I(b), I(c), or I(d) if the immediate cause of death, stated on I(a) describes completely the sequence of events. If the decedent had more than four causally related conditions relating to death, the certifier is requested to add lines (e), (f), etc., so all conditions related to the immediate cause of death are entered in Part I with only one condition to a line.

Any other significant condition which unfavorably influenced the course of the morbid process and thus contributed to the fatal outcome but not resulting in the underlying cause given in Part I is entered in Part II.
## INSTRUCTIONS FOR CLASSIFYING MULTIPLE CAUSES OF DEATH, 2009

### SECTION I

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
<th>Excludes</th>
<th>Includes</th>
</tr>
</thead>
<tbody>
<tr>
<td>I610</td>
<td>Intracerebral hemorrhage in hemisphere, subcortical</td>
<td>Any term indexed to I610 qualified as bilateral or multiple (I6100)</td>
<td>Any term indexed to I610 qualified as bilateral or multiple</td>
</tr>
<tr>
<td></td>
<td></td>
<td>*I6100 Bilateral or multiple intracerebral hemorrhages in hemisphere, subcortical</td>
<td>*I6100 Bilateral or multiple intracerebral hemorrhages in hemisphere, subcortical</td>
</tr>
<tr>
<td>I611</td>
<td>Intracerebral hemorrhage in hemisphere, cortical</td>
<td>Any term indexed to I611 qualified as bilateral or multiple (I6110)</td>
<td>Any term indexed to I611 qualified as bilateral or multiple</td>
</tr>
<tr>
<td></td>
<td></td>
<td>*I6110 Bilateral or multiple intracerebral hemorrhages in hemisphere, cortical</td>
<td>*I6110 Bilateral or multiple intracerebral hemorrhages in hemisphere, cortical</td>
</tr>
<tr>
<td>I612</td>
<td>Intracerebral hemorrhage in hemisphere, unspecified</td>
<td>Any term indexed to I612 qualified as bilateral or multiple (I6120)</td>
<td>Any term indexed to I612 qualified as bilateral or multiple</td>
</tr>
<tr>
<td></td>
<td></td>
<td>*I6120 Bilateral or multiple intracerebral hemorrhages, unspecified</td>
<td>*I6120 Bilateral or multiple intracerebral hemorrhages, unspecified</td>
</tr>
<tr>
<td>I613</td>
<td>Intracerebral hemorrhage in brain stem</td>
<td>Any term indexed to I613 qualified as bilateral or multiple (I6130)</td>
<td>Any term indexed to I613 qualified as bilateral or multiple</td>
</tr>
<tr>
<td></td>
<td></td>
<td>*I6130 Bilateral or multiple intracerebral hemorrhages in brain stem</td>
<td>*I6130 Bilateral or multiple intracerebral hemorrhages in brain stem</td>
</tr>
<tr>
<td>I614</td>
<td>Intracerebral hemorrhage in cerebellum</td>
<td>Any term indexed to I614 qualified as bilateral or multiple (I6140)</td>
<td>Any term indexed to I614 qualified as bilateral or multiple</td>
</tr>
<tr>
<td></td>
<td></td>
<td>*I6140 Bilateral or multiple intracerebral hemorrhages in cerebellum</td>
<td>*I6140 Bilateral or multiple intracerebral hemorrhages in cerebellum</td>
</tr>
<tr>
<td>I615</td>
<td>Intracerebral hemorrhage, intraventricular</td>
<td>Any term indexed to I615 qualified as bilateral or multiple (I6150)</td>
<td>Any term indexed to I615 qualified as bilateral or multiple</td>
</tr>
<tr>
<td></td>
<td></td>
<td>*I6150 Bilateral or multiple intracerebral hemorrhages, intraventricular</td>
<td>*I6150 Bilateral or multiple intracerebral hemorrhages, intraventricular</td>
</tr>
</tbody>
</table>
SECTION I

Introduction

I618 Other intracerebral hemorrhage
Excludes: Any term indexed to I618 qualified as bilateral or multiple (I6180)
*I6180 Bilateral or multiple other intracerebral hemorrhages
Includes: Any term indexed to I618 qualified as bilateral or multiple

I619 Intracerebral hemorrhage, unspecified
Excludes: Any term indexed to I619 qualified as bilateral or multiple (I6190)
*I6190 Bilateral or multiple intracerebral hemorrhages, unspecified
Includes: Any term indexed to I619 qualified bilateral or multiple

I630 Cerebral infarction due to thrombosis of precerebral arteries
Excludes: Any term indexed to I630 qualified as bilateral or multiple (I6300)
*I6300 Cerebral infarction due to bilateral or multiple thrombi of precerebral arteries
Includes: Any term indexed to I630 qualified as bilateral or multiple

I631 Cerebral infarction due to embolism of precerebral arteries
Excludes: Any term indexed to I631 qualified as bilateral or multiple (I6310)
*I6310 Cerebral infarction due to bilateral or multiple emboli of precerebral arteries
Includes: Any term indexed to I631 qualified as bilateral or multiple

I632 Cerebral infarction due to unspecified occlusion or stenosis of precerebral arteries
Excludes: Any term indexed to I632 qualified as bilateral or multiple (I6320)
*I6320 Cerebral infarction due to bilateral or multiple unspecified occlusions or stenosis of precerebral arteries
Includes: Any term indexed to I632 qualified as bilateral or multiple

I633 Cerebral infarction due to thrombosis of cerebral arteries
Excludes: Any term indexed to I633 qualified as bilateral or multiple (I6330)
*I6330 Cerebral infarction due to bilateral or multiple thrombi of cerebral arteries
Includes: Any term indexed to I633 qualified as bilateral or multiple.
### Section I

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
<th>Excludes:</th>
<th>Includes:</th>
</tr>
</thead>
<tbody>
<tr>
<td>I634</td>
<td>Cerebral infarction due to embolism of cerebral arteries</td>
<td>Any term indexed to I634 qualified as bilateral or multiple (I6340)</td>
<td>Cerebral infarction due to bilateral or multiple emboli of cerebral arteries</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Any term indexed to I634 qualified as bilateral or multiple</td>
</tr>
<tr>
<td>I635</td>
<td>Cerebral infarction due to unspecified occlusion or stenosis of cerebral arteries</td>
<td>Any term indexed to I635 qualified as bilateral or multiple (I6350)</td>
<td>Cerebral infarction due to bilateral or multiple unspecified occlusions or stenosis of cerebral arteries</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Any term indexed to I635 qualified as bilateral or multiple</td>
</tr>
<tr>
<td>I636</td>
<td>Cerebral infarction due to cerebral venous thrombosis, nonpyogenic</td>
<td>Any term indexed to I636 qualified as bilateral or multiple (I6360)</td>
<td>Cerebral infarction due to bilateral or multiple cerebral venous thrombi, nonpyogenic</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Any term indexed to I636 qualified as bilateral or multiple</td>
</tr>
<tr>
<td>I638</td>
<td>Other cerebral infarction</td>
<td>Any term indexed to I638 qualified as bilateral or multiple (I6380)</td>
<td>Bilateral or multiple other cerebral infarctions</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Any term indexed to I638 qualified bilateral or multiple</td>
</tr>
<tr>
<td>I639</td>
<td>Cerebral infarction, unspecified</td>
<td>Any term indexed to I639 qualified as bilateral or multiple (I6390)</td>
<td>Bilateral or multiple cerebral infarctions, unspecified</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Any term indexed to I639 qualified as bilateral or multiple</td>
</tr>
<tr>
<td>I64</td>
<td>Stroke, not specified as hemorrhage or infarction</td>
<td>Any term indexed to I64 qualified as bilateral or multiple (I6400)</td>
<td>Bilateral or multiple strokes, not specified as hemorrhage or infarction</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Any term indexed to I64 qualified as bilateral or multiple</td>
</tr>
</tbody>
</table>
SECTION I

I691  Sequelae of intracerebral hemorrhage
Excludes: Any term indexed to I691 qualified as bilateral or multiple (I6910)
*I6910  Sequela of bilateral or multiple intracerebral hemorrhages
Includes: Any term indexed to I691 qualified as bilateral or multiple

I693  Sequelae of cerebral infarction
Excludes: Any term indexed to I693 qualified as bilateral or multiple (I6930)
*I6930  Sequela of bilateral or multiple cerebral infarctions
Includes: Any term indexed to I693 qualified as bilateral or multiple

I694  Sequelae of stroke, not specified as hemorrhage or infarction
Excludes: Any term indexed to I694 qualified as bilateral or multiple (I6940)
*I6940  Sequela of bilateral or multiple strokes, not specified as hemorrhage or infarction
Includes: Any term indexed to I694 qualified as bilateral or multiple

J101  Influenza with other respiratory manifestations, influenza virus identified
Excludes: Influenza, flu, grippe (viral), influenza virus identified (without specified manifestations) (J1010)
*J1010  Influenza, flu, grippe (viral), influenza virus identified (without specified manifestations)

J111  Influenza with other respiratory manifestations, virus not identified
Excludes: Influenza, flu, grippe (viral), influenza virus not identified (without specified manifestations) (J1110)
*J1110  Influenza, flu, grippe (viral), influenza virus not identified (without specified manifestations)

J841  Other interstitial pulmonary diseases with fibrosis
Excludes: Chronic pneumonia, not elsewhere classified (J8410)
*J8410  Chronic pneumonia, not elsewhere classified

J849  Interstitial pulmonary disease, unspecified
Excludes: Interstitial pneumonia, not elsewhere classified (J8490)
*J8490  Interstitial pneumonia, not elsewhere classified
b. Not indicating a “due to” relationship

When conditions are separated by “and” or by another connecting term that does not imply a “due to” relationship, enter the codes for these conditions on the same line in the order that the conditions are reported on the certificate.

The following terms imply that conditions are meant to remain on the same line. They are separated by “and” or by another connecting term that does not imply a “due to” relationship:

- and consistent with
- accompanied by
- also
- associated with
- complicated by
- complicating

I (a) Acute bronchitis superimposed on J209 J439
(b) Emphysema
(c) Tobacco abuse (smokes 3 packs a day) F171 F179

Interpret “superimposed on” as “and.” Enter the code for the condition on I(b) as the second code on I(a). Do not enter a code on I(b).

I (a) MI I219
(b) ASHD I251
(c) Hypertension I10
(d) Diabetes E149 E142
II also diabetic nephropathy

Consider “also” as a connecting word that does not imply “due to” and code Part II as a continuation of I(d).

3. Condition entered above line I(a)

When a condition is reported on the certificate above line I(a), enter the code for this condition on I(a). Code the condition(s) entered on line I(a) on line I(b); then code the conditions entered on each of the remaining line(s) in Part I as though they had been reported on the succeeding lines.
Myocardial infarction
I (a) Pulmonary embolism I219
(b) Congestive heart failure I269
(c) Congenital heart disease I500
(d) Q249

Code the condition entered above I(a) on I(a), then code the condition entered on I(a) on I(b); then code the conditions entered on each of the remaining line(s) in Part I as though they had been reported on the succeeding lines.

4. Condition reported between lines in Part I

When a condition is reported between I(a) and I(b) or I(b) and I(c) or I(c) and I(d), without a connecting term, enter the code for this condition on the following “due to” line. Code the conditions entered on each of the remaining line(s) in Part I as though they had been reported on the succeeding line.

I (a) Pneumonia J189
(b) Bronchitis J40
(c) Emphysema J439
(d) Cancer of lung C349

Code the condition reported between lines I(a) and I(b) in the next “due to” position, and move the codes for conditions reported on lines I(b) and I(c) downward.

When a condition is reported between I(a) and I(b) or I(b) and I(c) or I(c) and I(d) with a connecting word, consider as a continuation of the line above and code accordingly unless there is a definite indication that it is a continuation of the line below.

I (a) Cerebral hemorrhage I619 I64
(c) CVA
(b) Cerebral arteriosclerosis I672

Code the condition entered between I(a) and I(b) as a continuation of I(a).

I (a) Cerebral hemorrhage I619
(c) CVA
(b) Cerebral arteriosclerosis I672 I64

Since the certifier indicated by an arrow that the condition entered between I(a) and I(b) was a continuation of I(b), code the CVA on I(b).
0. Other and unspecified gastroenteritis and colitis of unspecified origin (A099)

a. Code A090 (Gastroenteritis and colitis of infectious origin)

When reported due to:

A000-B99
R75
Y431-Y434
Y632
Y842

   I (a) Enteritis                        A090
   (b) Listeriosis                      A329

Code I(a) gastroenteritis and colitis of infectious origin, A090, since enteritis is reported due to a condition classified to A329.

b. Code K529 (Noninfective gastroenteritis and colitis, unspecified)

When reported due to:

C000-K929
L272
M000-N999
P000-R749
R760-Y430
Y435-Y631
Y633-Y841
Y843-Y899

   I (a) Enteritis                        K529
   (b) Abscess of intestine               K630

Code I(a) noninfective gastroenteritis and colitis, unspecified, K529, since enteritis is reported due to a condition classified to K630.

I (a) Colitis                           A099

Code I(a) gastroenteritis and colitis of unspecified origin, A099, as indexed.
(i) If a single code is provided for the infectious or inflammatory condition modified by the condition classified to A49 or B34, use this code. Do not assign a separate code for the condition classifiable to A49 or B34. It may be necessary to use “due to” or “in” in the Index to assign the appropriate code.

I (a) E. coli diarrhea                A044

**Code** as indexed under Diarrhea, due to, Escherichia coli.

I (a) Pneumonia                    J129

(b) Viral infection

**Code** as indexed under Pneumonia, viral.

I (a) Meningitis and sepsis        G000 A413

(b) H. influenzae

**Code** as indexed under Meningitis, Haemophilus (influenzae) and Septicemia, Haemophilus influenzae.

I (a) Sepsis with staph             A412

**Code** as staphylococcal sepsis as indexed under Septicemia, staphylococcal.

I (a) Pneumonia c MRSA              J152

**Code** as methicillin resistant staphylococcal aureus pneumonia as indexed under Pneumonia, MRSA.

(ii) If (i) does not apply, and the Index provides a code for the infectious or inflammatory condition qualified as “bacterial,” “infectious,” “infective,” or “viral,” assign the appropriate code based on the reported type of organism. Do not assign a separate code for the condition classified to A49 or B34.

I (a) Coxsackie virus pneumonia    J128

**Coxsackie virus** is a specified virus. **Code** as indexed under Pneumonia, viral, specified NEC.
SECTION III  

Intent of Certifier

I (a) Peritonitis K650
   (b) Campylobacter

Campylobacter is a specified bacteria. Code as indexed under Peritonitis, bacterial.

I (a) Pneumonia with coxsackie virus J128

Code as coxsackie virus pneumonia. Since coxsackie virus is a specified virus, code as indexed under Pneumonia, viral, specified NEC.

(iii) If (i) and (ii) do not apply, assign the NOS code for the infectious or inflammatory condition. Do not assign a separate code for the condition classified to A49 or B34.

I (a) Klebsiella urinary tract infection N390

The Index does not provide a code for Infection, urinary tract specified as bacterial, infectious, infective, or Klebsiella. Therefore, code infection, urinary tract.

I (a) Pyelonephritis N12
   (b) Staphylococcus

The Index does not provide a code for pyelonephritis specified as bacterial, infectious, infective, or staphylococcal. Therefore, code pyelonephritis as indexed.

I (a) Pyelonephritis and pseudomonas N12

The Index does not provide a code for pyelonephritis specified as bacterial, infectious, infective or pseudomonas. Therefore, code pyelonephritis as indexed.
28. Cataract (H269)

   Code H264 (Secondary cataract):

   When reported due to:

   A1690      H269
   B200-B24   H579
   E100-E149  R54
   E160-E162  R75
   E711       T66
   E742       Y493
   E830       Y540
   E835       Y576
   H264

   I  (a) CVA                     I64
      (b) Cataract                 H264
      (c) Diabetes                 E149

   Code I(b), secondary cataract, H264, since reported due to diabetes (E149).
29. Varices NOS and Bleeding Varices NOS (I839)

   Code (a) I859 (Esophageal varices) or
        (a) I850 (Bleeding esophageal varices):

When reported due to or on same line with:

Alcoholic diseases classified to: F101-F109
Liver diseases classified to: B150-B199, B251, B942, K700-K769
Toxic effect of alcohol classified to: T510-T519, T97

   I (a) Varices            I859
        (b) Cirrhosis of liver  K746

   I (a) Bleeding varices   I850
        (b) Cirrhosis of liver  K746
30. **DELETED:** Pneumonia in J188 or J189
   Bronchopneumonia (J180)
   (See page 4, Major revisions)
31. **Pneumoconiosis (J64)**

**Code** J60 (Coal worker’s pneumoconiosis):

When **Occupation is reported as**:

- Coal miner
- Coal worker
- Miner

**Occupation: Coal Miner**

I (a) Bronchitis J40
(b) Pneumoconiosis J60
SECTION III  Intent of Certifier

48. Intracranial Nontraumatic Hemorrhage of Fetus and Newborn (P52)

Code P10 (Intracranial laceration and hemorrhage due to birth injury) with the appropriate fourth character:

When reported due to:

P030 - P039
P100 - P112
P119
P130 - P131
P159

Male, 9 hours
I (a) Cerebral hemorrhage P101
   (b) Fractured skull during birth P130
   (c)

Code I(a) cerebral hemorrhage due to birth injury, P101, since reported due to a fracture skull occurring during birth.

Female, 2 weeks
I (a) Cerebral hemorrhage P101
   (b) Birth injury P159
   (c)

Code I(a) cerebral hemorrhage due to birth injury, P101.
49. Septal Defect, (atrial), (auricular), (heart), (ventricular), (Q210, Q211, Q212, Q219)

Code I510 (Acquired septal defect) providing there is no indication the defect is congenital:

a. When reported due to:

<table>
<thead>
<tr>
<th>Code Range</th>
<th>Code Range</th>
<th>Code Range</th>
<th>Code Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>A000-A099</td>
<td>I400-I519</td>
<td>N990-N999</td>
<td>R502-R509</td>
</tr>
<tr>
<td>A181</td>
<td>I700-180</td>
<td>P000-P049</td>
<td>R53-R54</td>
</tr>
<tr>
<td>A200-B89</td>
<td>J82-J989</td>
<td>P100-Q079</td>
<td>R560-R609</td>
</tr>
<tr>
<td>B908-E899</td>
<td>K20-K929</td>
<td>Q240-Q249</td>
<td>R634-R635</td>
</tr>
<tr>
<td>F100-F199</td>
<td>L89</td>
<td>Q260-Q349</td>
<td>R64</td>
</tr>
<tr>
<td>G000-G419</td>
<td>L97</td>
<td>Q380-Q459</td>
<td>R688-R799</td>
</tr>
<tr>
<td>G450-G459</td>
<td>L984</td>
<td>Q600-Q799</td>
<td>R826</td>
</tr>
<tr>
<td>G500-G729</td>
<td>M000-M1990</td>
<td>Q850-R098</td>
<td>R893</td>
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<tr>
<td>G900-G98</td>
<td>M300-M549</td>
<td>R11</td>
<td>S000-Y899</td>
</tr>
<tr>
<td>H650-H839</td>
<td>M800-M959</td>
<td>R160-R18</td>
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</tr>
<tr>
<td>I00-I029</td>
<td>N000-N399</td>
<td>R222</td>
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<tr>
<td>I10-I339</td>
<td>N600-N96</td>
<td>R300-R398</td>
<td></td>
</tr>
</tbody>
</table>

b. When reported on the same line with:

I110-I119
I130-I139
I200-I339
I400-I519

I (a) Cardiac arrest I469
(b) Ventricular septal defect I510
(c) Myocardial infarction I219
SECTION III

Intent of Certifier

I (a) Metastatic cancer of pleura  C782
(b) Metastatic melanoma of back  C435

Code I(a) to secondary neoplasm of pleura since pleura is on the list of common sites of metastases. Code I(b) to melanoma of back (C435) from the site list under melanoma.

(3) If a morphology implying site and an independent anatomical site are both qualified as metastatic, code to secondary malignant neoplasm of each site.

I (a) Metastatic colonic and renal cell carcinoma  C785  C790

Code both sites as secondary.

(4) If more than one site with a morphology of C80 is mentioned code as follows:

(a) If all but one site is qualified as metastatic and/or appear on the list of common sites of metastases, including lung, code to primary neoplasm of the site that is not qualified as metastatic or not on the list of common sites of metastases, irrespective of the order of entry or whether it is in Part I or Part II. Code all other sites as secondary.

I (a) Metastatic carcinoma of stomach  C788
(b) Carcinoma of gallbladder  C23
(c) Metastatic carcinoma of colon  C785

Code primary carcinoma of gallbladder since it is the only site not specified as metastatic. Assign a primary code on I(b) and secondary codes on I(a) and I(c).

I (a) Metastatic carcinoma of stomach  C788
(b) Metastatic carcinoma of lung  C780
II Carcinoma of colon  C189

Code I(a) and I(b) secondary and code primary carcinoma of colon in Part II since this is the only malignant neoplasm not qualified as metastatic, even though it is in Part II.
SECTION III

Intent of Certifier

I (a) Cancer of kidney                  C64
     (b) Metastatic cancer of prostate   C798

Code I(a) primary cancer of kidney since the only other site on the record is qualified as metastatic. Code I(b) secondary cancer of prostate since it is qualified as metastatic.

I (a) Metastatic cancer of ovary        C796
     II Cancer of colon                 C189

Code I(a) secondary and code part II primary. There are two sites reported and one is qualified as metastatic while the second site is not reported metastatic.

(b) If all sites are qualified as metastatic and/or are on the list of common sites of metastases, including lung, code to secondary malignant neoplasm of all reported sites.

I (a) Metastatic cancer of stomach      C788
     (b) Metastatic cancer of breast     C798
     (c) Metastatic cancer of lung       C780

Code secondary neoplasm of each site listed. All sites are reported as metastatic.

I (a) Metastatic carcinoma of ovary     C796
     (b) Carcinoma of lung              C780
     (c) Metastatic pancreatic carcinoma C788

Code to secondary malignant neoplasm of each site. Lung is on the list of common sites of metastases and ovary and pancreas are both reported as metastatic.

I (a) Metastatic stomach cancer         C788
     (b) Lung cancer                    C780

Code to secondary malignant neoplasm of each site. Lung is on the list of common sites of metastases and stomach cancer is reported as metastatic.

I (a) Carcinoma of spine               C795
     (b) Metastatic lung cancer         C780

Code to secondary malignant neoplasm of each site. Spine is on the list of common sites of metastases and lung is reported as metastatic.
SECTION III

5. **B941 Sequela of viral encephalitis**

Use this subcategory for the classification of viral encephalitis (conditions in A830-A839, A840-A849, A850-A858, A86) if:

a. A statement of a late effect or sequela of the viral encephalitis is reported.

   I (a) Late effects of viral encephalitis B941

   **Code** sequela of viral encephalitis as indexed.

b. A chronic condition or a condition with a duration of one year or more that was due to the viral encephalitis is reported.

   I (a) Chronic brain syndrome F069
   (b) Viral encephalitis B941

   **Code** sequela of viral encephalitis, since a resultant chronic condition is reported.

c. The viral encephalitis is stated to be ancient, history of, old, remote, or the interval between onset of the viral encephalitis and death is indicated to be one year or more whether or not the residual (late) effect is specified.

   I (a) St. Louis encephalitis 1 yr B941

   **Code** sequela of viral encephalitis, since a duration of 1 year is reported.

   I (a) Old viral encephalitis B941

   **Code** sequela of viral encephalitis, since it is stated “old.”

d. Brain damage, cerebral fungus, CNS damage, epilepsy, hydrocephalus, mental retardation, paralysis (G810-G839) is reported due to the viral encephalitis.

   I (a) Paralysis G839
   (b) Viral encephalitis B941

   **Code** sequela of viral encephalitis since paralysis is reported due to the viral encephalitis.
6. **B942 Sequela of viral hepatitis**

   Use this subcategory for the classification of viral hepatitis (conditions in B150-B199) if:

   A statement of a late effect or sequela of the viral hepatitis is reported.

7. **B948 Sequela of other specified infectious and parasitic diseases**

   **B949 Sequela of unspecified infectious and parasitic diseases**

   Use B948 for the classification of other specified infectious and parasitic diseases (conditions in A000-A099, A200-A289, A310-A70, A740-A799, A811-A829, A870-B09, B250-B89) and

   Use B949 for the classification of only the terms “infectious disease NOS” and “parasitic disease NOS” if:

   a. A statement of a late effect or sequela of the infectious or parasitic disease is reported.

   b. The infectious or parasitic disease is stated to be ancient, arrested, cured, healed, history of, inactive, old, quiescent, or remote, whether or not the residual (late) effect is specified, unless there is evidence of activity of the disease.

   c. A chronic condition or a condition with a duration of one year or more that was due to the infectious or parasitic disease is reported.

   I  (a) Reye’s syndrome             1 yr             G937
      (b) Chickenpox                   B948

   I  (a) Chronic brain syndrome     F069
      (b) Meningococcal encephalitis  B948

   d. There is indication the interval between onset of the infectious or parasitic disease and death was one year or more, whether or not the residual (late) effect is specified.
8. **E640-E649 Sequela of malnutrition and other nutritional deficiencies**

<table>
<thead>
<tr>
<th>Use Sequela Code</th>
<th>For Categories</th>
</tr>
</thead>
<tbody>
<tr>
<td>E640</td>
<td>E40-E46</td>
</tr>
<tr>
<td>E641</td>
<td>E500-E509</td>
</tr>
<tr>
<td>E642</td>
<td>E54</td>
</tr>
<tr>
<td>E643</td>
<td>E550-E559</td>
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<tr>
<td>E648</td>
<td>E51-E53</td>
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<td></td>
<td>E56-E60</td>
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<tr>
<td></td>
<td>E610-E638</td>
</tr>
<tr>
<td>E649</td>
<td>E639</td>
</tr>
</tbody>
</table>

Use these subcategories for the classification of malnutrition and other nutritional deficiencies (conditions in E40-E639) if:

a. A statement of a late effect or sequela of malnutrition and other nutritional deficiencies (E40-E639) is reported.

   I (a) Cardiac arrest I469
   (b) Sequela of malnutrition E640

b. A condition with a duration of one year or more is qualified as rachitic or that was due to rickets (E55.-) is reported.

   I (a) Scoliosis 3 years M419
   (b) Rickets 3 years E643
9. **E68 Sequela of hyperalimentation**

Use this category for the classification of hyperalimentation (conditions in E67 and hyperalimentation NOS in R632) if:

a. A statement of a late effect or sequela of the hyperalimentation is reported.

b. A condition with a duration of one year or more that was due to hyperalimentation is reported.

10. **G09 Sequela of inflammatory diseases of central nervous system**

Use this category for the classification of intracranial abscess or pyogenic infection (conditions in G000-G009, G030-G049, G060-G069, G08) if:

a. A statement of a late effect or sequela of the condition in G000-G009, G030-G049, G060-G069, G08 is reported.

b. A condition with a duration of one year or more that was due to the condition in G000-G009, G030-G049, G060-G069, G08 is reported.

c. The condition in G000-G009, G030-G049, G060-G069, G08 is stated to be ancient, history of, old, remote, or the interval between onset of this condition and death is indicated to be one year or more, whether or not the residual (late) effect is specified.

d. Brain damage, cerebral fungus, CNS damage, epilepsy, hydrocephalus, mental retardation, paralysis (G810-G839) is reported due to a condition in G000-G009, G030-G049, G060-G069, G08.

<table>
<thead>
<tr>
<th>I</th>
<th>Hydrocephalus</th>
<th>G919</th>
</tr>
</thead>
<tbody>
<tr>
<td>(a)</td>
<td>Meningitis</td>
<td>G09</td>
</tr>
</tbody>
</table>
11. **I690-I698 Sequela of cerebrovascular disease**

Use this category for the classification of cerebrovascular disease (conditions in I600-I64, I670-I671, I674-I679) if:

a. A statement of a late effect or sequela of a cerebrovascular disease is reported.

   I (a) Sequela of cerebral infarction I693

   **Code sequela of cerebral infarction as indexed.**

b. A condition with a duration of one year or more that was due to one of these cerebrovascular diseases is reported.

   I (a) Hemiplegia 1 year G819
   (b) Intracranial hemorrhage I692

   **Code sequela of other nontraumatic intracranial hemorrhage since the residual effect (hemiplegia) has a duration of one year.**

c. The condition in I600-I64, I670-I671, I674-I679 is stated to be ancient, history of, old, remote, or the interval between onset of this condition and death is indicated to be one year or more, whether or not the residual (late) effect is specified.

   I (a) Brain damage G939
   (b) Remote cerebral thrombosis I693

   **Code sequela of cerebral thrombosis since the cerebral thrombosis is reported as remote.**

   I (a) Old intracerebral hemorrhage I691

   **Code sequela of intracerebral hemorrhage since the intracerebral hemorrhage is stated as old.**
I (a) Cerebrovascular occlusion    6 yrs    I693

Code sequela of cerebrovascular occlusion since the duration is one year or more.

I (a) History of CVA    I694

Code sequela of CVA since “history of” CVA is reported.

d. The condition in I600-I64, and I670-I671, I674-I679 is reported with paralysis (any) stated to be ancient, history of, old, remote, or the interval between onset of this condition and death is indicated to be one year or more whether or not the residual (late) effect is specified.

I (a) CVA with old hemiplegia    I694    G819

Code sequela of CVA since it is reported with hemiplegia stated as old.

12. O97 Sequela of direct obstetric cause

Use this category for the classification of a direct obstetric cause (conditions in O00-O927) if:

a. A statement of a late effect or sequela of the direct obstetric cause is reported.

b. A condition with a duration of one year or more that was due to the direct obstetric cause is reported.
(4) Ill-defined and unspecified cause of mortality (R99)

**Includes:**
- Bone(s) found
- Dead on arrival (DOA)
- Diagnosis deferred
- Died without doctor in attendance
- Inquest pending
- Natural cause(s)
- Natural causes, cause unknown
- Natural causes uncertain
- Natural causes undetermined
- Natural causes unknown
- Natural causes unspecified
- Natural disease undetermined
- No doctor
- Pending examination (any type)
  - (pathological) (toxicological)
- Pending investigation (police)
- Skeleton
- Uncertain natural causes
- Undetermined natural causes
- Undetermined natural disease
- Undiagnosed disease
- Unknown natural causes
- Unspecified natural causes

**Excludes:**
- Unknown cause (R97)

I (a) DOA
  (b) Cause unknown

I (a) No doctor
  (b) Pending investigation

I (a) Cause unknown
  (b) Pending pathological examination

I (a) Natural causes, cause unknown
3. **Unknown cause (R97)**

**Includes:**

- Cause not found
- Cause unknown
- Cause undetermined
- Could not be determined
- Etiology never determined
- Etiology not defined
- Etiology uncertain
- Etiology unexplained
- Etiology unknown
- Etiology undetermined
- Etiology unspecified
- Final event undetermined
- Immediate cause not determined
- Immediate cause unknown
- Immediate cause not determined
- Immediate cause not specified
- Immediate cause
- ? Cause
- ? Etiology
- Etiology

(a) Use this category for the classification of the listed terms except when the term in R97 is reported.

(1) On the same line with and preceding a condition qualified as “possible,” “probable,” etc.

(1) In “Describe How Injury Occurred” (Item 43) of the death certificate.

In such cases, **do not** enter a code for the term in R97.

| I (a) | G. I. hemorrhage | K922 |
| I (b) | Cause unknown | R97 |
| I (c) | Carcinomatosis | C80 |
| II (a) | Unknown cause | R97 |
| I (a) | Intestinal obstruction | K566 |
| I (b) | Unknown, possibly cancer | C80 |
| I (a) | Amyloidosis | E859 |
| I (b) | Chronic ulcerative colitis | K519 |
| II | Cirrhosis of liver, cause unknown | K746 R97 |
a. Carbon monoxide poisoning

Code carbon monoxide poisoning from motor vehicle exhaust gas to noncollision motor vehicle accident (traffic) according to type of motor vehicle involved unless there is indication the motor vehicle was not in transit. Consider statements of “sleeping in car,” “sitting in parked car,” “in parked car” or place stated as “garage” to indicate the motor vehicle was “not in transit.” Assume “not in transit” in self-harm (intentional) and self-inflicted cases.

Place

<p>| | | |</p>
<table>
<thead>
<tr>
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</thead>
<tbody>
<tr>
<td>I</td>
<td>(a) Carbon monoxide poisoning</td>
<td>T58 &amp;V892</td>
</tr>
<tr>
<td></td>
<td>(b)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(c)</td>
<td></td>
</tr>
<tr>
<td>II</td>
<td>Motor vehicle exhaust gas</td>
<td>T58</td>
</tr>
</tbody>
</table>

Code I(a) nature of injury for carbon monoxide and most specific external cause. Code external cause to person injured in unspecified motor vehicle accident, traffic. Refer to Table of land transport accidents under Victim and mode of transport. Select occupant of motor vehicle (traffic), noncollision transport accident. Code nature of injury for exhaust gas in Part II.

Place

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<table>
<thead>
<tr>
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</thead>
<tbody>
<tr>
<td>9</td>
<td>I (a) Poisoned by carbon monoxide</td>
<td>T58 &amp;X47</td>
</tr>
<tr>
<td></td>
<td>II Sitting in parked car</td>
<td></td>
</tr>
</tbody>
</table>

Code I(a) nature of injury and external cause for carbon monoxide from Table of drugs and chemicals. The external cause includes poisoning by gas, motor exhaust, not in transit.

Place

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
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</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>I (a) Carbon monoxide inhalation</td>
<td>T58 &amp;X67</td>
</tr>
<tr>
<td></td>
<td>II Found in garage. Suicide.</td>
<td></td>
</tr>
</tbody>
</table>

Code I(a) nature of injury and external cause for carbon monoxide from Table of drugs and chemicals. The external cause includes intentional self-harm poisoning by gas, motor exhaust, not in transit.
b. Inhalation and sniffing sprays and aerosol substances

When inhalation of sprays, aerosol substances, etc. is reported, code to the appropriate accidental poisoning category for the external cause.

Exceptions:

“Glue sniffing” and “cocaine sniffing” are indexed to mental and behavioral disorders due to psychoactive substance use (F182, F142).

Place I (a) Toxicity T659 &X46
0 (b) Inhalation of aerosol substance T659
(c)
MOD II Breathed “PAM” (freon) in plastic bag T535
A Accident 
Home

Code I(a) nature of injury code for toxicity as indexed. Code external cause to accidental inhalation of freon gas or spray (X46), the specific substance indicated by the certifier. Code nature of injury for aerosol on I(b) and freon in Part II.

c. Intoxication by certain substances or toxic poisoning due to disease

When ammonia intoxication (NH₃), carbon dioxide intoxication (CO₂), or toxic poisoning is reported due to a disease, do not code to poisoning. When due to a disease, code ammonia intoxication to R798, carbon dioxide intoxication to R068, and toxic poisoning to R688.

I (a) Ammonia intoxication R798
(b) Cirrhosis of liver K746

Code I(a) as indexed, Intoxication, ammonia, due to disease (R798).

I (a) Carbon dioxide intoxication R068
(b) Chronic pulmonary emphysema J439

Code I(a) as indexed, Intoxication, carbon dioxide, due to disease (R068).

I (a) Toxic poisoning R688
(b) Gastroenteritis A099

Code I(a) as indexed, Poisoning, toxic, from a disease (R688).
5. Intoxication (acute) NOS

When intoxication (acute) NOS is reported, code the nature of injury code for alcohol as indexed and the appropriate external cause for alcohol poisoning.

When intoxication (acute) NOS is reported “due to” drugs or poisonous substances, code the intoxication to the nature of injury code for the first substance reported in the “due to” position.

**Exception:**

Intoxication (acute) NOS “due to” drug(s) with indication the drug was being given for therapy.

\[
\text{Place I (a) Intoxication} \quad \text{T519 &X45}
\]

Code intoxication as indexed to T519 and code the external cause code for alcohol poisoning X45. Precede the external cause code with an ampersand.

\[
\text{Place I (a) Acute intoxication} \quad \text{T404}
\]

\[
\text{Place I (b) Darvon & alcohol poisoning} \quad \text{T404 &X62 T519 X65}
\]

**MOD II**

**Suicide**

Code I(a) T404, the nature of injury code for darvon since this is the first substance reported in the “due to” position. Code I(b) to the nature of injury and external cause code for darvon poisoning and alcohol poisoning. Precede the external cause code for darvon poisoning with an ampersand.

Do not ampersand external cause code for alcohol poisoning.

\[
\text{Place I (a) Intoxication} \quad \text{T58}
\]

\[
\text{Place I (b) Carbon monoxide inhalation} \quad \text{T58 &X47}
\]

**MOD II**

**Accident**

Code I(a) T58, the nature of injury for the substance (carbon monoxide) reported in “due to” position. Code I(b) to the nature of injury and external cause code for carbon monoxide inhalation. Precede the external cause code with an ampersand.

**NOTE:** See Appendix H for additional drug examples.
R. Complications of medical and surgical care (Y40-Y84)

Code any complication, abnormal reaction, misadventure to patient, or other adverse effect that occurred as a result of or during medical care except obstetrical procedures to the appropriate category in Chapters I-XIX, but take into account the medical care if it modifies the code assignment. Assign the appropriate external cause (E-code) pertaining to the medical care regardless of whether the complication is classified to Chapters I-XVIII or to Chapter XIX.

The E-code distinguishes between:

1. Drugs, medicaments and biological substances causing adverse effects in therapeutic use (Y40-Y59).

2. Misadventures to patients during surgical and medical care (Y60-Y69).

3. Surgical and other medical procedures as the cause of abnormal reaction of the patient, or of later complication, without mention of misadventure at the time of the procedure (Y83-Y84).
### Effects of External Cause of Injury and
**External Causes of Injury and Poisoning**
**Complications of Medical and Surgical Care**

<table>
<thead>
<tr>
<th>The first entry on the lowest line in Part I is classifiable to</th>
<th>And a condition classifiable to one of the following codes is reported on the same line or in Part II</th>
</tr>
</thead>
<tbody>
<tr>
<td>R590 Localized enlarged lymph nodes</td>
<td>B270-B279 C810-C969</td>
</tr>
<tr>
<td>R591 Generalized enlarged lymph nodes</td>
<td>B24 B270-B279 B588 C810-C969</td>
</tr>
<tr>
<td>R599 Enlarged lymph nodes, unspecified</td>
<td>B270-B279 C810-C969</td>
</tr>
<tr>
<td>R600 Localized edema</td>
<td>E43 E877</td>
</tr>
<tr>
<td>R601 Generalized edema</td>
<td>N000-N058 N059</td>
</tr>
<tr>
<td>R609 Edema, unspecified</td>
<td>E43 E877 N000-N058</td>
</tr>
<tr>
<td>R628 Other lack of expected normal physiological development</td>
<td>B24 E45 E46</td>
</tr>
<tr>
<td>R630 Anorexia</td>
<td>F500</td>
</tr>
<tr>
<td>R631 Polydipsia</td>
<td>E232 N251</td>
</tr>
<tr>
<td>R64 Cachexia</td>
<td>B24 E41 E46</td>
</tr>
<tr>
<td>R730 Abnormal glucose tolerance test</td>
<td>E100-E162 E891</td>
</tr>
<tr>
<td>R780 Finding of alcohol in blood</td>
<td>F101-F109</td>
</tr>
<tr>
<td>The first entry on the lowest line in Part I is classifiable to</td>
<td>And a condition classifiable to one of the following codes is reported on the same line or in Part II</td>
</tr>
<tr>
<td>---------------------------------------------------------------</td>
<td>--------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>R788 Finding of other specified substances, not normally found in blood</td>
<td>A000-A079&lt;br&gt;A090-A499&lt;br&gt;J13-J159&lt;br&gt;J180-J189</td>
</tr>
<tr>
<td>R798 Other specified abnormal findings of blood chemistry</td>
<td>E100&lt;br&gt;E101&lt;br&gt;E102-E106&lt;br&gt;E107&lt;br&gt;E109&lt;br&gt;E110&lt;br&gt;E111&lt;br&gt;E112-E116&lt;br&gt;E117&lt;br&gt;E119&lt;br&gt;E120&lt;br&gt;E121&lt;br&gt;E122-E126&lt;br&gt;E127&lt;br&gt;E129&lt;br&gt;E130&lt;br&gt;E131&lt;br&gt;E132-E136&lt;br&gt;E137&lt;br&gt;E139&lt;br&gt;E140&lt;br&gt;E141&lt;br&gt;E142-E146&lt;br&gt;E147&lt;br&gt;E149</td>
</tr>
<tr>
<td>R799 Abnormal finding of blood chemistry, unspecified</td>
<td>E101&lt;br&gt;E107&lt;br&gt;E111&lt;br&gt;E117&lt;br&gt;E121&lt;br&gt;E127&lt;br&gt;E131&lt;br&gt;E137&lt;br&gt;E141&lt;br&gt;E147</td>
</tr>
<tr>
<td>R80 Isolated proteinuria</td>
<td>C900&lt;br&gt;D511&lt;br&gt;D649&lt;br&gt;N000-N079&lt;br&gt;N170-N19&lt;br&gt;N250-N289</td>
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<tr>
<td>R81 Glycosuria</td>
<td>E100-E149&lt;br&gt;E748</td>
</tr>
<tr>
<td>R823 Hemoglobinuria</td>
<td>B508&lt;br&gt;B54&lt;br&gt;D595-D596</td>
</tr>
<tr>
<td>Effect</td>
<td>Code</td>
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<tr>
<td>--------------------------------------------</td>
<td>--------</td>
</tr>
<tr>
<td>Serum hepatitis</td>
<td>B169</td>
</tr>
<tr>
<td>Blood transfusion</td>
<td>Y640</td>
</tr>
<tr>
<td>Leukemia</td>
<td>&amp;C959</td>
</tr>
</tbody>
</table>

Serum hepatitis is a misadventure occurring during a blood transfusion. Code I(a) B169, serum hepatitis, and I(b) Y640, Contaminated medical or biological substance transfused or infused. Code I(c) as indexed and precede with an ampersand to indicate the reason for the transfusion.

<table>
<thead>
<tr>
<th>Effect</th>
<th>Code</th>
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</thead>
<tbody>
<tr>
<td>Burns</td>
<td>T300</td>
</tr>
<tr>
<td>Radiation therapy</td>
<td>&amp;Y632</td>
</tr>
<tr>
<td>Cancer of esophagus</td>
<td>&amp;C159</td>
</tr>
</tbody>
</table>

Code I(a) T300, radiation burns. Code I(b) Y632, Overdose of radiation given during therapy. Code I(c) as indexed and precede with an ampersand to indicate the reason for the radiation.

<table>
<thead>
<tr>
<th>Effect</th>
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<tbody>
<tr>
<td>Rib fracture</td>
<td>T818</td>
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<tr>
<td>Cardiopulmonary resuscitation</td>
<td>&amp;Y658</td>
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<tr>
<td>Pulmonary embolism</td>
<td>&amp;I269</td>
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</tbody>
</table>

Rib fracture due to cardiopulmonary resuscitation is considered a misadventure. Code I(a) Complications, medical procedure, specified NEC T818. Code I(b) Misadventure, specified type Y658. Code I(c) as indexed and precede with an ampersand to indicate the reason for cardiopulmonary resuscitation.

<table>
<thead>
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<th>Effect</th>
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<tr>
<td>HIV</td>
<td>B24</td>
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<tr>
<td>Blood transfusion</td>
<td></td>
</tr>
<tr>
<td>Hemophilia</td>
<td>D66</td>
</tr>
</tbody>
</table>

Code I(a) and I(c) as indexed. No code for I(b) since there are no complications reported. Do not consider HIV (any B20-B24) as a misadventure occurring during a blood transfusion.
S. Sequela of injuries, poisonings, and other consequences of external causes

A sequela is a late effect, an after effect, or a residual of a nature of injury or external cause. The Classification provides categories T900-T983 for sequela of nature of injury codes and Y850-Y899 for sequela of external causes. There are separate instructions for determining if the nature of injury or the external cause should be coded as sequela. If either the nature of injury or the external cause requires a sequela code, both the nature of injury and the external cause must be coded to a sequela category.

1. Sequela of injuries, poisoning, and other consequences of external causes (T900-T983)

Use these categories for the classification of injuries and poisonings (conditions in S00-T88) if:

a. A statement of sequela of the condition in S00-T88 is reported unless the interval between date of injury and date of death is less than 1 year.

   I (a) Sequela of hip fracture T931
   (b)
   (c)
   II &Y86

   Code I(a) to T931 since it is stated as a sequela of hip fracture. Code Part II as sequela of accident NEC.

b. The condition in S00-T88 is stated to be ancient, healed, history of, late effect of, old, remote, regardless of reported duration, or the interval between onset of this condition and death is indicated to be 1 year or more, whether or not the residual (sequela) effect is specified.

   Date of death 12/1/98
   I (a) Old head injury T909
   MOD II &Y86
   A Accident Farm Date of injury 9/3/98 Tractor overturned

   Code I(a) old head injury to Sequela, injury, head since it is stated as old. Interpret “tractor overturning on farm” as contact with agricultural machinery. Code Part II accident - tractor overturned to sequela of other accidents since it resulted in an injury stated as old.
c. A condition with a duration of 1 year or more that was due to the condition in S00-T88 is reported.

   I (a) Paralysis  16 mos.  T941
   (b) Spinal cord injury  T913
   (c) Auto accident  &Y850

Code I(a) paralysis to sequela of traumatic paralysis since it is reported due to trauma and has a duration of 1 year or more. Code I(b) spinal cord injury to Sequela, injury, spinal, cord since it caused a condition of 1 year or more. Code I(c) auto accident, to Sequela, motor vehicle accident.

d. More than one nature of injury or a nature of injury and an external cause are reported on the same line with a duration of 1 year or more, apply the duration to each condition.

   I (a) Head injury and skull fracture  Years  T909  T902
   (b) Fall
   II  Fall  &Y86

Code both conditions on I(a) as sequela. Do not disregard the duration since there is more than one injury on same line.

   I (a) Gunshot wound head  Years  T901  &Y86

Code both head wound and gunshot as sequela. Apply duration to nature of injury and external cause.
2. Sequela of external causes (Y850-Y899)

- Y850 Sequela of motor vehicle accident (includes V01-V89)
- Y859 Sequela of other and unspecified transport accidents (includes V90-V99)
- Y86 Sequela of other accidents (excludes W78-W80)
- Y870 Sequela of intentional self-harm
- Y871 Sequela of assault
- Y872 Sequela of events of undetermined intent
- Y880 Sequela of adverse effects caused by drugs, medicaments, and biological substances in therapeutic use
- Y881 Sequela of misadventures to patients during surgical and medical procedures
- Y882 Sequela of adverse incidents associated with medical devices in diagnostic and therapeutic use
- Y883 Sequela of surgical and medical procedures as the cause of abnormal reaction of the patient, or of later complication, without mention of misadventure at the time of the procedure
- Y890 Sequela of legal intervention
- Y891 Sequela of war operations
- Y899 Sequela of unspecified external cause

Use the preceding categories with the appropriate fourth characters for the classification of external causes of injury (V010-Y849) if:

a. A statement of sequela of the external cause is reported unless the interval between date of external cause and date of death is less than 1 year.

   I (a) Paralysis, sequela of T941 &Y86
   (b) fall down steps

   Code I(a) to sequela of traumatic paralysis and sequela of fall down the steps.
b. An injury that is stated to be ancient, healed, history of, late effect of, old, remote, or a delayed union, malunion or nonunion of a fracture that was due to the external cause is reported.

<table>
<thead>
<tr>
<th>MOD</th>
<th>MOD</th>
</tr>
</thead>
<tbody>
<tr>
<td>(a) Pneumonia</td>
<td>J189</td>
</tr>
<tr>
<td>(b) Debility</td>
<td>R53</td>
</tr>
<tr>
<td>(c) Nonunion of hip fracture</td>
<td>M841</td>
</tr>
<tr>
<td>II Inanition</td>
<td>R64 Y86</td>
</tr>
</tbody>
</table>

**Accident**  **Fell at home**

Code I(c) as indexed. Code sequela of fall last in Part II since the fall resulted in nonunion of the fracture.

| I (a) ASHD | I251 |
| II Old fractured hip | T931 &Y86 |

Code I(a) ASHD as indexed. Code Part II old fractured hip, T931 Y86 since the injury was specified as old.

c. If the external cause is stated to be ancient, history of, old, remote, regardless of reported duration, or the interval between onset of the external cause and death is indicated to be 1 year or more.

| I (a) Old fall, fractured hip 6 months | T931 &Y86 |
| (b) | 
| (c) | 

**Accident**  **Fell and fractured hip 6 months ago**

Code as sequela since the external cause is stated as “old.”
d. A condition with a duration of 1 year or more that was due to the external cause is reported.

I (a) Subdural hematoma 1 year T905
   (b) Fall &Y86

Code I(a) subdural hematoma, T905, since it is reported to be of 1 year or more duration. Code I(b) fall, Y86, since it resulted in a condition of 1 year or more duration.

I (a) Esophageal stricture years K222
   (b) Ingestion of lye T97 &Y870
II Suicide attempt

Code I(a) esophageal stricture as indexed. Code I(b) ingestion of lye, T97 Y870, since it resulted in a condition of 1 year or more duration.

e. The interval between the time of occurrence of the external cause and death is indicated to be 1 year or more, whether or not the residual (sequela) effect is specified.

Date of death 11/1/96
I (a) Bronchopneumonia J180
   MOD II Contusion brain T905 &Y850
   A Accident
   Street
   Date of injury 5/20/95
   Bicylce (operator) vs. truck

Code I(a) bronchopneumonia as indexed. Code sequela of nature of injury and external cause since the date of injury is 1 year or more prior to death.

I (a) Cardiac arrest I469
   (b) Pacemaker failure weeks T983 &Y883 &I519
      (c) Had pacemaker implanted 3 years ago

Code I(a) cardiac arrest as indexed. Code I(b) pacemaker failure to sequela T983 and Y883 since duration of implanted pacemaker is 3 years. Code I519, Disease, heart since pacemaker indicates a heart disease. Precede I519 with an ampersand as reason for the surgery. Do not enter a code on I(c).
f. The complication of the external cause classified to Chapters I-XVIII and the external cause is reported on the same line and the duration is 1 year or more.

I (a) Radiation enteritis 3 years Y883 K520
(b) Lung cancer &C349

Code I(a) as a sequela of radiation therapy. Do not disregard the duration. Precede the code for the lung cancer with an ampersand to indicate the reason for medical care.
Appendix A

**Standard Abbreviation and Symbols**

When an abbreviation is reported on the certificate, refer to this list to determine what the abbreviation represents. **If an abbreviation represents more than one term, determine the correct abbreviation by using other information on the certificate.** If no determination can be made, use abbreviation for first term listed.

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Term</th>
<th>Abbreviation</th>
<th>Term</th>
</tr>
</thead>
<tbody>
<tr>
<td>AAA</td>
<td>abdominal aortic aneurysm</td>
<td>AEG</td>
<td>air encephalogram</td>
</tr>
<tr>
<td>AAS</td>
<td>aortic arch syndrome</td>
<td>AF</td>
<td>auricular or atrial fibrillation; acid fast</td>
</tr>
<tr>
<td>AAT</td>
<td>alpha-antitrypsin</td>
<td>AFB</td>
<td>acid-fast bacillus</td>
</tr>
<tr>
<td>AAV</td>
<td>AIDS-associated virus</td>
<td>AGG</td>
<td>agammaglobulinemia</td>
</tr>
<tr>
<td>AB</td>
<td>abdomen; abortion; asthmatic bronchitis</td>
<td>AGL</td>
<td>acute granulocytic leukemia</td>
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<td>ABD</td>
<td>abdomen</td>
<td>AGN</td>
<td>acute glomerulonephritis</td>
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<td>ABE</td>
<td>acute bacterial endocarditis</td>
<td>AGS</td>
<td>adrenogenital syndrome</td>
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<td>ABS</td>
<td>acute brain syndrome</td>
<td>AHA</td>
<td>acquired hemolytic anemia; autoimmune hemolytic anemia</td>
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<td>ACA</td>
<td>adenocarcinoma</td>
<td>AHD</td>
<td>arteriosclerotic heart disease</td>
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<td>ACD</td>
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<td>AHHD</td>
<td>arteriosclerotic hypertensive heart disease</td>
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<td>ACH</td>
<td>adrenal cortical hormone</td>
<td>AHG</td>
<td>anti-hemophilic globulin deficiency</td>
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<td>ACT</td>
<td>acute coronary thrombosis</td>
<td>AHLE</td>
<td>acute hemorrhagic leukoencephalitis</td>
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<td>ACTH</td>
<td>adrenocorticotrophic hormone</td>
<td>AI</td>
<td>aortic insufficiency; additional information</td>
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<td>arteriosclerotic cardiovascular disease</td>
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<td>above knee amputation</td>
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### Geographic Codes

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**Territories and Outlying Areas**

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</table>

*Not recognized as a valid USPS State abbreviation*
Appendix D

Code for Place of Occurrence

0. Home

Excludes: Abandoned or derelict house (8)
         Home under construction, but not yet occupied (6)
         Institutional place of residence (1)
         Office in home (5)

About home
         Apartment
         Bed and breakfast
         Boarding house
         Cabin (any type)
         Caravan (trailer) park - residential
         Condominium
         Farm house
         Dwelling
         Hogan
         Home premises
         Home sidewalk
         Home swimming pool
         House (residential) (trailer)
         Noninstitutional place of residence
         Penthouse
         Private driveway to home
         Private garage
         Private garden to home
         Private walk to home
         Private wall to home
         Residence
         Rooming house
         Storage building at apartment
         Swimming pool in private home, private garden,
            apartment or residence
         Townhome
         Trailer camp or court
         Yard (any part) (area) (front) (residential)
         Yard to home