

**Gokhale Institute of Politics  
and Economics, Poona 4.**

**THE ELEMENTS OF  
VITAL STATISTICS**

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THE ELEMENTS  
OF  
VITAL STATISTICS  
IN THEIR BEARING ON SOCIAL  
AND PUBLIC HEALTH PROBLEMS

BY

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## PREFACE

THE first edition of this work, published in 1889, was written for the special use of medical officers of health and others engaged in public health and social work, who have to handle statistical data. It has evidently proved useful, for although the last revision was made in 1899, it is still called for both in this country and in America. The present re-written volume is intended for the same class of workers. It embodies much of the author's public health experience during the last forty years, and it must be regarded as showing the important purposes of administration and of administrative research to which statistics can be put, rather than as a guide to statistical technique.

I have endeavoured to utilize American as well as English vital statistics throughout the volume, in view of the great advance of America in the compilation of accurate figures and in their scientific use, and for the further reason that the most urgent requests for a new edition of this work have come from Americans.

The general plan of the book has not been altered greatly. I have not written a textbook of statistical method, though this aspect of the subject cannot be entirely avoided. But access to and study of the textbooks of statistics is assumed; and for the rest, with the exception of Chapters in Part II, methods are dealt with in their application to each subject as it arises.

It has been a chief aim to summarize available information on each subject dealt with, so that the volume may maintain its value as a ready source of trustworthy statistics, and may give references which will enable the student to pursue further inquiry into any subject on which fuller details are required. Methods of investigation and results on each subject are stated in the same or in contiguous chapters, and thus the student can at once appreciate the utility of the technical processes employed.

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Illustrations of practical problems are appended to many chapters. Some of these are only elementary in character, but experience has shown that they are needed for public health and other students.

Vital Statistics as a subject has developed greatly since 1889, and the introduction of the more elaborate mathematical processes into the study of biological problems—although representing an important advance in science—has repelled many hygienists from that fruitful study of their local or of other statistics which is practicable apart from advanced biometrical methods. The present volume is intended for those not equipped for higher mathematical investigations, which must remain the important function of a limited few. A few of these methods have been briefly indicated in order to make certain paragraphs comprehensible; but the special textbooks must be studied by those wishing to pursue this branch of statistics.

Apart from such mathematical complications, much valuable statistical investigation is practicable, for which no larger outfit is needed than accurate medical knowledge, a willingness to undertake laborious calculations, and sound judgment in the collection of facts and the interpretation of results. No better example of such possibilities exists than in the long and invaluable series of medical letters in the annual reports of the Registrar-General of England and Wales, each one of which contains information and deductions invaluable for every medical officer of health. These reports necessarily cannot exhaust the subjects of discussion, either nationally or still less locally; but they can be made the starting-point of important and extensive investigations into the distribution and the causation of special diseases. It is hoped that this volume may indicate lines for such investigations and encourage their pursuit.

The subjects embraced in the present volume are numerous, and it is almost certain that errors have crept in. The author will be grateful if the reader will communicate with him on any such points.

It will be noted that most of the statistical illustrations are taken from the official and other reports for England and for the United States. Only occasional reference is made to Scottish and Irish reports, or to the valuable

Australasian and Canadian reports. This limitation was necessary to avoid excessive detail; but the student will have no difficulty in referring to the last report of each of these and of other series relating to foreign countries.

Owing to delay in issue of some of the English census returns for 1921, as for instance in dealing with migration, it has been necessary to utilise the 1911 census data. I wish to express my obligation to Mr. Vivian, the English Registrar-General, for allowing me to see and use advanced sheets of official reports on Occupational Mortality and on Fertility; also for permission from him and from H.M. Stationery Office to use a considerable number of official diagrams. The source of other diagrams is acknowledged throughout the text. I am also indebted to members of the staff of the General Register Office for assistance; and my special obligation to Dr. T. H. C. Stevenson, C.B.E., is of a character and on a scale which is evident throughout the volume, and for which formal thanks are entirely inadequate.

To Dr. William H. Davis, Chief Statistician for Vital Statistics of the Bureau of the Census of Washington, I wish to express my obligation for permitting the use of certain diagrams and for sending me advanced copies of official reports.

Mr. F. A. A. Menzler, F.I.A., B.Sc., of the Government Actuary's Department, has read many of the chapters, and has made many suggestions of great value. Dr. H. P. Newsholme and other friends have co-operated; but I am solely responsible for any errors in the volume and for the value or the reverse of any criticisms made within its covers.

In this respect I may compare my labours to those of the immortal Captain Graunt (p. 21), who suggested that, having completed his statistical analysis of the London Bills of Mortality, he was like a schoolboy who, coming to say his lesson to the world ("that peevish and techie master"), brought a bundle of rods wherewith to be whipped for every mistake he had committed.

ARTHUR NEWSHOLME.

ASHLEY HOUSE, SHALFORD, SURREY.  
March, 1923.

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**PART I**  
**VITAL STATISTICS**



## APPENDIX B

### RULES FOR ALLOCATION OF DEATHS

RULES IN USE IN THE GENERAL REGISTER OFFICE,  
ENGLAND, FOR SELECTION OF ONE FROM TWO OR  
MORE JOINTLY STATED CAUSES OF DEATH.

*(From Manual of the International List of causes of death as adapted  
for use in England and Wales, 1912, H.M. Stationary Office.)*

1. In cases where the effect of any two rules appears to be at variance, the first stated is to be followed, unless the second refers explicitly to an exception to be made in the application of the first.

2. In cases of the separate statement as joint causes of death of two diseases the names of which are components of a single compound pathological term, the death is generally to be classed as indicated in the Manual, for the compound term, e.g. Gastritis, Enteritis, treat as Gastro-enteritis.

*N.B.*—This does not apply to Bronchitis, Pneumonia.

3. The general order of preference is as follows:—

1. VIOLENCE.
2. GENERAL DISEASES.
3. LOCAL DISEASES.
4. ILL-DEFINED CAUSES OF DEATH (Nos. 187-189).  
(For Nos. 150-154 see Rule 8.)

#### VIOLENCE.

4. Where any forms of violence and disease are jointly stated as causes of death, the violence is to be preferred except in the following instances:—

- (a) Deaths from any definite disease stated to have been accelerated by accident are to be classed to the disease.
- (b) Deaths during or resultant from operation or the administration of an anæsthetic are to be classed to the disease or injury for which the operation was performed.
- (c) Deaths from pneumonia or other lung diseases consequent upon accidental immersion are to be classed to the disease.
- (d) Deaths from injuries received during an epileptic or apoplectic fit are to be classed to epilepsy or apoplexy, as the case may be.
- (e) Deaths from tetanus, erysipelas, pyæmia, septicæmia, blood-poisoning, etc., following accident are to be classed to the disease if the injury was slight, such as "scratch" or "abrasion"; but if the injury was apparently severe enough to kill by itself (e.g. by vehicle, machinery, etc.), the death is to be classed to violence.
- (f) Deaths from cancer and accident in conjunction are to be classed to cancer.

## GENERAL DISEASES.

5. Any general disease, except—

- (a) Membranous laryngitis (9 B.) and croup (9 C.), which for this purpose are regarded as local diseases, and
- (b) Undefined anæmia and chlorosis (in 54), "other tumours" (46), and chronic rheumatism (48 A.) which for this purpose rank below all except the ill-defined causes of death,

is to be preferred to any local disease except aneurism (81 A.), strangulated hernia and acute intestinal obstruction (in 109), and puerperal fever, phlebitis, and diseases of the breast (137, 139 A., and 141), which for this purpose are included with the general diseases in Group I below.

6. The general diseases are divided into four groups in order of their importance for the purpose of selection. Any disease in Group I is to be selected in preference to any other not in Group I; any in Group II is to be preferred to any other not in Groups I and II, and so on. If two or more of the diseases in any group are stated together, the disease of longest duration, or that first mentioned in the Certificate should as a rule be chosen. (See Rule 10.)

*Group I.*

- 5. Smallpox.
- 12. Asiatic cholera.
- 21. Glanders.
- 22. Anthrax (Splenic fever).
- 23. Rabies.
- 24. Tetanus.
- 39-45. Cancer (all forms).
- 57-59. Chronic lead and other chronic poisonings.
- 81 A. Aneurism.
- In 109. } Strangulated hernia and acute intestinal obstruction.
- 137. Puerperal fever.
- 139 A. Puerperal phlegmasia alba dolens and phlebitis.
- 141. Puerperal diseases of the breast.

And other epidemic diseases of exceptional interest, such as Mediterranean fever (3 B.), Plague (15), Yellow fever (16), Leprosy (17), Beriberi (27), etc.

*Group II.*

- 1. Enteric fever.
- 2. Typhus.
- 3 A. Relapsing fever.
- 4. Malaria.
- 6. Measles.
- 7. Scarlet fever.
- 8. Whooping cough.
- 9 A. Diphtheria.
- 14. Dysentery.

*Group III.*

- 10. Influenza.
- 25. Mycoses.
- 28-35. Tuberculosis (all forms).<sup>1</sup>

<sup>1</sup> Deaths from tubercle of two or more organs should be assigned to No. 28 or No. 29 if the lungs are involved; otherwise to 35. (See notes to Nos. 28 and 35, pp. 5 and 8 of the Manual.)

- 37-38. Venereal diseases.
- 47. Rheumatic fever.
- 52. Addison's disease.

*Group IV.*

- 18. Erysipelas.
- 19 A. Mumps.
- 19 B. German measles.
- 19 C. Varicella.
- 20 (A. B. Pyæmia and Septicæmia.<sup>1</sup>
- 36. Ricketts, softening of bones.
- 48 B. Osteo-arthritis.
- 48 C. Gout.
- 49. Scurvy.
- 50. Diabetes.
- 51. Exophthalmic goitre.
- 53. Leucocythæmia, Lymphadenoma.
- In 54. Pernicious anæmia.
- 55. Other general diseases.

7. If one of the diseases mentioned is an immediate and frequent complication of another, the primary disease should be preferred to its complication.

8. The conditions comprised under headings 150-154 are to be dealt with as follows, notwithstanding anything to the contrary implied in any preceding rule:—

(a) Congenital defects (150), premature birth (151 A.), icterus neonatorum (151 C.), and sclerema and œdema neonatorum (151 D.)—

*Under 3 months*—these conditions are to be preferred to any disease except syphilis and the diseases in Groups I and II.

*Over 3 months*—any definite disease not presumably the consequence of a congenital defect is to be preferred to these conditions.

Premature birth (151 A.) is to be preferred to congenital defects (150) and "other diseases peculiar to early infancy" (152), when occurring together on the same Certificate.

(b) "Other diseases peculiar to early infancy" (152) are to receive the same preference as congenital defects under 3 months of age.

(c) Atrophy, debility and marasmus of infants (151 B.), want of breast milk (151 E.), and senile decay (154 B.), are to be treated as ill-defined causes of death.

(d) Lack of care (153) is to be treated for this purpose as a form of violence.

(e) Senile dementia (154 A.) is to be treated in the same manner as other forms of insanity (see Rule 9).

LOCAL DISEASES.

9. The following are to be selected in preference to any other local diseases appearing in the same Certificate, except aneurism (81 A.), strangulated hernia, and acute intestinal obstruction (in 109), and puerperal fever, phlebitis, and diseases of the breast (137, 139 A. and 141).

<sup>1</sup> Pyæmia and septicæmia are subject to Rule 7, but in cases where the application of this rule causes a local disease to be preferred to either of them, the local disease acquires Group IV precedence

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<i>Column A.</i>	<i>Column B.</i>
61 A. Cerebro-spinal fever.	62. Locomotor ataxy.
61 B. Posterior basal meningitis	63. Other diseases of spinal cord.
78 B. Infective endocarditis	67. General paralysis of insane.
92 A. Lobar pneumonia.	68. Other forms of mental alienation.
104 & 105 A. Infective enteritis.	69. Epilepsy.
106, 107, 112, 121, and other headings according to part affected.	74 A. Idiocy, Imbecility.
	74 C. Cerebral tumour.
	154 A. Senile dementia.
} Parasitic diseases (except thrush).	
108. Appendicitis.	
143. Carbuncle, Boil.	
144 A. Phlegmon.	

A disease in Column A is to be preferred to any disease in Column B, when occurring upon the same Certificate. (See also Rules 6 and 10.)

10. Where two or more local diseases, neither of which is included in the preceding list, are certified together, that of longest duration should be preferred; if duration is not recorded, any disease of a chronic nature should be preferred to a disease not so characterized; if neither disease can be assumed to be chronic, the first mentioned on a *medical* certificate should be selected. Exceptions to this rule are as follows:—

- (a) Any definite disease of the heart (77–80 and 85 A.), or kidney (119–122) is to be preferred to any disease of the respiratory system (86–98).
- (b) "Congestion" of any organ, convulsions (70 and 71), "hemorrhage" (85 C.), laryngismus stridulus (87 A.), thrush (99 B.), and dyspepsia (in 103 B. and 104 and 105 E.) rank below all except the ill-defined causes of death. Alcoholism, however stated, takes the same rank, in view of the treatment of organic disease attributed to it (see pp. x and xiv of Manual).
- (c) Arterial sclerosis (81 B.), heart diseases (77–80 and 85 A.), cirrhosis of the liver (113), and Bright's disease (120 A.) are to be preferred to apoplexy (64 A.), cerebral hæmorrhage (64 E.), hemiplegia (66 A.), and cerebral embolism and thrombosis (82 A.), which on the other hand are to be preferred to bronchitis (89 and 90 B.).
- (d) Cirrhosis of the liver with neuritis is to be taken as alcoholic cirrhosis of liver (113 B.).
- (e) In the case of deaths occurring in lunatic asylums, nervous diseases other than those mentioned under (b) and (c) are to be preferred to other local diseases, except those receiving special preference under rules 6 and 9.

**NOTE.**—The foregoing rules have been framed primarily for the selection of one from two jointly stated causes of death. Where three or more causes are jointly stated it may occasionally be found that the effect of different rules is conflicting. In these cases, which are infrequent, the coder must rely upon his own judgment for guidance as to the rule to be followed.

RULES ISSUED BY THE INTERNATIONAL COMMISSION  
IN 1903 FOR THE SELECTION OF ONE FROM TWO  
JOINTLY STATED CAUSES OF DEATH.\*

*N.B.*—Not in use in the General Register Office for England and Wales.

1. If one of the two diseases is an *immediate and frequent* complication of the other, the death should be classified under the head of the primary disease. Examples:—

*Infantile diarrhœa* and *convulsions*, classify as *infantile diarrhœa*.

*Measles* and *broncho-pneumonia*, classify as *measles*.

*Scarlet fever* and *diphtheria*, classify as *scarlet fever*.

*Scarlet fever* and *nephritis*, classify as *scarlet fever*.

2. If the preceding rule is not applicable, the following should be used: If one of the diseases is *surely fatal*<sup>1</sup> and the other is of less gravity, the former should be selected as the cause of death. Examples:—

*Cancer* and *broncho-pneumonia*, classify as *cancer*.

*Pulmonary tuberculosis* and *puerperal septicæmia*, classify as *tuberculosis*.

*Icterus gravis* and *pericarditis*, classify as *icterus gravis*.

3. If neither of the above rules is applicable, then the following: If one of the diseases is *epidemic* and the other is not, choose the epidemic disease. Examples:—

*Typhoid fever* and *saturnism*, classify as *typhoid fever*.

*Measles* and *biliary calculi*, classify as *measles*.

4. If none of the three preceding rules is applicable, the following may be used: If one of the diseases is *much more frequently fatal* than the other, then it should be selected as the cause of death. Examples:—

*Rheumatism (without metastasis)* and *salpingitis*, classify as *salpingitis*.

*Pericarditis* and *appendicitis*, classify as *pericarditis*.

5. If none of the four preceding rules applies, then the following: If one of the diseases is of *rapid development* and the other is of slow development, the disease of rapid development should be taken. Examples:—

*Diabetes* and *icterus gravis*, classify as *icterus gravis*.

*Cirrhosis* and *angina pectoris*, classify as *angina pectoris*.

*Pleurisy* and *senile debility*, classify as *pleurisy*.

6. If none of the above five rules applies, then the diagnosis should be selected that best characterises the case. Examples:—

*Saturnism* and *peritonitis*, classify as *saturnism*.

Precise diagnosis should be given the preference over vague and indeterminate terms, such as "hæmorrhage," "encephalitis," etc. Arbitrary decisions should be avoided as much as possible by the use of the preceding rules. None of them is absolute, but all are subject to exceptions, which may vary according to local usages. In practice the first rule, which is the most logical of all, is the one of most frequent application. The others have been formulated only to prepare for all cases and to treat them with system and uniformity.

<sup>1</sup> Apart from all treatment. This provision is necessary to assure stability in the application of the rules. Otherwise a therapeutic discovery, for example that of the anti-diphtheritic serum, would modify the tables and injure the comparability of the statistics.

## APPENDIX C

### NOSOLOGIC NOMENCLATURE

#### NOMENCLATURE OF DISEASES AND CAUSES OF DEATH AGREED UPON BY THE INTERNATIONAL COMMISSION, PARIS, OCTOBER 14, 1920.

GENERAL OBSERVATIONS.—The statistics of diseases and causes of death should be given by ages in as detailed a manner as possible, and should show at least the following groups :—

- From 0 to 1 year.
- From 1 to 19 years.
- From 20 to 39 years.
- From 40 to 59 years.
- From 60 years and over.

It seems *desirable* to divide, if possible, the second age group as follows : From 1 to 4 years, from 5 to 14 years, from 15 to 19 years. The distinction by sex for each group is equally desirable.

It is *indispensable* to publish the population by age (and by sex, if the mortality data are so given), conforming to the age-groups adopted for the statistics of causes of death.

#### DETAILED NOMENCLATURE.

*(The titles given in italics relate to morbidity statistics only.)*

##### I. EPIDEMIC, ENDEMIC, AND INFECTIOUS DISEASES.

1. Enteric fever :
  - (a) Typhoid fever.
  - (b) Paratyphoid fevers.
2. Typhus.
3. Relapsing fever ("Spirillum obermeieri").
4. Mediterranean fever ("Melito-coccosis").
5. Malarial fever or cachexia :
  - (a) Malarial fever.
  - (b) Malarial cachexia.
6. Smallpox.
7. Measles.
8. Scarlet fever.
9. Whooping cough.
10. Diphtheria.
11. Influenza :
  - (a) With pulmonary complications specified.
  - (b) Without pulmonary complications specified.
12. Miliary fever.
13. *Mumps*.
14. Asiatic cholera.

15. Cholera nostras (cholericform enteritis).
  16. Dysentery :
    - (a) Amœbic.
    - (b) Bacillary.
    - (c) Due to other causes or of unspecified origin.
  17. Plague :
    - (a) Bubonic.
    - (b) Pneumonic.
    - (c) Septicæmic.
    - (d) Not otherwise defined.
  18. Yellow fever.
  19. Spirochaetosis ictero-hæmorrhagica.
  20. Leprosy.
  21. Erysipelas.
  22. Acute poliomyelitis.
  23. Encephalitis lethargica.
  24. Meningococcal meningitis.
  25. Other epidemic diseases.
  26. Glanders.
  27. Anthrax.
  28. Rabies.
  29. Tetanus.
  30. Mycoses.
  31. Tuberculosis of the respiratory system.
  32. Tuberculosis of the meninges and central nervous system generally.
  33. Tuberculosis of the intestines and peritoneum.
  34. Tuberculosis of the vertebral column.
  35. Tuberculosis of the joints.
  36. Tuberculosis of other organs :
    - (a) Tuberculosis of the skin and subcutaneous cellular tissue.
    - (b) Tuberculosis of the bones (vertebral column excepted).
    - (c) Tuberculosis of the lymphatic system (mesenteric and retroperitoneal glands excepted).
    - (d) Tuberculosis of the genito-urinary system.
    - (e) Tuberculosis of organs other than the above.
  37. Disseminated tuberculosis :
    - (a) Acute.
    - (b) Chronic.
  38. Syphilis :
    - (a) *Primary*.
    - (b) *Secondary*.
    - (c) *Tertiary*.
    - (d) *Hereditary*.
    - (e) *Stage not indicated*.
  39. Soft chancre.
  - 40A. Gonococcal infection (ophthalmia excepted).
  - 40B. Gonorrhœal or purulent ophthalmia.
  41. Purulent infection, septicæmia.
  42. Other infectious diseases.
- II. GENERAL DISEASES NOT INCLUDED ABOVE.
43. Malignant tumours of the buccal cavity.
  44. Malignant tumours of the stomach and liver.

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45. Malignant tumours of the peritoneum, intestines and rectum.
46. Malignant tumours of the female genital organs.
47. Malignant tumours of the breast.
48. Malignant tumours of the skin.
49. Malignant tumours of other or unspecified organs.
50. Benign tumours, and tumours not returned as malignant  
(tumours of the female genital organs excepted).
51. Rheumatic fever.
52. Chronic rheumatism, osteo-arthritis, gout.
53. Scurvy.
54. Pellagra.
55. Beriberi.
56. Rickets.
57. Diabetes.
58. Anæmia, chlorosis :
  - (a) Pernicious anæmia.
  - (b) Other anæmias and chlorosis.
59. Diseases of the pituitary gland.
60. Diseases of the thyroid gland :
  - (a) Exophthalmic goitre.
  - (b) Other diseases of the thyroid gland.
61. Diseases of the parathyroid glands.
62. Diseases of the thymus.
63. Diseases of the adrenals.
64. Diseases of the spleen.
65. Leukæmia, lymphadenoma.
  - (a) Leukæmia.
  - (b) Lymphadenoma (Hodgkin's disease).
66. Alcoholism (acute or chronic).
67. Chronic poisoning by mineral substances.
68. Chronic poisoning by organic substances.
69. Other general diseases.

### III. DISEASES OF THE NERVOUS SYSTEM AND SENSE ORGANS.

70. Encephalitis.
71. Meningitis.
72. Tabes dorsalis (locomotor ataxy).
73. Other diseases of the spinal cord.
74. Cerebral hæmorrhage, apoplexy :
  - (a) Cerebral hæmorrhage.
  - (b) Cerebral thrombosis and embolism.
75. Paralysis of unstated origin.
  - (a) Hemiplegia.
  - (b) Other forms of paralysis.
76. General paralysis of the insane.
77. Other forms of mental alienation.
78. Epilepsy.
79. Convulsions (non-puerperal ; 5 years and over).
80. Infantile convulsions (under 5 years of age).
81. Chorea.
- 82A. *Hysteria and neuralgia.*
- 82B. Neuritis.
83. Cerebral softening.
84. Other diseases of the nervous system.



85. Diseases of the eye and annexa :  
 (a) *Diseases of the organs of the eye.*  
 (b) *Follicular conjunctivitis.*  
 (c) *Trachoma.*  
 (d) *Tumours of the eye.*  
 (e) *Other diseases of the eye and annexa.*

86. Diseases of the ear and of the mastoid sinus.

#### IV. DISEASES OF THE CIRCULATORY SYSTEM.

87. Pericarditis.  
 88. Acute endocarditis and myocarditis.  
 89. Angina pectoris.  
 90. Other diseases of the heart.  
 91. Diseases of the arteries :  
 (a) Aneurism.  
 (b) Arterial sclerosis.  
 (c) Other diseases of the arteries.  
 92. Embolism and thrombosis (not cerebral).  
 93. Diseases of the veins (varices, hæmorrhoids, phlebitis, etc.).  
 94. Diseases of the lymphatic system (lymphangitis, etc.).  
 95. Hæmorrhage without determined cause.  
 96. Other diseases of the circulatory system.

#### V. DISEASES OF THE RESPIRATORY SYSTEM.

97. Diseases of the nasal fossæ and of their annexa.  
 98. Diseases of the larynx.  
 99. Bronchitis :  
 (a) Acute.  
 (b) Chronic.  
 (c) Not otherwise defined under 5 years of age.  
 (d) Not otherwise defined over 5 years of age.  
 100. Broncho-pneumonia (including capillary bronchitis).  
 101. Pneumonia :  
 (a) Lobar.  
 (b) Not otherwise defined.  
 102. Pleurisy.  
 103. Congestion and hæmorrhage infarct of the lung.  
 104. Gangrene of the lung.  
 105. Asthma.  
 106. Pulmonary emphysema.  
 107. Other diseases of the respiratory system (tuberculosis excepted):  
 (a) Chronic interstitial pneumonia, including occupational diseases of the lung.  
 (b) Diseases of the mediastinum.  
 (c) Diseases not included under (a) or (b).

#### VI. DISEASES OF THE DIGESTIVE SYSTEM.

- 108A. *Diseases of the teeth and gums.*  
 108B. Other diseases of the buccal cavity and its annexa.  
 109. Diseases of the pharynx and tonsils (including adenoid vegetations).  
 110. Diseases of the œsophagus.  
 111. Ulcer of the stomach or duodenum:  
 (a) Ulcer of the stomach.  
 (b) Ulcer of the duodenum.

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112. Other diseases of the stomach (cancer excepted).
113. Diarrhoea and enteritis (under 2 years of age).
114. Diarrhoea and enteritis (over 2 years of age).
115. Ankylostomiasis.
116. Diseases due to other intestinal parasites :
  - (a) Cestodes (hydatids of the liver excepted).
  - (b) Trematodes.
  - (c) Nematodes (other than ankylostoma).
  - (d) Coccidia.
  - (e) Other parasites.
  - (f) Undefined parasites.
117. Appendicitis and typhlitis.
118. Hernia, intestinal obstruction :
  - (a) Hernia.
  - (b) Intestinal obstruction.
- 119A. *Diseases of the anus and stercoral fistula.*
- 119B. Other diseases of the intestine.
120. Acute yellow atrophy of the liver.
121. Hydatid tumour of the liver.
122. Cirrhosis of the liver :
  - (a) Returned as alcoholic.
  - (b) Not returned as alcoholic.
123. Biliary calculi.
124. Other diseases of the liver.
125. Diseases of the pancreas.
126. Peritonitis of unstated origin.
127. Other diseases of the digestive system (cancer and tuberculosis excepted).

### VII. NON-VENEREAL DISEASES OF THE GENITO-URINARY SYSTEM AND ITS ANNEXA.

128. Acute nephritis (including unspecified under 10 years of age).
129. Chronic nephritis (including unspecified over 10 years of age).
130. Chyluria.
131. Other diseases of the kidneys and their annexa (diseases of the kidneys in pregnancy excluded).
132. Calculi of the urinary passages.
133. Diseases of the bladder.
134. Diseases of the urethra, urinary abscess, etc. :
  - (a) Stricture of the urethra.
  - (b) Other diseases.
135. Diseases of the prostate.
136. Non-veneral diseases of the male genital organs.
137. Cysts and other benign tumours of the ovary.
138. Salpingitis and pelvic abscess.
139. Benign tumours of the uterus.
140. Non-puerperal uterine hæmorrhage.
- 141A. *Metritis.*
- 141B. Other diseases of the female genital organs.
142. Non-puerperal diseases of the breast (cancer excepted).

### VIII. THE PUERPERAL STATE.

- 143A. *Normal childbirth.*
- 143B. Accidents of pregnancy :

- (a) Abortion.
- (b) Ectopic gestation.
- (c) Other accidents.

- 144. Puerperal hæmorrhage.
- 145. Other accidents of childbirth.
- 146. Puerperal sepsis.
- 147. Phlegmasia alba dolens ; puerperal embolism or sudden death in the puerperium.
- 148. Puerperal albuminuria and convulsions.
- 149. Childbirth (without other explanation).
- 150. Puerperal diseases of the breast.

**IX. DISEASES OF THE SKIN AND CELLULAR TISSUE.**

- 151. Gangrene.
- 152. Furuncle.
- 153. Phlegmon, acute abscess.
- 154A. *Trichophytosis*.
- 154B. *Scabies*.
- 154c. Other diseases of the skin and its annexa.

**X. DISEASES OF THE BONES AND ORGANS OF LOCOMOTION.**

- 155. Diseases of the bones (tuberculosis and rickets excepted).
- 156. Diseases of the joints (tuberculosis and rheumatism excepted).
- 157. Amputation.
- 158. Other diseases of the organs of locomotion.

**XI. MALFORMATIONS.**

- 159. Congenital malformations (still-births excepted).

**XII. DISEASES OF EARLY INFANCY.**

- 160A. *Nurslings discharged from hospital without disease*.
- 160B. Congenital debility, icterus and scleroma.
- 161. Premature birth ; injury at birth.
- 162. Other diseases peculiar to early infancy.
- 163. Lack of care.

**XIII. OLD AGE.**

- 164. Senility.

**XIV. EXTERNAL CAUSES.**

- 165. Suicide by solid or liquid poisons.
- 166. Suicide by corrosive substances.
- 167. Suicide by poisonous gas.
- 168. Suicide by hanging or strangulation.
- 169. Suicide by drowning.
- 170. Suicide by firearms.
- 171. Suicide by cutting or piercing instruments.
- 172. Suicide by jumping from high places.
- 173. Suicide by crushing.
- 174. Other suicides.
- 175. Poisoning by food.
- 176. Poisoning by venomous animals.
- 177. Other acute accidental poisonings.
- 178. Conflagration.
- 179. Burns (conflagration excepted).

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180. Accidental mechanical suffocation.
181. Accidental absorption of irrespirable or poisonous gas.
182. Accidental drowning.
183. Accidental injury by firearms (war casualties excepted).
184. Accidental injury by cutting or piercing instruments.
185. Accidental injury by fall.
186. Accidental injury in mines and quarries.
187. Accidental injury by machinery.
188. Accidental injury by other forms of crushing (vehicles, railways, landslides, etc.).
189. Injury by animals (poisoning excepted).
190. Wounds of war.
191. Execution of civilians by belligerent armies.
- 192A. *Fatigue*.
- 192B. Hunger or thirst.
193. Excessive cold.
194. Excessive heat.
195. Lightning.
196. Electricity (lightning excepted).
197. Homicide by firearms.
198. Homicide by cutting or piercing instruments.
199. Homicide by other means.
200. Infanticide (murder of infants less than one year of age).
- 201A. *Dislocations*.
- 201B. *Sprains*.
- 201C. Fracture (cause not specified).
202. Other external violence.
203. Violent deaths of unknown causation.

### XV. ILL-DEFINED DISEASES.

204. Sudden death.
- 205A. Cause of death unstated or ill-defined.
- 205B. *No disease; simulation*.
206. Diseases omitted as having caused less than 10 deaths.

NOTE.—When less than 10 deaths are attributed to a disease the data may be given simply in a footnote. The total number of deaths from causes omitted for this reason must then be given under No. 206.

The International Commission charged with the third decennial revision of the Nosologic Nomenclatures was convoked by the French Ministry of Foreign Affairs upon the recommendations of the League of Red Cross Societies to meet at Paris, October 11, 1920. The above nomenclature was agreed to by the delegates of forty-two nations, and the articles of agreement were signed October 14, 1920. The official report with detailed index and the minutes of the meeting is not yet issued (June 1923).

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