In the course of its twentieth meeting held on 23 May 1968, the Committee on Programme and Budget decided to recommend to the Twenty-first World Health Assembly the adoption of the attached resolutions:
The Twenty-first World Health Assembly,

Recalling its recommendation contained in operative paragraph 1(d) of resolution WHA20.19, 1

CONFIRMS the annexed rules for selection of the cause of death for primary mortality tabulation.

ANNEX

RULES FOR CLASSIFICATION

Reprint from the International Classification of Diseases, 1965 Revision, Volume 1, World Health Organization.
Rules for selection of cause of death for primary mortality tabulation

When only one cause of death is recorded, this cause is selected for tabulation. When more than one cause of death is recorded, selection should be made in accordance with the rules which follow. The rules are based on the concept of the underlying cause, i.e. the disease or injury which initiated the sequence of events which led to death. Where the selected cause is an injury, either the circumstances which gave rise to the injury, or the nature of the injury, or preferably both should be coded.

Selection of the cause to be coded comprises two stages; selection of the underlying cause, and subsequent modification of the underlying cause. These two stages are described below.

Selection of the underlying cause

The rules for selecting the underlying cause are as follows. Either the General rule or Rule 1 or Rule 2 will apply to all certificates. Rule 3 may apply in addition to one of these.

General rule. Select the condition entered alone on the lowest used line of Part I unless it is highly improbable that this condition could have given rise to all the conditions entered above it.

Rule 1. If there is a reported sequence terminating in the condition first entered on the certificate, select the underlying cause of this sequence. If there is more than one such sequence, select the underlying cause of the first-mentioned sequence.

Rule 2. If there is no reported sequence terminating in the condition first entered on the certificate, select this first-mentioned condition.

Rule 3. If the condition selected by the General rule or Rules 1 or 2 can be considered a direct sequel of another reported condition, whether in Part I or Part II, select this primary condition. If there are two or more such primary conditions, select the first mentioned of these.

In a properly completed certificate, the underlying cause will have been entered alone on the lowest used line of Part I and the conditions, if any, which arose as a consequence of this underlying cause will have been entered above it, one condition to a line, in ascending causal order of sequence.

Example 1: (a) Uraemia
(b) Retention of urine
(c) Hypertrophy of prostate

Example 2: (a) Bronchopneumonia
(b) Chronic bronchitis

II Chronic myocarditis

In a properly completed certificate, therefore, the General rule will apply. However, the fact that the certificate as a whole has not been completed in an entirely satisfactory manner does not preclude the application of the General rule. Provided that it is not highly improbable that the condition entered alone on the lowest used line of Part I could have given rise to all the conditions above it, the General rule should be applied, even though the conditions entered above it have not been entered in a correct causal order of sequence.

Example 3: (a) Gangrene of intestine and
(b) Peritonitis
(c) Volvulus of caecum

Example 4: (a) Coronary thrombosis
(b) Cerebral haemorrhage
(c) Arteriosclerosis

The General rule should be discarded only when the certifier has entered more than one condition on the lowest used line of Part I or has entered there a single condition and it is highly improbable that this condition could have given rise to all the conditions entered above it. Guidance on the interpretation of "highly improbable" is given at the end of the rules, but it should be borne in mind that the medical certifier's statement indicates his opinion about the conditions leading to death and about their relationship one to another, and this opinion should not be lightly disregarded.

Where the General rule cannot be applied, clarification of the certificate should be sought from the certifier whenever this is possible, since the remaining selection rules are somewhat arbitrary and may not always lead to a satisfactory selection of the underlying cause. Where further clarification cannot be obtained, however, Rule 1 or Rule 2 must be applied.

In these rules, the term "reported sequence" means two or more conditions entered on successive lines of Part I, each condition being an acceptable cause of the one entered on the line above it. Rule 1 is applicable only if such a reported sequence, terminating in the condition first entered on the certificate, is found. If such a sequence is not found, Rule 2 applies and the first entered condition is selected.

The condition selected by the above rules may, however, be an obvious sequel of another condition which was not reported in a correct causal relationship with it, e.g. in Part II or on the same line in Part I. If so, then Rule 3 also applies and the primary condition is selected. It applies, however, only when there is no doubt about the causal relationship between the two conditions; it is not sufficient that a causal relationship between them would have been accepted if the certifier had reported it.
Modification of the underlying cause

The underlying cause, as selected by the above rules, will not necessarily be the most useful and informative condition for tabulations of mortality data. For example, if senility or some generalized disease such as hypertension or arteriosclerosis has been selected, more useful information will be conveyed if the condition to be tabulated is some reported manifestation of the ageing or disease process. In other cases it may be necessary to modify the assignment to conform with provisions of the International Classification of Diseases for a single code for two or more causes jointly reported or for preference for a particular cause when reported with certain other conditions.

The modification rules (Rules 4-10), therefore, are intended to improve the usefulness and precision of mortality tabulations and should be applied after selection of the underlying cause by means of the selection rules. The processes of selection and modification have been separated for the sake of clarity, though they are closely interwoven; it will be seen, for example, that some of the modification rules require a renewed application of the selection rules. This should present no difficulty to experienced coders but for beginning coders the importance of going through the mental processes of selection, modification and, if necessary, re-selection, should be emphasized.

Examples of the selection rules

General rule. Select the condition on the lowest used line of Part I unless it is highly improbable that this condition could have given rise to all the conditions entered above it.

Example 5: I(a) Abscess of lung
   (b) Lobar pneumonia

Select lobar pneumonia.

Example 6: I(a) Hepatic failure
   (b) Bile duct obstruction
   (c) Carcinoma of pancreas

Select carcinoma of pancreas.

Example 7: I(a) Secondary in lung with lung abscess
   (b) Cancer of brain

Select cancer of brain.

Example 8: I(a) Pulmonary oedema

II Secondary anaemia and chronic lymphatic leukaemia

Select pulmonary oedema. But rule 3 also applies; see example 21.

Rule 1. If there is a reported sequence terminating in the condition first entered on the certificate, select the underlying cause of this sequence. If there is more than one such sequence, select the underlying cause of the first mentioned sequence.

Example 9: I(a) Coronary embolism
   (b) Arteriosclerotic heart disease
   (c) Influenza

Select arteriosclerotic heart disease. The reported sequence terminating in the condition first entered on the certificate is coronary embolism due to arteriosclerotic heart disease. But Rule 7 also applies; see example 41.

Example 10: I(a) Bronchopneumonia
   (b) Cerebral thrombosis and hypertensive heart disease

Select cerebral thrombosis. There are two reported sequences terminating in the condition first entered on the certificate; bronchopneumonia due to cerebral thrombosis, and bronchopneumonia due to hypertensive heart disease. The underlying cause of the first mentioned sequence is selected.

Example 11: I(a) Oesophageal varices and congestive heart failure
   (b) Cirrhosis of liver and chronic rheumatic heart disease

Select cirrhosis of liver. The reported sequence terminating in the condition first entered on the certificate is oesophageal varices due to cirrhosis of liver.

Example 12: I(a) Pericarditis
   (b) Uraemia and pneumonia

Select uraemia. There are two reported sequences terminating in the condition first entered on the certificate; pericarditis due to uraemia, and pericarditis due to pneumonia. The underlying cause of the first mentioned sequence is selected. But rule 5 also applies, example 30.

Example 13: I(a) Cerebral haemorrhage and hypostatic pneumonia
   (b) Hypertension and diabetes
   (c) Arteriosclerosis

Select arteriosclerosis. There are two reported sequences terminating in the condition first entered on the certificate; cerebral haemorrhage due to hypertension due to arteriosclerosis, and cerebral haemorrhage due to diabetes. The underlying cause of the first mentioned sequence is selected. But rule 7 also applies; see example 42.

Example 14: I(a) Cerebral haemorrhage
   (b) Hypertension
   (c) Chronic pyelonephritis and prostatic obstruction

Select chronic pyelonephritis. This is the condition which is the underlying cause of the reported sequence terminating in the condition first entered on the certificate; the other condition on line (c) is not reported in sequence. But rule 3 also applies; see example 22.

Rule 2. If there is no reported sequence terminating in the condition first entered on the certificate, select this first mentioned condition.

Example 15: I(a) Pernicious anaemia and gangrene of
   (b) Foot
   (c) Arteriosclerosis

Select pernicious anaemia. There is a reported sequence, gangrene of foot due to arteriosclerosis, but it does not terminate in the condition first entered on the certificate.
Example 16: I(a) Rheumatic and arteriosclerotic heart 
(b) disease
Select rheumatic heart disease. There is no reported sequence.

Example 17: I(a) Senility and hypostatic pneumonia 
(b) Rheumatoid arthritis
Select senility. There is a reported sequence, hypostatic pneumonia due to rheumatoid arthritis, but it does not terminate in the condition first entered on the certificate. But rule 4 also applies; see example 26.

Example 18: I(a) Fibrocystic disease of the pancreas 
(b) Bronchitis and bronchiectasis
Select fibrocystic disease of the pancreas. There is no reported sequence.

Example 19: I(a) Bursitis and ulcerative colitis
Select bursitis. There is no reported sequence. But rule 6 also applies; see example 33.

Example 20: I(a) Acute nephritis, scarlet fever.
Select acute nephritis. There is no reported sequence. But rule 3 also applies; see example 23.

Rule 3. If the condition selected by the General rule or Rules 1 or 2 can be considered a direct sequel of another reported condition, whether in Part I or Part II, select this primary condition. If there are two or more such primary conditions, select the first mentioned of these.

Example 21: I(a) Pulmonary oedema 
II Secondary anaemia and chronic lymphatic leukaemia
Select chronic lymphatic leukaemia. Pulmonary oedema, selected by the General rule (see example 8), can be considered a direct sequel of either of the conditions in Part II, but secondary anaemia is itself a direct sequel of lymphatic leukaemia.

Example 22: I(a) Cerebral haemorrhage 
(b) Hypertension
(c) Chronic pyelonephritis and prostatic obstruction
Select prostatic obstruction. Chronic pyelonephritis, selected by Rule 1 (see example 14), can be considered a direct sequel of prostatic obstruction.

Example 23: I(a) Acute nephritis, scarlet fever
Select scarlet fever. Acute nephritis, selected by Rule 2 (see example 20), can be considered a direct sequel of scarlet fever.

Example 24: I(a) Nephrectomy 
II Embryoma of kidney
Select embryoma of kidney. There is no doubt that the nephrectomy was performed for the embryoma of kidney.

Example 25: I(a) Hypostatic pneumonia, cerebral 
(b) haemorrhage and cancer of 
(c) breast
Select cerebral haemorrhage. Hypostatic pneumonia, selected by rule 2, can be considered a direct sequel of either of the other conditions reported; the one first mentioned is selected.

Examples of the modification rules

Rule 4. Senility. Where the selected underlying cause is classifiable to 794 (Senility) and a condition classifiable elsewhere than to 780-796 is reported on the certificate, re-select the underlying cause as if the senility had not been reported, except to take account of the senility if it modifies the coding.

Example 26: I(a) Senility and hypostatic pneumonia 
(b) Rheumatoid arthritis
Code to rheumatoid arthritis. The senility, selected by Rule 2 (see example 17), is ignored and the General rule applied.

Example 27: I(a) Cerebral arteriosclerosis 
(b) Senility
II Gastro-enteritis
Code to cerebral arteriosclerosis. The senility is ignored and the General rule applied.

Example 28: I(a) Myocardial degeneration and 
(b) emphysema 
(c) Senility
Code to myocardial degeneration. The senility is ignored and Rule 2 applied.

Example 29: I(a) Psychosis 
(b) Senility
Code to senile psychosis. The senility modifies the coding.

Rule 5. Ill-defined conditions. Where the selected underlying cause is classifiable to 780-793, 795 or 796 (the ill-defined conditions) and a condition classifiable elsewhere than to 780-796 is reported on the certificate, re-select the underlying cause as if the ill-defined condition had not been reported, except to take account of the ill-defined condition if it modifies the coding.

Example 30: I(a) Pericarditis 
(b) Uraemia and pneumonia
Code to pneumonia. Uraemia, selected by Rule 1 (see example 12), is ignored and the General rule applied.

Example 31: I(a) Dehydration 
(b) Haematemesis and 
(c) arteriosclerosis
Code to arteriosclerosis. Haematemesis and dehydration, both ill-defined conditions, are successively ignored, and the only defined condition reported is selected.

Example 32: I(a) Anaemia 
(b) Splenomegaly
Code to splenomegalic anaemia. Splenomegaly modifies the coding.
Rule 6. Trivial conditions. Where the selected underlying cause is a trivial condition unlikely itself to cause death and not reported as the cause of a more serious complication, and a more serious unrelated condition is reported on the certificate, re-select the underlying cause as if the trivial condition had not been reported.

Example 33: (a) Bursitis and ulcerative colitis
   Code to ulcerative colitis. Bursitis, selected by Rule 2 (see example 19), is ignored.

Example 34: (a) Dental caries
   II Tetanus
   Code to tetanus.

Example 35: (a) Dermatitis, perforating duodenal
   (b) ulcer and hypertensive heart
   (c) disease
   Code to perforating duodenal ulcer. Dermatitis is ignored and Rule 2 applied to the remaining conditions.

Rule 7. Linkage. Where the selected underlying cause is linked by a provision in the Classification or in the list on pages 427-432 with one or more of the other conditions on the certificate, code the combination.

Where the linkage provision is only for combinations of one condition specified as due to another, code to the combination only when the correct causal relationship is stated or can be inferred from application of the selection rules.

Where a conflict in linkages occurs, link with the condition to which the death would have been assigned if the underlying cause had not been reported.

Example 36: (a) Myocardial degeneration
   (b) Hypertension
   Code to hypertensive heart disease.

Example 37: (a) Acute otitis media
   II Mastoiditis
   Code to acute otitis media with mastoiditis.

Example 38: (a) Cardiac dilatation and renal sclerosis
   (b) Hypertension
   Code to hypertensive heart and renal disease. All three conditions combine.

Example 39: (a) Parkinsonism
   (b) Arteriosclerosis
   Code to paralysis agitans. The conditions are stated in the correct causal relationship for the "due to" linkage.

Example 40: (a) Aortic aneurysm and generalized
   (b) arteriosclerosis
   Code to aortic aneurysm (nonsyphilitic). The correct causal relationship for the "due to" linkage can be inferred from the use of rule 3 to select arteriosclerosis as the underlying cause.

Example 41: (a) Coronary embolism
   (b) Arteriosclerotic heart disease
   (c) Influenza
   Code to coronary embolism. Arteriosclerotic heart disease, selected by rule 1 (see example 9), links with coronary embolism.

Example 42: (a) Cerebral haemorrhage and hypostatic pneumonia
   (b) Hypertension and diabetes
   (c) Arteriosclerosis
   Code to cerebral haemorrhage with hypertension. Arteriosclerosis, selected by rule 1 (see example 13), links with hypertension, which itself links with cerebral haemorrhage.

Example 43: (a) Myocardial degeneration
   (b) Arteriosclerosis
   II Cerebral haemorrhage
   Code to myocardial degeneration. Link with myocardial degeneration since the death would have been assigned to this condition by the General rule if arteriosclerosis had not been reported.

Example 44: (a) Cerebral haemorrhage
   (b) Arteriosclerosis and hypertensive heart
   (c) disease
   Code to hypertensive heart disease. Link with hypertensive heart disease since the death would have been assigned to this condition by the General rule if arteriosclerosis had not been reported.

Example 45: (a) Cerebral haemorrhage and hypertensive
   (b) heart disease
   (c) Arteriosclerosis
   Code to cerebral haemorrhage. Link with cerebral haemorrhage since the death would have been assigned to this condition by Rule 2 if arteriosclerosis had not been reported.

Example 46: (a) Coronary embolism
   (b) Myocarditis and nephritis
   (c) Hypertension
   Code to coronary embolism with hypertension. Link with myocarditis since the death would have been assigned to this condition by rule 1 if hypertension had not been reported, and myocarditis itself links with coronary embolism.

Rule 8. Specificity. Where the selected underlying cause describes a condition in general terms and a term which provides more precise information about the site or nature of this condition is reported on the certificate, prefer the more informative term. This rule will often apply when the general term can be regarded as an adjective qualifying the more precise term.

Example 47: (a) Cerebral thrombosis
   (b) Cerebrovascular accident
   Code to cerebral thrombosis.
Rule 9. Early and late stages of disease. Where the selected underlying cause is an early stage of a disease and a more advanced stage of the same disease is reported on the certificate, code to the more advanced stage. This rule does not apply to a "chronic" form reported as due to an "acute" form unless the Classification gives special instructions to that effect.

Example 53: I(a) Tertiary syphilis
(b) Primary syphilis
Code to tertiary syphilis.

Example 54: I(a) Eclampsia during pregnancy
(b) Pre-eclamptic toxemia
Code to eclampsia of pregnancy.

Example 55: I(a) Chronic myocarditis
(b) Acute myocarditis
Code to acute myocarditis.

Example 56: I(a) Chronic nephritis
(b) Acute nephritis
Code to chronic nephritis. See note at page 430.

Rule 10. Late effects. Where the selected underlying cause is an early form of a condition for which the Classification provides a separate late effects category and there is evidence that death occurred from residual effects of this condition rather than in its active phase, code to the appropriate late effects category.

Example 57: I(a) Pulmonary fibrosis
(b) Old pulmonary tuberculosis
Code to late effects of respiratory tuberculosis.

Example 58: I(a) Heart failure
(b) Curvature of spine
(c) Rickets in childhood
Code to late effects of rickets.

Example 59: I(a) Hydrocephalus
(b) Cerebral abscess
Code to late effects of intracranial abscess.

Example 60: I(a) Cerebral palsy 2 years
(b) Birth injury
Code to cerebral spastic infantile paralysis. This category includes residuals of birth injury to brain.

Example 61: I(a) Paralysis
(b) Fractured spine
(c) Automobile accident, 18 months ago
Code to late effects of automobile accident and late effects of fracture of vertebral column with spinal cord lesion.

Rule 11. Old infective and maternal conditions. Where the selected underlying cause is an infective disease classifiable to 000-003, 020, 021, 032-033, 036.0, 036.8, 037, 050, 052, 056, 060, 071, 072, 080-083, 470-474, 480-486 or a maternal cause classifiable to 630-678, and there is evidence that the date of onset was 1 year or more prior to death or a resultant chronic condition is reported, proceed as follows:

(a) if a late effect of the underlying cause is reported on the certificate, code to the late effect;

(b) if no late effect is reported but there is another condition entered on the certificate, code to the other condition;

(c) if there is no other condition reported on the certificate, code to "Other unknown and unspecified causes" (796.9).

Example 62: I(a) Cerebral haemorrhage
(b) Hypertension
(c) Childbirth, 5 years ago
Code to cerebral haemorrhage with hypertension.

Example 63: I(a) Chronic nephritis
(b) Scarlet fever
Code to chronic nephritis.

Example 64: I(a) Meningococcal meningitis, 4 years ago
II Regional enteritis
Code to regional enteritis.

Example 65: I(a) Pneumonia 1 year
Code to unknown cause.
Notes for use in primary mortality coding

When a condition in one of the categories shown in the following list is reported as a cause of death, the provisions of the relevant note should be applied. Notes dealing with the linkage of conditions appear at the categories from which the combination is excluded.

01 Pulmonary tuberculosis
   Excludes with conditions in 515 (Pneumoconiosis due to silica and silicates) (010).

012.3 Tuberculous laryngitis
012.9 Other respiratory tuberculosis
013-017 Tuberculosis of other organs
   Excludes with conditions in 011 (Pulmonary tuberculosis) (011) unless reported as the underlying cause of and with a specified duration exceeding that of the condition in 011.

018 Disseminated tuberculosis
   Excludes with conditions in:
   011 (Pulmonary tuberculosis) (011)
   013 (Tuberculosis of meninges and central nervous system) (013)

035 Erysipelas
037 Tetanus
038 Septicaemia
   Code to these diseases when they follow vaccination or a slight injury (any condition in N910-N918, prick, splinter, minor cut, puncture (except of trunk), bruise or contusion of superficial tissues or external parts, burn of first degree); when they follow a more serious injury, code to the injury.

196 Secondary and unspecified malignant neoplasm of lymph nodes
197 Secondary malignant neoplasm of respiratory and digestive systems
198 Other secondary malignant neoplasm
   Not to be used if the site of the primary neoplasm is known.

292-294 Psychosis associated with physical conditions
309 Mental disorders not specified as psychotic associated with physical conditions
310-315 Mental retardation
   Not to be used if the underlying physical condition is known.

303 Alcoholism
   Excludes with conditions in 571.9 (Other cirrhosis of liver) (571.0).

323 Encephalitis, myelitis, and encephalomyelitis
   Not to be used if the antecedent condition is known:
   postchickenpox encephalitis (052)
   postmeasles encephalitis (055)
   otitic encephalitis (381.9)
   influenzal encephalitis (474)

345 Epilepsy
   Includes accidents resulting from epilepsy.
   Excludes epilepsy due to trauma (code to appropriate N and E categories; if the nature of injury is not known, code to N854).

379 Blindness
388 Deaf mutism
389 Other deafness
   Not to be used if the antecedent condition is known.

397 Diseases of other endocardial structures
   Excludes with condition in:
   394 (Diseases of mitral valve) (394)
   395 (Diseases of aortic valve) (395)
   396 (Diseases of mitral and aortic valves) (396)

400-404 Hypertensive disease
   Excludes with conditions in 410-414 (Ischaemic heart disease) (410-414 with 4th digit .0).

401-404 Hypertensive disease not specified as malignant
   Excludes with conditions in 400 (Malignant hypertension) (400).

401 Essential benign hypertension
   Excludes with conditions in:
   430-438 (Cerebrovascular disease) (430-438 with 4th digit .0)
   427 (Symptomatic heart disease) (402)
   428 (Other myocardial insufficiency) (402)
   429 (Ill-defined heart disease) (402)
   580-583 (Nephritis and nephrotic syndrome) (580-583)
   584 (Renal sclerosis unqualified) (403)
   and when reported as the underlying cause of conditions in 424 (Chronic disease of endocardium) (424)

402 Hypertensive heart disease
   Excludes with conditions in:
   403 (Hypertensive renal disease) (404)
   584 (Renal sclerosis unqualified) (404)

403 Hypertensive renal disease
   Excludes with conditions in:
   402 (Hypertensive heart disease) (404)
   427 (Symptomatic heart disease) (404)
428 (Other myocardial insufficiency) (404)
429 (Ill-defined heart disease) (404)

431 Other acute and subacute forms of ischaemic heart disease
412 Chronic ischaemic heart disease
413 Angina pectoris
Excludes with conditions in 410 (Acute myocardial infarction) (410)

424 Chronic disease of endocardium
When more than one valve is mentioned, priority in classification is in the order mitral, aortic, other.

426 Pulmonary heart disease
Not to be used if the underlying pulmonary condition is known (except for the term "kyphoscoliotic heart disease").

427 Symptomatic heart disease
428 Other myocardial insufficiency
429 Ill-defined heart disease
Excludes with:
- malignant hypertension (400.1)
- hypertension, benign or unspecified (402)
- conditions in 410-414 (Ischaemic heart disease) (410-414)

428 Other myocardial insufficiency
Excludes with arteriosclerosis (412)

429 Ill-defined heart disease
Excludes with conditions in 519.1 (Acute oedema of lung) (427.1)

430-438 Cerebrovascular disease
Excludes with malignant hypertension (400.2)

437 Generalized ischaemic cerebrovascular disease
Excludes with conditions in 430-434 (Cerebral haemorrhage and infarction) (430-434)
and when reported as the underlying cause of conditions in 342 (Paralysis agitans) (342).

440 Arteriosclerosis
Excludes with conditions in:
- 400-404 (Hypertensive disease) (400-404)
- 410-414 (Ischaemic heart disease) (410-414)
- 430-438 (Cerebrovascular disease) (430-438)
- 428 (Other myocardial insufficiency) (412)
- 445.9 (Gangrene not elsewhere classified) (445.0)

and when reported as the underlying cause of conditions in:
- 342 (Paralysis agitans) (342)
- 424 (Chronic disease of endocardium) (424)
- 441-444 (Other diseases of arteries and arterioles, except gangrene) (441-444, 446)
- 584 (Renal sclerosis unqualified) (403)

and of the terms nephritis (chronic) (interstitial) and Bright's disease (chronic) in 582, 583 (403).

460 Acute nasopharyngitis
465 Acute upper respiratory infection of multiple or unspecified sites
Excludes when reported as the underlying cause of serious conditions such as meningitis (320), brain abscess (322), otitis media, mastoiditis (381-383), influenza (470-474), pneumonia (480-486), bronchitis (490, 491), acute nephritis (580).

490 Bronchitis, unqualified
Excludes with conditions in 492 (Emphysema) (491).

492 Emphysema
Excludes with conditions in 490, 491 (Bronchitis, chronic or unqualified) (491).

493 Asthma
Excludes with condition in:
- 466 (Acute bronchitis and bronchiolitis) (466)
- 490 (Bronchitis, unqualified) (490)
- 491 (Chronic bronchitis) (491)
- 492 (Emphysema) (492).

515 Pneumoconiosis due to silica and silicates
Excludes with conditions in 011 (Pulmonary tuberculosis) (010).

519.1 Acute oedema of lung
Excludes with conditions in:
- 429 (Ill-defined heart disease) (427.1)
- 782.4 (Acute heart failure, undefined) (427.1).

580-584 Nephritis and nephrosis
Excludes with malignant hypertension (400.3).

580 Acute nephritis
Excludes when reported as the underlying cause of conditions in 582 (Chronic nephritis) (582).

584 Renal sclerosis unqualified
Excludes with conditions in:
- 401 (Essential benign hypertension) (403)
- 402 (Hypertensive heart disease) (404)
- 403 (Hypertensive renal disease) (403).
593.2 Other renal disease
Excludes renal disease NOS and renal failure NOS with:
hypertension, benign or unspecified (403).

606 Sterility, male
628 Sterility, female
Not to be used if the causative condition is known.

630 Infections of genital tract during pregnancy
631 Ectopic pregnancy
Includes deaths from these causes even though delivery occurred before death.

632 Haemorrhage of pregnancy
Excludes deaths occurring after onset of labour (651). If there is no information as to delivery before death, it may be assumed that delivery occurred and that the condition complicated delivery.

633 Anaemia of pregnancy
635-639 Urinary infections and toxaeamias of pregnancy and the puerperium
Includes deaths from these causes even though delivery occurred before death.

636 Renal disease arising during pregnancy and the puerperium
Excludes with conditions in:
637.0 (Pre-eclampsia) (637.0)
637.1 (Eclampsia) (637.1).

640 Abortion induced for medical indications
Not to be used if the complication of pregnancy or other condition requiring induction is known.

655 Delivery complicated by foetopelvic disproportion
Excludes with conditions in 654 (Delivery complicated by abnormality of bony pelvis) (654).

656 Delivery complicated by malpresentation of foetus
Excludes with conditions in 655 (Delivery complicated by foetopelvic disproportion) (655).

711 Acute non-pyogenic arthritis
Not to be used if the antecedent condition is known.

735 Curvature of spine
Excludes with conditions in:
427.0 (Congestive heart failure) (426)
427.1 (Left ventricular failure) (426)
429 (Ill-defined heart disease) (426)
782.4 (Acute heart failure, undefined) (426).

764-768 Difficult labour
Excludes residual cerebral paralysis at age 4 weeks or over (343).
When more than one type of difficult labour is mentioned, priority in classification is in the order 764-768.

770 Conditions of placenta
771 Conditions of umbilical cord
772 Birth injury without mention of cause
774 Haemolytic disease of newborn with kernicterus
Excludes residual cerebral paralysis at age 4 weeks or over (343).

776 Anoxic and hypoxic conditions not elsewhere classified
Excludes residual cerebral paralysis at age 4 weeks or over (343).
Excludes with conditions in 760-771 (Maternal conditions, Difficult labour, Conditions of placenta and cord) (760-771).

777 Immaturity, unqualified
778.1 Post-maturity
779.0 Maceration
Not to be used if any other cause of perinatal mortality is reported.

782.4 Acute heart failure, undefined
Excludes with conditions in 519.1 (Acute oedema of lung) (427.1).

792 Uraemia
Excludes with malignant hypertension (400.3).

E930, E931 Complications and misadventures in therapeutic procedures
Not to be used if the condition for which the treatment was given is known.

N800-N803 Fracture of skull
When more than one site is mentioned, priority in classification is in the order base, vault, other.

N995 Certain early complications of trauma
Not to be used if the nature of the antecedent injury is known.

N997-N999 Complications of medical care
Not to be used if the medical care was for purposes of treatment and the condition for which the treatment was given is known.
Notes for interpretation of entries of causes of death

The foregoing rules will usually determine the underlying cause of death for primary mortality tabulation. Each country will need to amplify the rules, depending on the consistency and completeness of medical certification. The following paragraphs will be of assistance in formulating such additional instructions.

I. Guides for the determination of the probability of sequences

A. Assumption of intervening cause

The assumption of an intervening cause in Part I is permissible for the purpose of accepting a sequence as reported, but it must not be used to modify the coding.

Example 1: I (a) Cerebral haemorrhage
(b) Chronic nephritis

Code to chronic nephritis (582). It is necessary to assume hypertension as a condition intervening between cerebral haemorrhage and the underlying cause, chronic nephritis.

Example 2: I (a) Mentally retarded baby
(b) Difficult birth (prolonged labour)

Code to difficult labour without mention of birth injury, asphyxia, anoxia or hypoxia (768.9). The assumption of an intervening birth injury or hypoxia does not allow assignment to one of the other subdivisions of 768.

B. Interpretation of "highly improbable"

As a guide to the acceptability of sequences in the application of the selection rules, the following relationships should be regarded as "highly improbable":

(a) an infective or parasitic disease (000-136) other than erysipelas (035), tetanus (037), septicaemia or pyaemia (038), and gas gangrene (039.0) reported as "due to" any disease outside the group;

(b) a malignant neoplasm reported as "due to" any other disease;

(c) a congenital anomaly (740-759) reported as "due to" any other disease of the individual, including immaturity;

(d) diabetes (250), haemophilia (286.0), or influenza (470-474) reported as "due to" any other disease;

(e) rheumatic fever (390, 391) or rheumatic heart disease (394-398) reported as "due to" any disease other than streptococcal sore throat (034.0), scarlet fever (034.1), streptococcal septicaemia (038.0), and acute tonsillitis (463);

(f) a non-inflammatory disease of the central nervous system (330-349, 430-438), except cerebral embolism (434), reported as "due to" endocarditis (394-397, 421, 424) or to a disease of the digestive system (520-577);

(g) a condition of stated date of onset "X" reported as "due to" a condition of stated date of onset "Y", when "X" predates "Y".

The above list does not cover all "highly improbable" sequences, but in other cases the general rule should be followed unless there are strong indications to the contrary.

The following should be accepted as possible sequences in Part I of the certificate:

Acute or terminal circulatory diseases in 410-440 when reported as due to malignant neoplasm, diabetes or asthma.

II. Effect of duration on classification

In evaluating the reported sequence of the direct and antecedent causes, consideration should be given to any statements of the interval between the onset of the disease or condition and time of death. This would apply in the interpretation of "highly improbable" relationships, item (g), and in rule 11.

Conditions classified as congenital anomalies in the International Classification of Diseases (Nos. 740-759), even when not specified as congenital on the medical certificate, should be coded as such if the interval between onset and death and the age of the decedent indicate that the condition existed from birth.

The Classification provides for late effects of certain conditions by specific categories (Nos. 019, 044, 066, 077, 130.2, 265.1, 324, E940-E949, E959, E969, E977, E989, E999), and by a fourth-digit subcategory "9" in the section for accidents, poisoning, and violence by nature of injury (Nos. N800-N839, N850-N918, N940-N959). In many cases these late effects include conditions present one year or more after onset of the disease or injury. Rule 10 applies to these categories.

III. Sex limitations

Certain categories in the Classification are limited to one sex (Nos. 185-187, 222, 257, 600-607 for males only and Nos. 180-184, 218-221, 234-236, 256, 612-678 for females only). If, after verification, the sex and cause of death on the certificate are not consistent, the death should be coded to "Other unknown and unspecified causes (796.9)".

IV. Operations

If an operation appears on the certificate as the cause of death without mention of the condition for which it was performed, or of the findings at operation, and the index provides no assignment for it, it is to be assumed that the condition for which the operation is usually performed was present, and assignment will be made in accordance with the
above rules for selection of the cause of death. However, if the name of the operation leaves in doubt what specific morbid condition was present, additional information is to be sought. Failing this, code to the residual category for the organ or site indicated by the name of the operation (e.g. code “gastrectomy” to 537); if the operation does not indicate an organ or site (e.g. “laparotomy”), code to “Other unknown and unspecified causes (796.9)”, unless there is mention of a therapeutic misadventure (E930, E931).

V. Malignant neoplasms of multiple sites

If malignant neoplasms of more than one site are entered on the certificate, the site indicated as primary should be selected. This indication may be the specification of one site as “primary”, or of the other(s) as “secondary” or as “metastases”, or an acceptable order of entry pointing to one site as the primary. Malignant neoplasm of liver or lymph nodes without specification as primary should be assumed to be secondary and assignment made to the other site mentioned, even if this is entered in Part II.

If there is no indication as to which was the primary site (for example, if sites are entered on the same line or in a sequence which does not point to one as the primary), prefer a defined site to an ill-defined site in category 195 and of two or more defined sites prefer the first mentioned.

Of two or more specified sites of secondary malignant neoplasm, prefer the first mentioned.

VI. Rheumatic fever with heart involvement

See note at 391. If there is no statement that the rheumatic process was active at the time of death, assume activity if the heart condition (other than terminal conditions and bacterial endocarditis) which is specified as rheumatic or stated to be due to rheumatic fever is described as acute or subacute; in the absence of such description, the terms “carditis”, “endocarditis”, “heart disease”, “myocarditis”, and “pericarditis” can be regarded as acute if the interval between onset and death is less than one year or, if no interval is stated, if the age at death is under 15, and the term “pericarditis” can be regarded as acute at any age.

VII. Congenital anomalies

The following conditions may be regarded as congenital when causing death at the ages stated provided there is no indication that they were acquired after birth.

Under 1 year: aneurysm, aortic stenosis, atresia, atrophy of brain, cyst of brain, deformity, displacement of organ, ectopia, hypoplasia of organ, malformation, pulmonary stenosis, valvular heart disease.

Under 4 weeks: endocarditis, heart disease NOS, hydrocephalus NOS, myocarditis.

VIII. Nature of injury

Where more than one kind of injury in N800-N959 is mentioned and there is no clear indication as to which caused death, the injury to be coded should be selected in accordance with the following order of preference, provided that there is no contrary instruction in the classification:

fracture of skull (N800, N801, N803, N804) and broken neck (N805.0, N805.1)
internal injury of chest, abdomen, pelvis (N860-N869)
fracture of face bones, spine, trunk (N802, N805.2-N805.9, N806-N809)
other head injury (N850-N854), open wounds (multiple) of neck and chest (N874, N875, N879, N904-N908), traumatic amputation of limbs (N887, N897) and spinal cord lesion without evidence of spinal bone injury (N958)
fracture of limbs (N810-N829)
burn (N940-N949)
others in N800-N959

IX. Adverse effect of medicinal agents

When combinations of medicinal agents classified differently are involved, proceed as follows. If one component of the combination is specified as the cause of death, code to that component. Otherwise if the components are classified to the same three-digit category, code to the residual sub-category (.9); if not, code to N977.8, except for the particular combinations identified in N978.

X. Expressions indicating doubtful diagnosis

Qualifying expressions indicating some doubt as to the accuracy of the diagnosis, such as “apparently”, “presumably”, “possibly”, etc., should be ignored, since entries without such qualification differ only in degree of certainty of the diagnosis.
REVIEW OF THE ORGANIZATIONAL STUDY ON CO-ORDINATION WITH THE UNITED NATIONS AND THE SPECIALIZED AGENCIES

The Twenty-first World Health Assembly,

Recalling resolutions WHA15.40 and WHA20.49; and

Having considered the recommendations made by the Executive Board in its resolution EB41.R21,

1. DECIDES that the review of the organizational study on co-ordination with the United Nations and the specialized agencies should be continued for another year; and

2. REQUESTS the Executive Board to report on its review to the Twenty-second World Health Assembly.
The Twenty-first World Health Assembly,

1. NOTES the Supplement to the Third Report on the World Health Situation\(^1\) including the review of the special topic "Environmental Health" which has been prepared by the Director-General in pursuance of resolution WHA19.52, paragraph III;\(^2\)

2. THANKS the Governments of Member States and Associate Members for their assistance in providing material for this Supplement;

3. REQUESTS the Governments of Member States and Associate Members to submit before 30 June 1968 any amendments they wish to include in this Supplement before it is finalized; and

4. RECALLS the decision of the Nineteenth World Health Assembly\(^2\) to request the Director-General to prepare for the Twenty-third World Health Assembly the fourth report on the world health situation.

\(^1\) Documents A21/P&B/3 and A21/P&B/3 Add.1.