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PAN AMERICAN HEALTH ORGANIZATION  
Pan American Sanitary Bureau,  
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WORLD HEALTH ORGANIZATION

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REGIONAL ADVISORY COMMITTEE ON INTERNATIONAL  
CLASSIFICATION OF DISEASES

First Report



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REGIONAL ADVISORY COMMITTEE ON INTERNATIONAL  
CLASSIFICATION OF DISEASES

Washington, D. C., 20-24 February 1961

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\* Unable to attend.

# REGIONAL ADVISORY COMMITTEE ON INTERNATIONAL CLASSIFICATION OF DISEASES

## First Report

### 1. Introduction

The first meeting of the Regional Advisory Committee on Classification was held in the Pan American Sanitary Bureau from February 20-24, 1961. At the opening session Dr. John C. Cutler, Assistant Director of the Pan American Sanitary Bureau, welcomed the members and outlined the responsibility of the World Health Organization in this field. He gave the major objectives of the first meeting, namely, to establish a method of working together in the region in order that the International Classification of Diseases\* serve the needs of health and medical workers in all countries, to promote greater understanding of the Classification and to effect improvement in the basic data. He commented on the activities and leadership being given by the Latin American Center for Classification of Diseases and the contribution of the Venezuelan Government to this program. This development of a program of regional activities is a new venture and a great challenge.

### 2. Responsibilities of WHO and Approach to 1965 Revision

Dr. W. P. D. Logan, Director of Health Statistics of the World Health Organization (WHO) gave a brief summary of the history of the International List of Causes of Death which was started in the 1890's under sponsorship of the International Statistical Institute. The French Government convoked at Paris the Revision Conferences in 1900, 1909, 1920, 1929, 1938 and 1948.

At the time of the 1948 Revision, WHO which was just coming into existence took over responsibility. The name was changed to the International Statistical Classification of Diseases, Injuries, and Causes of Death and this Revision was developed for morbidity as well as for mortality purposes. However, it should be remembered that the primary purpose for 50 years has been for mortality statistics, that is, for tabulation of national mortality data. Although various morbidity purposes are becoming increasingly important, and the Classification has to meet these needs, it still remains essential that the Classification should be suitable for mortality tabulation.

The responsibility of WHO as stated in the Constitution is "to establish and revise as necessary international nomenclatures of diseases, of causes of death...."

Previous to the establishment of WHO, Revisions were accomplished by bringing a few national representatives together to make the necessary changes. However, it is now recognized that a Revision is too long a task to be accomplished solely at a conference and the WHO Statistical Division at Headquarters has a section for the continuous study of problems associated with

\* Manual of the International Statistical Classification of Diseases, Injuries and Causes of Death, WHO, Geneva, 1957.

the Classification and for publication of the Classification in three languages English, French and Spanish. Headquarters collects suggestions and proposals and stimulates national and regional activities. It is assisted by the WHO Centre for Classification of Diseases, London. The next Revision Conference will probably be held early in 1965, possibly in Geneva. The preparatory work and the solution of problems associated with the Revision is a responsibility of Headquarters of WHO. Progress in health conditions including health statistics is rapid throughout the world and by the end of another ten years the regions may be more nearly alike. Thus it can be expected that in due course all the regions of WHO will be actively contributing to the Revision of the Classification. Meantime, however, the American Region is one which can make a major regional contribution. In the past, work has been principally on a national basis with only three countries working together for joint recommendations, namely, England and Wales, Canada and the United States. Thus regional coordination in Latin America is a new development for working out a common plan of suggestions which will be valuable not only for Latin America but also for other regions and to Headquarters.

Although the adoption of the Classification remains an individual national responsibility, proposals have a better chance of being accepted that have been thoroughly tried out and have the support of a group of countries. Through regional organization an opportunity is provided for coordination of national proposals, with the Latin American Center for Classification of Diseases rendering major assistance.

### 3. Timetable of WHO

A timetable for activities has been prepared by Headquarters to allow time for testing suggested changes. The 1965 Revision will be the first major Revision carried out by WHO; the groundwork for the 1948 Revision was done before WHO came into existence, and only slight changes were incorporated in the 1955 Revision. Preparatory work is essential and resources should be made available.

The following is the proposed timetable:

1960 - In December 1960 the program was discussed at the meeting of the Expert Committee on Health Statistics.

1961 - A meeting will be held in November 1961 of a Subcommittee on Classification for a two-week period at which time the general aspects of the Revision of the Classification will be considered. There will be special two-day meetings of statisticians and clinicians on the three following fields:

1. Cardiovascular diseases
2. Mental diseases
3. Perinatal conditions

Proposed changes in other fields may also be considered at the general meeting.

- 1962 - Special meetings will be held as needed. The Expert Committee on Health Statistics which will meet in December will be informed of progress toward the Revision and make suggestions for further activities.
- 1963 - The Subcommittee on Classification will meet toward the end of the year to prepare the draft Revision which will be disseminated to all Member Countries for national and regional comments.
- 1964 - About October, the Expert Committee on Health Statistics will have as its major item the Revision of the Classification. Immediately following, a final draft Revision will be prepared and circulated for consideration by countries before the Revision Conference in 1965.
- 1965 - The Revision Conference may be scheduled early in the year (dependent on the date of WHO Assembly) in order that the Revision may be sent to the Assembly for approval.

Regional activities should be planned in relation to this time schedule.

#### 4. Progress on Classification in the United States

The activities of five subcommittees on classification of the U. S. National Committee on Vital and Health Statistics preparatory to the Eighth Revision of the International Classification of Diseases were described.

##### a. Classification of mental diseases

The classification now in use in the United States is that of the American Psychiatric Association. This classification differs in several important respects from that of the International Classification of Diseases. The Subcommittee has the problem of developing a classification which will be acceptable to the psychiatrists in the United States and in other countries. To date, the work of the Subcommittee has been largely exploratory. It is hoped that there will be consultations with the corresponding Subcommittee of the United Kingdom in the development of a classification of mental diseases.

##### b. Classification of perinatal morbidity and mortality

A draft classification of "Certain Causes of Morbidity and Mortality Peculiar to Fetal and Early Infancy Periods" has been developed. This classification has already been tested and will now be circulated to agencies, national organizations and specialists in the United States for comments and criticisms prior to submission for international consideration.

##### c. Cardiovascular-renal diseases

A proposed classification had resulted from the joint meeting of the U.S. and U.K. Subcommittees on Classification of Cardiovascular Diseases. This draft Classification brings in the cerebrovascular diseases, and provides for cross-classification of cardiac and cerebrovascular diseases

as well as certain other associated conditions. It has been tested on mortality and morbidity data in England and in the United States.

d. Accidents, poisonings and other violence (external causes)

A draft classification will be released shortly.

e. Congenital malformations

A subcommittee is being created to work on this classification.

The problem of assessing the suitability of a classification was discussed. One criterion is the codability and how readily the rules are understandable. Another and more important is in terms of the use of the classification and how well the resulting data satisfy consumer needs.

The procedure to be followed with these subcommittee proposals in the United States was explained. After appropriate national clearance, the National Committee will recommend to the Surgeon General of the Public Health Service that the Revision proposals be sent to WHO for international consideration.

## 5. Classification of Nutritional Deficiency Diseases

A proposal was submitted to improve the classification of nutritional disorders in order to measure more satisfactorily the size of the problem as shown by causes of death, hospitals records and morbidity surveys. The following three groups were considered by the Committee: (a) protein, calorie and unspecified malnutrition, (b) nutritional deficiency anaemias and (c) avitaminosis.

a) Protein, calorie and unspecified malnutrition (280-282)

The following three divisions were proposed:

- 280 - Kwashiorkor (protein malnutrition)
- 281 - Marasmus or inanition (calorie deficiency)
- 282 - Malnutrition, other and unspecified

There appeared to be agreement among specialists consulted in the field of nutrition that each of the above three states should have a separate category. The Advisory Committee felt that this grouping was valuable and that it should be brought before the Joint WHO/FAO Expert Committee on Nutrition for consideration. The development of international diagnostic standards for these categories by this Expert Committee would be desirable especially to obtain precise definitions of these categories and the terminology in usage to describe them.

Tabulations were prepared by the Latin American Center for the Classification of Diseases by reassigning deaths in Venezuela from present List Numbers 772 and 286 to these suggested categories. These data indicated that many different terms were in use in Spanish and that a large proportion of deaths from malnutrition which probably belong together but are at present



scattered in several categories of the Classification would be included in the three categories. Of the 890 deaths studied, 854 were placed in these three categories with 223 classed as kwashiorkor, 328 as marasmus and 303 as other and unspecified malnutrition. The group thought that it would be advisable to have similar sample tabulations made in several countries. However, in order to classify adequately terms in use the interpretations usually intended should be determined through discussions with specialists in pediatrics and in nutrition. Querying through questionnaires or verbal interviews is another method for ascertaining the correct interpretation of the terms used on morbidity and mortality records. Since nutritional diseases in Latin America are a problem mainly in the tropical and sub-tropical areas, efforts should be made to obtain such investigations in countries such as Panama, Costa Rica, El Salvador, Guatemala, Colombia, and Venezuela. Immediate work is desirable in order that recommendations can be submitted to WHO before the November 1961 meeting. To ensure interest and contributions by countries the director of the Latin American Center will visit some of these countries.

b. Nutritional deficiency anemias (291-292)

At present the only nutritional deficiency anaemias appearing in the Classification are the iron deficiency anaemias under the section of Diseases of the Blood and Blood-forming Organs. The question was discussed of transferring this category to the nutritional deficiency diseases. Basing its recommendations on opinions from specialists who were consulted, the Committee considered that at present it would be best to keep the iron deficiency anaemias in the blood group.

In areas where ankylostomiasis is prevalent many cases of iron deficiency anaemias will only be described as ankylostomiasis and assigned to that category. Although the committee accepted the premise of this relationship provisionally, it was realized that for clarification further investigation on the etiology of this anaemia is needed.

In regard to the etiology of other nutritional deficiency anaemias, there is no agreement among the specialists consulted. However, it was agreed by the Committee that anaemias could be incorporated under the general heading of Nutritional Anaemias in the group of Blood Diseases. Additional research in the next few years may indicate their specific origin and show that they should be included with nutritional deficiency diseases.

Provisionally, the following classification on nutritional deficiency anaemias has been suggested to be incorporated under Diseases of the Blood and Blood-forming Organs:

- 291 - Iron deficiency anaemias (microcytic, hypochromic)
- 292 - Other nutritional deficiency anaemias
  - 292.1 - Folic acid deficiency anaemia (megaloblastic)
  - 292.2 - Vitamin B<sub>12</sub> deficiency anaemia (megaloblastic)
  - 292.3 - Vitamin B<sub>6</sub> deficiency anaemia (microcytic, hypochromic)

292.4 - Specific protein deficiency anaemia (normocytic-normochromic)

Note: The Committee believes, on the basis of reports from a number of specialists, that this category is a controversial one..

292.5 - Other

c) Avitaminosis

The Committee felt that a simplification of the present classification is needed. It was suggested that the categories such as "Vitamin C deficiency, excluding scurvy" and "Vitamin D deficiency, excluding rickets" should be eliminated. The following classification was proposed:

- 283 - Vitamin A deficiency
- 284 - Thiamine deficiency (including beriberi)
- 285 - Nicotinic acid deficiency (including pellagra)
- 286 - Other vitamin B complex deficiencies
- 287 - Ascorbic acid deficiency (including scurvy)
- 288 - Vitamin D deficiency

- 288.1 - Rickets, active
- 288.2 - Rickets, late effects
- 288.3 - Osteomalacia

289 - Other vitamin deficiency states

The Committee did not discuss the classification of the diseases resulting from malabsorption and related syndromes and suggests that the Expert Committee on Nutrition consider their place in the Classification.

It was considered that mortality directly attributable to nutritional diseases, as in many other diseases, does not represent the true weight of malnutrition in the determination of death. The problem of the relation between nutrition and infections was pointed out. In some countries a significant part of the high mortality attributed to infectious diseases such as diarrheas, measles, whooping cough, bronchopneumonia and others may have nutritional status as a contributing factor of great importance. It was suggested that in making decisions for the coming Revision, results of the research on the role of malnutrition in mortality attributed to the infectious processes should be reviewed. Consideration should be given to the possibility of providing subcategories to show the association of malnutrition and some of the infectious diseases.

The Committee was concerned primarily with nutritional deficiency diseases but mentioned in passing some aspects of overnutrition which is frequently a contributory cause of death in some countries and a direct cause in some instances. Its importance in the Classification for purposes of morbidity is obvious. In the present Revision a category is assigned for "obesity, not specified as of endocrine origin" (287). Further consideration might be given to the overnutrition problem in the next Revision.

The Committee wishes also to call attention to the fact that although nutritional deficiency diseases occur principally among children, the Classifi-

cation should be adaptable to the problems which affect other population groups such as pregnant women and elderly people.

#### 6. Classification of Diseases Attributable to Viruses

The rapid progress in identification of viruses responsible for disease necessitates an extensive Revision of the Classification with provision for expansion with the identification of new viruses. According to the current state of knowledge, it is not always possible to associate each of the known viral agents with a definite clinical syndrome (and this is especially true for the viruses discovered in recent years). It is also true that virus strains closely resembling each other in the laboratory may give rise to easily distinguishable clinical syndromes. In developing the classification, it is advisable to take into account the clinical picture, the vector relationship and the etiologic agent. A classification of viral diseases based exclusively on the taxonomy of the etiological agents is not practical, at least in the present state of knowledge, and with existing laboratory facilities.

The Committee reviewed the proposed classification of diseases attributable to viruses. In this proposal, a grouping of these diseases under five main headings was suggested, namely:

- A - Viral diseases with frequent involvement of the nervous system
- B - Arthropod-borne viral diseases with slight or no involvement of the nervous system
- C - Viral diseases with predominant involvement of the respiratory system
- D - Viral diseases accompanied by exanthem
- E - Viral diseases with involvement of other organs or systems

The Committee considered that this method of classification was acceptable. As a result of the discussions, slight modifications were introduced in the proposed classification as shown in Annex 1. The three digit numbers assigned to these categories are tentative and for discussion purposes only.

#### A. Viral diseases with frequent involvement of the nervous system

The following ten categories are included:

- 075 - Acute paralytic poliomyelitis
- 076 - Acute non-paralytic poliomyelitis
- 077 - Acute poliomyelitis, unspecified as to paralytic or non-paralytic
- 078 - Late effects of acute poliomyelitis
- 079 - Aseptic meningitis
- 080 - Rabies
- 081 - Lethargic encephalitis
- 082 - Arthropod-borne viral encephalitis

- 083 - Other and unspecified infectious encephalitis
- 084 - Late effects of acute encephalitis

The division of poliomyelitis into four 3-digit categories seemed desirable to separate paralytic from non-paralytic disease whenever possible. The advisability of continuing to show 081, lethargic encephalitis as a separate category should be determined by inquiries. So far as is known, no outbreaks of classical lethargic encephalitis have occurred since 1926. It was suggested that the desirability of including 084, late effects of acute encephalitis in this section, or alternatively in Section VI (Diseases of the Nervous System), should be discussed with neurologists. The same should be done with the subgroups under late effects of acute encephalitis.

B. Arthropod-borne viral diseases with slight or no involvement of the nervous system

The following diseases may occasionally involve the central nervous system but it was agreed that it was best to form a separate group:

- 085 - Yellow fever
- 086 - Dengue
- 087 - Arthropod-borne haemorrhagic fevers
- 088 - Other arthropod-borne viral diseases

C. Viral diseases with predominant involvement of the respiratory system.

The position of the viral diseases tending to affect the respiratory system was discussed. Discovery of new viral agents and evidence of their etiologic relationship to these acute upper respiratory "syndromes" suggest the advisability of placing them in Section I (Infective and Parasitic Diseases) instead of classifying them in Section VIII (Diseases of the Respiratory System) as in the Seventh Revision. Although evidence of an unequivocal etiological relationship to any specific virus is still lacking in a large proportion of cases with acute upper respiratory symptoms, there is at present a general consensus on the viral character of these infections. A cautious attitude on this position, however, is necessary. If these categories are taken out of Section VIII, for consistency it will be advisable to move several other disease categories such as acute tonsillitis, influenza, and pneumonia; after this, it may be very difficult to decide whether or not others should be moved. The Committee is cognizant of the possible consequences of the suggested changes and hopes that a careful evaluation by expert groups will be made.

In this section have been included the following three-digit categories:

- 089 - Common cold
- 090 - Herpangina
- 091 - Acute viral laryngitis and tracheitis
- 092 - Acute upper respiratory infection of multiple or unspecified sites
- 093 - Influenza
- 094 - Primary atypical pneumonia
- 095 - Psittacosis and ornithosis

Subdivisions of categories 089 and 092 above according to etiologic agents did not seem advisable. Such subdivisions might be useful for special study groups, but the opinion was that for purposes of general or hospital morbidity, such subcategories would be unrealistic. However, for 094, atypical pneumonia, the serious character of the disease and future advances expected in methodology of laboratory diagnosis may justify etiologic subcategories.

For category 093, influenza, it was considered unnecessary to maintain the separate categories for digestive and nervous manifestations without respiratory symptoms, as listed in 482 and 483 of the 1955 Classification.

#### D. Viral diseases accompanied by exanthem

The following eight categories were proposed:

- 096 - Smallpox
- 097 - Cowpox
- 098 - Chickenpox
- 099 - Herpes zoster
- 100 - Herpes febriles
- 101 - Measles
- 102 - Rubella
- 103 - Other viral exanthema

Thought was given to the possibility of having chickenpox and herpes zoster (098 and 099) under a single three-digit category (with one four-digit subcategory for each) since there is general acceptance of their single etiology. However, in keeping with the criteria adopted elsewhere in this proposal, it was considered advisable to give each of them a separate three-digit category.

#### E. Viral diseases with involvement of other organs or systems

Seven three-digit categories were allowed for this group of diseases:

- 104 - Mumps
- 105 - Viral hepatitis
- 106 - Infectious mononucleosis
- 107 - Trachoma
- 108 - Inclusion blennorrhoea
- 109 - Infectious keratoconjunctivitis
- 110 - Other viral diseases

Special attention was given to the classification of viral hepatitis (category 105). The general feeling was that infectious hepatitis and homologous serum jaundice should be given separate fourth-digits in the category for viral hepatitis, 105. Careful study should be given to the hepatic conditions associated with pregnancy (642.5, 686), since there are doubts that they should be classified in different parts of the Classification.

It was agreed that trachoma, inclusion blennorrhoea and infectious keratoconjunctivitis should be assigned separate three-digit categories. Decision as to the inclusion of subcategory, epidemic viral gastroenteritis (110.4), should depend on the way the whole group of diarrheal diseases is classified.

### 7. Classification of Diarrheal Diseases

The section of the Report of the Study Group on Diarrheal Diseases, 1958, WHO/D.D./25, was used as the basis for discussion. Considerable work has been done in the Region of the Americas which has shown the importance of diarrheal diseases and the difficulty of classification of terms. The WHO Study Group recommended that consideration should be given in the Eight Revision to bringing together the many terms being used for the diarrheal diseases into one group. In the Seventh Revision, non-specific diarrhea is scattered in the following categories of the Classification:

- 048 - Unspecified forms of dysentery
- 571 - Gastro-enteritis and colitis, except ulcerative, age 4 weeks and over
- 572 - Chronic enteritis and ulcerative colitis
- 578 - Other diseases of intestines and peritoneum
- 764 - Diarrhea of newborn
- 773 - Ill-defined diseases peculiar to early infancy  
(Toxicosis under 1 year has been included here)
- 785.6 - Diarrhea, age 2 years and over
- 795.0 - Other ill-defined conditions  
(Toxicosis, 1 year and over, is included here)

There are two main problems. One involves the grouping of these categories and the place of the group in the Classification, and the other is concerned with the terminology in use for these diseases especially in Spanish-speaking countries of Latin America. Although there were some differences of opinion due in part to the differences in instruction in medical schools in the various countries there seemed to be general agreement that infection has a major role in the etiology of the diarrheal diseases in most of the countries in Latin America.

Data were presented which showed the seasonal and the age distributions of the diarrheal diseases which resembled the seasonal distribution and age distribution of deaths assigned to the dysenteries. There was agreement that a distinction should not be made by age and that the diarrheal diseases should be brought together into one section of the Classification.

It was pointed out that at present a number of terms descriptive of diarrheal diseases are used in Latin American countries which do not appear in the Alphabetical Index (Volume 2 of the Classification). Thus, the problem of terminology indicates the desirability of collecting terminology in use for proper incorporation in the Alphabetical Index and in the Classification.

The Committee recommended that these several categories be combined into one which would be added to the section (040-049), "infectious diseases commonly arising in intestinal tract." This category would include the present 048 - "unspecified forms of dysentery," probably all of 571, 572, 764, 785.6 and terms from 578, 773 and 795.0. It was recognized that such a transfer would have consequential effects on the sections of the Classification dealing with the digestive system and with diseases of the newborn. For the diarrheal diseases which are not infectious in origin, there should be a residual category listed in Dis-

eases of the Digestive System where such diarrheal diseases could be included.

There was considerable discussion of the association between the diarrheal diseases and nutritional deficiency diseases, and some interest was expressed in categories combining diarrheal diseases and associated nutritional status. The discussion indicated the desirability of research in order to determine to what extent diarrheal diseases were infectious in origin and their relationship to nutrition.

#### 8. Classification of Other Infective and Parasitic Diseases

The section devoted to tuberculosis 001-019 was discussed in some detail. It was agreed that some changes might be made, but the Committee made no firm recommendations. The following points were brought up as matters for future consideration:

- (1) Suggestion for elimination of category 001 (Respiratory tuberculosis with mention of occupational disease of the lung). The Committee believed that it should be retained.
- (2) Elimination of category 017 (Tuberculosis of adrenal glands) as a separate category. Because of the rarity of the disease, it might be preferable to classify tuberculosis of adrenal glands with category 018, Tuberculosis of other organs.
- (3) Removal of tuberculosis of the Intestines (included in 011) to 018 (Tuberculosis of other organs). This form is almost always a complication of pulmonary tuberculosis, and the primary form is rare.
- (4) Change in priority now given to pulmonary tuberculosis when disseminated tuberculosis is also mentioned.
- (5) Combination of tuberculosis and diabetes occurring together as a new joint category.
- (6) Inactive pulmonary tuberculosis is being reported with increasing frequency as the underlying cause of death and emphysema and cor pulmonale are the terminal events in such cases. A separate category for "Late effects of healed pulmonary tuberculosis" might be created. (There already is a category 013 for "Late effects of healed bone and joint tuberculosis".)
- (7) Pleurisy with effusion without mention of cause, now assigned to pleural tuberculosis (003) requires further study, since today many such cases are not tuberculous in origin, especially in elderly persons.

The remaining groups of diseases in Section I, Infective and Parasitic Diseases, which need to be studied are the following:

Syphilis and its sequelae (020-029)  
 Gonococcal infection and other venereal diseases (030-039)  
 Other bacterial diseases (050-064)  
 Spirochaetal diseases, except syphilis (070-074)  
 Malaria (110-117)  
 Other infective and parasitic diseases (120-138)

The Committee recommended that the Pan American Sanitary Bureau review the classification of these diseases, and obtain advice of the Latin American Center and of other specialists. The Latin American Center would proceed with the necessary trials and study of terminology.

#### 9. Adaptation of Classification for Diagnostic Indexing of Hospital Records

The Latin American Center for Classification of Diseases is completing a Spanish edition of the adaptation of the Classification for diagnostic indexing. This edition has been based upon an Adaptation\* recently introduced in the United States. Whereas the United States' Adaptation departs in a few important areas from the International Classification of Diseases, the Spanish version is in line with the International Classification except for certain fourth-digit modifications.

For consideration of the specific problems involving the use of the Classification for diagnostic indexing, two members\*\* of the Group which developed the U.S. Adaptation joined the meeting.

It was reported that in the United States' Adaptation it had been decided to depart from the International Classification in the section on mental diseases because the Classification of the American Psychiatric Association is in use in most mental hospitals in the United States. The other major change was to include drug reactions in the section on poisonings in line with the recommendations of the American Society of Hospital Pharmacists. Categories for vague terms were omitted, and the fourth digits, 8 and 9, were used consistently for "other and undiagnosed conditions". The operations code included in this publication was based on the British scheme.\*\*\*

In hospital indexing, efforts are directed to grouping all cases of a kind together. Multiple diagnoses are not contained in a single category (as in coding of causes of death) and each diagnosis is indexed individually.

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\* International Classification of Diseases, Adapted for Indexing of Hospital Records and Operations Classification, U.S. Dept. of Health, Education and Welfare, 1959.

\*\* Miss Dorothy Kurtz, Chief Medical Record Librarian, Columbia Presbyterian Medical Center, New York, N. Y.  
 Miss Lillian Erickson, Chief, Medical Records Branch, Division of Hospitals, Public Health Service, Washington, D. C.

\*\*\* Code of Surgical Operations with Classification of Radiotherapy and Anaesthetic Procedure, General Register Office, London, 1956.



In the United States, the diagnostic index is used principally for locating hospital case records for study of the results of therapy or other factors, and not for deriving hospital statistics. The Columbia Presbyterian Hospital does not use the information for statistical purposes; emphasis is placed on finding records of specified diagnosis.

In Chile the Standard Nomenclature of Diseases and Operations of the American Medical Association was employed until 1953. Since then, the International Classification of Diseases has been used for statistical purposes and for indexing of hospital records.

The viewpoint of WHO is given in the last section of the Introduction of the 1955 Revision of the Classification, entitled "Use of the International Classification of Diseases as a Diagnostic Index." There it is stated that the Classification was suitable for use as a diagnostic index to hospital case-histories, and it is recommended that the three or four digits be left exactly as given in the Classification, since conflict in numbering causes confusion. Although comparability of diagnostic indexing is not necessary, it may prove useful. However, for hospital statistics, international comparability is highly desirable and thus identical numbering and content are essential.

A question was raised in regard to the problems caused by decennial Revisions of the Classification and the consequences on hospital indices. Such changes were reported not to create difficulties as the index could be closed on the last day of the year and a new index started on the first day of the year in which the Revision is introduced.

In the discussion of the number of digits required for a diagnostic index, three digits were not considered sufficient (less than 1000 categories) and five digits too many. An index with four-digit categories (as in the Adaptation of the International Classification) provides sufficient detail.

Following the publication of the Adaptation of the Classification for diagnostic indexing in Spanish, it is hoped that it will be tried out extensively in the Spanish-speaking countries. In these countries it may be used for diagnostic indexing and may also help to introduce hospitals to the use of the International Classification of Diseases for hospital statistics. Since the three-digit categories of the Classification are maintained in the Adaptation, code numbers assigned in accordance with the Adaptation will serve both for the diagnostic index and for hospital statistics. The experience in the next few years will be most valuable in developing plans for the 1965 Revision for these purposes. Notes on medical terms to be added and categories needing expansion should be recorded for use in planning the Revision in these fields.

To help promote the introduction of the Adaptation in Spanish, the Committee asked that literature regarding the experience of hospitals in the United States should be obtained and sent to members of the Committee. The Committee recommended that such reports and the Introduction to the Adaptation in Spanish be utilized for the preparation of papers regarding the value of this Adaptation, for publication in journals in the Spanish-speaking countries.

The participation of the medical record librarians in the discussion of the Adaptation for diagnostic indexing proved valuable and further collaboration

in this field is highly desirable so that a satisfactory Adaptation can be developed to serve all countries.

#### 10. Special Tabulation Lists

The 1948 Revision introduced three special tabulation lists, namely:

List A - Intermediate List of 150 Causes for Tabulation of Morbidity and Mortality

List B - Abbreviated List of 50 Causes for Tabulation of Mortality

List C - Special List of 50 Causes for Tabulation of Morbidity for Social Security Purposes

The B List has been extensively used by both the United Nations and the World Health Organization. Although it does not provide sufficient detail for tabulations for any one country, it has served relatively well for the purpose designed, the publication of data for countries of the world in the Demographic Yearbook of U. N. and the Annual Epidemiological and Vital Statistics of WHO.

The Committee recommended that the Bureau using the experience of several countries of the Region devise a minimum list that would satisfy the needs in the Americas. Such a list might be an expansion for this Region of a minimum list designed for international publications. For this Region, expansion of the list is desirable to provide information on specific infectious diseases and on nutritional deficiency diseases.

In addition to a revised B List for mortality statistics, the Committee recommended that an appropriate list be developed for hospital statistics. The next meeting of the Expert Committee on Health Statistics will be concerned with the subject of hospital statistics and this is the proper time to begin study of the problem of providing a suitable list for hospital statistics.

#### 11. Development of Research on Classification

The Committee surveyed the area of research in relation to the Classification. Three major fields of research were discussed: the first on the reliability of medical information; the second on statistical procedures for obtaining and processing data and the resulting effect on comparability; and the third on the use of the International Classification in epidemiological and other research studies.

Included for study among the many basic aspects which affect the reliability of medical data on mortality were the extent and process of medical certification in individual countries or localities. To judge the reliability of medical certification, one should know the proportion of deaths certified by attending physicians, examining physicians, and by medico-legal examiners. Knowledge of the bases for establishing diagnoses - clinical judgment, laboratory

findings, hospital investigations, results of biopsies or autopsy findings - is helpful. Also mentioned was the need for further research on the relationship between diagnoses established on the basis of clinical judgment and antemortem examinations, and diagnoses as determined by autopsy findings. Such studies would help to show the reliability of statistics based on limited information.

To evaluate the comparability of medical data among countries, research is needed on differences in national concepts of disease, diagnostic criteria, and nosological attitudes among physicians. An example given of the latter was the problem of medical terminology affecting the classification of diarrheal diseases in the countries of the Americas. Another example relates to studies that have been initiated to investigate whether the difference in mortality from bronchitis in the United States and England is a true one or one produced by different nosological attitudes toward the same condition. Similarly, the differences in mortality from cardiovascular disease between England and France may reflect different nosological ideas and diagnostic criteria in the two countries.

The second major field of research is concerned with the effect of various procedures on comparability of medical statistics. This area of research could include study of the effect of the form of the medical certificate of death used, and the subsidiary questions included such as on laboratory or autopsy findings. Since comparability is affected by coding rules, it is important to know what they are and the extent to which they are actually followed in practice. Research should be directed to methods of carrying out querying programs, their purpose and effects. Other important factors to be weighed include the type of coders, the administrative level at which coding is performed, and steps taken to achieve uniformity when coding is not carried out at a single center.

The third major field of research concerns the use of the International Classification of Diseases in epidemiological and other research studies. This can be divided into two parts - the relationship of research to the Classification and the research uses of the Classification. In some Sections of the Classification, changes have been and will be made on the basis of advances in medical knowledge about the diseases. Those participating in Revisions of the Classification must keep abreast of these advances and be aware of possible improvements that will make the Classification more effective. The Classification is a useful and a widely used tool in epidemiological research on both morbidity and mortality; for example, in inter-country studies on the geographical pathology of cancer.

Emphasis in research on the Classification has been mainly for mortality uses. Special types of research must be undertaken on the use of the Classification for morbidity and hospital services. The need for special coding rules and adaptations of the Classification for indexing diagnoses in hospitals were pointed out. In addition, classification of morbidity data not originating in hospitals but in private physicians' offices or in Social Security systems needs special study.

A paper prepared for this meeting by WHO on the "Role of the International Classification of Diseases in Epidemiological Research" was distributed.

## 12. Promotion of Understanding of International Classification of Diseases

One of the objectives of the present meeting was to develop a regional program for greater understanding of the Classification. The publication of the Clasificación Internacional de Enfermedades Adaptada para Índice de Diagnósticos de Hospitales y Clasificación de Operaciones in 1961 will provide an opportunity for distribution of these volumes to hospitals and at the same time for release of papers for local journals regarding its value for diagnostic indices. Greater understanding of the value of this Classification in hospitals, especially in teaching hospitals will have a favorable effect on the quality of mortality statistics.

A well-developed program in vital statistics serves to promote understanding of the Classification. The publication of mortality statistics and the use of such data for health planning are important methods of promotion. The Organization through its statistical consultants should promote, as a major part of their activities, the development and strengthening of vital and health statistics in their areas. Also wide use should be made of the services of the Latin American Center for Classification of Diseases as an integral part of its program - both for educational as well as administrative purposes - in relation with the uses of the Classification particularly in the field of mortality statistics.

As part of the development of a program in vital statistics, educational efforts employing visual aids are useful. The series of slides on medical certification which has been used in the Province of Buenos Aires in Argentina was shown to the group. This use of visual aids has proved valuable in Argentina and there is interest in developing an improved set. The Latin American Center for Classification of Diseases has long been using, for courses and for distribution among countries, an adaptation of the "film strip" of the U. S. National Office of Vital Statistics on "The Medical Certification of the Cause of Death". Several other educational methods such as "flip charts", pamphlets, posters, etc., are also used by the Center and are available for distribution. In Argentina a series of slides is also to be designed for promotion of interest in and the improvement of hospital records and statistics.

When diagnostic standards become available on nutritional diseases and diarrheal diseases, the development of slides on diagnostic methods would prove helpful.

Other educational tools which can improve the understanding of the Classification include queries to complete and clarify causes of death. Charts emphasizing important points regarding the International Classification are useful in classes of medical students.

The courses given by the Latin American Center for Classification of Diseases have been valuable not only for training coders but also for promoting the correct application and understanding of the value of the Classification in many countries of the Region. Consultation services provided by the Center and the interchange of samples of death certificates between countries and the Center have also been of value, not only in promoting the use of the Classification but for fostering uniformity as well. Dissemination of teaching and educational material has also been carried out by the Center. A wide use by countries of the

services of the Center stimulated through the Zone Offices should help to promote and improve the use of the Classification in Latin American countries.

The Working Group on Education and Training on Medical Certification,\* which was held in 1959, made specific recommendations on the teaching of medical certification in medical schools and also for hospital personnel. The scope of teaching, methodology and administrative aspects are dealt with. The Committee recommended that this report be widely disseminated and used in the Region.

The Committee felt that it would be useful to promote better understanding of the Classification for specific purposes such as for coding of causes of death. There is also need for dissemination of information on the various uses of the Classification for different purposes such as indexing of hospital records, and developing data for epidemiological research and for morbidity statistics.

The staff of PAHO/WHO serving in countries, Zone Offices, and the Regional Office are able to render valuable services in the promotion of the use of the Classification in these fields.

### 13. Mechanism of Work in the Region for Revision

National Committees on Vital and Health Statistics were recommended by the Sixth Revision Conference for the purpose of co-ordinating statistical activities within the countries, and to serve as links between the national medical-statistical institutions and the World Health Organization. Although such Committees have been created in nearly all of the countries in the Americas, difficulties have been encountered in their functioning. However, at this time the creation of national Subcommittees on Classification with a specific program directed to the Revision is recommended by the Advisory Committee. The composition of the Subcommittee should be such that Revision proposals can be made with special attention to infectious, nutritional and diarrheal diseases. Some one actively engaged in an operating program on vital statistics should be a member of the Subcommittee.

The Pan American Sanitary Bureau working with the Latin American Center should outline a definite plan of action, with objectives and procedures. Also the Bureau through the Zone consultants, Washington staff and the Latin American Center should render consultant services in order to ensure uniformity in results. The Bureau would be responsible for coordination of the program. At all stages the Regional Office would keep in touch with headquarters of WHO.

The director of the Latin American Center should be in over-all charge of the studies on terminology and of trials, working directly with individuals in the countries. The countries to participate would be selected on the basis of availability of persons interested in investigating terms in use or in

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\* La Enseñanza de la Certificación Médica en las Escuelas de Medicina, Boletín de la Oficina Sanitaria Panamericana, June 1960, pgs. 487-499.

carrying on trials of a proposal. The trials should be carefully planned with tabulations and lists specified by the Latin American Center. The Center will extend its activities into research on problems involving the Classification.

WHO will distribute information regarding Revision plans so that they will be known throughout the Americas. An opportune time would be when the Seventh Report, Expert Committee on Health Statistics, is released.

The importance of interchange of experience through national and regional meetings was stressed. Since additional meetings of the Advisory Committee may be scheduled as well as a Seminar which could include a working group on Classification, a timetable of activities has been developed for the Region (Section 16).

#### 14. Special Problems for Improvement of Spanish Edition

There are special problems connected with the Spanish edition of the International Classification of Diseases. These are: (1) establishment of corresponding equivalents for the English terms, (2) provision in the index for synonyms in Spanish for which there are no English equivalents, (3) provisions for variation in meaning of a particular Spanish term, (4) inclusion of various terms in local use. All Latin American countries should contribute to the improvement of the Alphabetical Index. It was suggested that a less literal translation be prepared of the Introduction to the Manual for better understanding. Also in pamphlets, adaptations in Spanish are often preferable to literal translations, with examples of Spanish terms that need emphasis.

#### 15. Development of Portuguese Edition

WHO has responsibility for the English, French and Spanish editions. In addition, a Russian edition may be prepared by WHO in 1965. It was recognized that the responsibility for translations into the other languages is vested in the various countries if such a need arises. However, the Committee hoped that the Pan American Sanitary Bureau and the Latin American Center for Classification of Diseases would render all possible assistance in preparing the 1965 Revision in Portuguese to be introduced in Brazil in 1968.

16. Timetable for Activities on Classification of WHO and  
Region of the Americas, 1960-1965

World Health Organization	Region of the Americas
1960 December - Expert Committee on Health Statistics	1960 June - Regional Advisory Committee on Statistics
1961 April-June - Announcement of 1965 Revision plans April - Expert Committee on Nutrition  November - Subcommittee on Classification	1961 February- First Meeting of Regional Advisory Committee on Classification April - Creation of National Subcommittees on Classification PASB Report of First Meeting of Regional Advisory Committee on Classification  Design of trials and beginning of collection of data on nutritional, diarrheal and infectious diseases  Visits by the director of the Latin American Center  Introduction of Adaptation in Spanish to teaching and large hospitals through papers, articles, and audiovisual aids
1962 December - Expert Committee on Health Statistics  Special meetings as necessary through the year	1962 Midyear - Second Meeting of Regional Advisory Committee on Classification  Reports on trials, terms, tabulation lists  Second Meeting of Regional Advisory Committee on Statistics
1963 December - Subcommittee on Classification Draft Revision	1963 June - Seminar on Vital and Health Statistics  Third Meeting of Regional Advisory Committee on Classification (2 days following Seminar)
1964 About October - Expert Committee on Health Statistics Draft Revision	1964 Intensified work on Draft Revision  Late 1964 - Third Meeting of Regional Advisory Committee on Statistics
1965 Early - Revision Conference	

PROPOSED CATEGORIES AND TERMS FOR DISEASES ATTRIBUTABLE  
TO VIRUSES AND RICKETTSIAL DISEASES  
(Preliminary Proposal for Discussion Purposes)\*

Diseases Attributable to Viruses (075-110)

- A. Viral diseases with frequent involvement of the nervous system
- 075 - Acute paralytic poliomyelitis (poliovirus type 1, 2 or 3)  
This title excludes conditions specified as late effects or sequelae, or present one year or more after onset.
- 075.0 - Specified as bulbar or polio-encephalitis  
Infantile paralysis (acute) specified as bulbar  
Polio-encephalitis (acute) (bulbar)  
Polio-encephalomyelitis (acute)  
Poliomyelitis (acute) (anterior), specified as bulbar
- 075.1 - With other paralysis  
Acute atrophic spinal paralysis  
Paralytic infantile paralysis  
Poliomyelitis (acute) )  
                          anterior )): with paralysis except bulbar  
                          epidemic )
- 076 - Acute non-paralytic poliomyelitis  
Poliomyelitis (acute) )  
                          anterior )): specified as non-paralytic  
                          epidemic )
- 076.0 - With laboratory confirmation (poliovirus type 1, 2 or 3)
- 076.1 - Without mention of laboratory confirmation  
Poliomyelitis suspected, with meningeal syndrome  
(etiology unconfirmed)  
Aseptic meningitis, suspected to be of poliomyelitis etiology
- 077 - Acute poliomyelitis, unspecified as to paralytic or non-paralytic  
Infantile paralysis )  
Poliomyelitis (acute) ) unspecified whether paralytic or  
                          anterior ): non-paralytic  
                          epidemic )
- 077.0 - With laboratory confirmation (poliovirus type 1, 2 or 3)

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\* Numbers assigned to categories are tentative, for discussion purposes only.



- 077.1 - Without mention of laboratory confirmation
- 078 - Late effects of acute poliomyelitis  
Paralysis or any condition specified as a late effect or sequela of acute poliomyelitis (or synonyms in 075 or 077), or present one year or more after onset of poliomyelitis
- 079 - Aseptic meningitis  
Encephalomeningitis, serous  
Meningoencephalitis, serous  
Meningitis, serous  
Viral meningitis
- This title excludes: infection by leptospira (072) and by the virus of mumps (104.2); poliomyelitis (076, 077); herpes simplex (100) and infection by other organisms specifically classified elsewhere.
- 079.0 - Caused by the virus of lymphocytic choriomeningitis  
Choriomeningitis, lymphocytic (acute)
- 079.1 - Caused by Coxsackie viruses, group A
- 079.2 - Caused by Coxsackie viruses, group B
- 079.3 - Caused by ECHO viruses
- 079.4 - Unspecified (undetermined etiology)
- 080 - Rabies  
Hydrophobia  
Rabies  
Lyssa
- 081 - Lethargic encephalitis  
Encephalitis  
Lethargic  
Lethargica (acute)  
Myoclonic  
Vienna type  
Von Economo type  
Type A encephalitis
- 082 - Arthropod-borne viral encephalitis  
082.0 - Mosquito-borne encephalitis  
Eastern equine virus  
Western equine virus  
Japanese B virus  
Murray Valley (Australian X) virus  
St. Louis virus  
Ilheus virus  
California virus

- 082.1 - Tick-borne encephalitis
  - Louping-ill
  - Russian spring-summer encephalitis
  - Diphasic meningo-encephalitis (Diphasic milk fever)
  - (Bivulvant meningo-encephalitis)
  - Central European tick-borne encephalitis
- 082.2 - Other arthropod-borne viral encephalitis (including those of vector unknown)
  - Powassan encephalitis
- 083 - Other and unspecified infectious encephalitis
  - (This excludes aseptic meningitis, and other encephalitis classified elsewhere)
- 084 - Late effects of acute encephalitis
  - 084.0 - Postencephalitic Parkinsonism
    - Parkinsonian syndrome, postencephalitic
    - Parkinsonism, postencephalitic
  - 084.1 - Postencephalitic personality and character disorders
    - Personality change following acute (viral infectious) encephalitis
    - Any condition in 320, 321, 325, 326 if specified as a late effect of acute encephalitis or as a late effect of conditions described under 079, 081, 082, 083 or 088)
  - 084.2 - Postencephalitic psychosis
    - Postencephalitic psychosis
    - Any condition in 300-309 if specified as a late effect of acute encephalitis or as a late effect of conditions described under 079, 081, 082, 083 or 088
  - 084.3 - Other postencephalitic conditions
    - Oculogyric crisis following ) Conditions
    - Respiratory crisis following ) described
    - Any condition specified as a late effect of ) under 079,
    - Any condition present one year or more after ) 081, 082,
    - onset of ) 083 or 088
    - Except if included under 084.0 - 084.2
- B. Arthropod-borne viral diseases with slight or no involvement of the nervous system
  - 085 - Yellow fever
    - Yellow fever
    - Febris flava
  - 085.0 - Sylvatic yellow fever, jungle yellow fever
  - 085.1 - Urban yellow fever (Aedes aegypti-borne)

- 086 - Dengue (virus types 1, 2, 3 or 4)  
 Dengue  
 Breakbone fever  
 Dandy fever  
 Five-day fever  
 Seven-day fever
- 087 - Arthropod-borne haemorrhagic fevers
- 087.0 - Mosquito-borne  
 Philippine haemorrhagic fever  
 Thailand haemorrhagic fever
- 087.1 - Tick-borne  
 Crimean haemorrhagic fever  
 Omsk haemorrhagic fever  
 Kyasanur haemorrhagic fever
- 087.2 - Other  
 Mite-borne haemorrhagic fevers (possible)  
 Haemorrhagic nephroso-nephritis  
 Far Eastern haemorrhagic fever  
 Korean haemorrhagic fever  
 Russian (Yaroslavl) haemorrhagic fever  
 Argentina (Junin)(N. W. of Buenos Aires province)  
 haemorrhagic fever
- 088 - Other arthropod-borne viral diseases
- 088.0 - Mosquito-borne fevers (excluding yellow fever and dengue)
- |                         |            |                    |
|-------------------------|------------|--------------------|
| Rift Valley fever       | Middleburg | Spondweni          |
| West Nile fever         | Zika       | Itaqui             |
| Venezuelan equine fever | Mayaro     | Caraparu           |
| Chikungunya fever       | Guama      | Murucutu           |
| Mayaro fever            | Catu       | Germiston          |
| Bwamba fever            | Guaroa     | Onyong-nyong       |
| Bunyamwera fever        | Marituba   | Uganda (S.A. H336) |
| Wesselbron              | Oriboca    |                    |
- 088.1 - Tick -borne fevers  
 Colorado tick fever  
 Tick fever  
 Mountain - tick fever  
 Non-exanthematous tick fever  
 American mountain tick fever
- 088.2 - Phlebotomus-borne fevers (Naples or Sicily types)  
 Sandfly fever  
 Pappataci fever  
 Three-day fever  
 Phlebotomus fever

088.3 - Other arthropod-borne viral fevers (including those of vector unknown)  
 Uruma fever  
 Ilesha fever

C. Viral diseases with predominant involvement of the respiratory system

089 - Common cold (acute nasopharyngitis)

Cold (head) common

Coryza (acute)

Nasal catarrh (acute)

Nasopharyngitis: NOS  
 acute  
 infective NOS

Adenopharyngoconjunctival fever

Pharyngoconjunctival fever

Non-bacterial pharyngitis

Non-streptococcal exudative pharyngitis (and tonsillitis)

This title excludes: herpangina (090) acute or unspecified pharyngitis (475.1); acute or unspecified sore throat (472.0); chronic nasopharyngitis and chronic or unspecified rhinitis (512.1); chronic pharyngitis and chronic sore throat (512.0); hay fever (or synonyms in 240). For primary death classification, it also excludes the listed conditions if stated as a starting point of a morbid sequence involving serious conditions such as: meningitis (340); brain abscess (342); otitis media, mastoiditis (390-393); influenza (093 or 480-483); pneumonia (490-493); bronchitis (500-502); and acute nephritis (590)

090 - Herpangina

091 - Acute viral laryngitis and tracheitis

Viral croup

This title excludes: laryngitis and tracheitis specified as due to streptococcus (051); chronic tracheitis (502.1); chronic laryngitis (516); diphtheria (055)

092 - Acute upper respiratory infection of multiple or unspecified sites

Catarrhal fever (acute)

Febrile catarrh

Upper respiratory: disease (acute) }  
 infection (acute) } of multiple or unspecified sites

Acute respiratory disease of recruits

This title excludes acute or unspecified upper respiratory infection specified as due to streptococcus (051). For primary death classification it also excludes the listed conditions if stated as a starting point of a morbid sequence involving serious conditions such as: meningitis (340); brain abscess (342); otitis media, mastoiditis (390-393); influenza (093); pneumonia (490-493); primary atypical pneumonia (094); bronchitis (500-502); and acute nephritis (590)

093 - Influenza  
 "Flu"  
 Grippe  
 Influenza

This title excludes diseases due to H. influenzae which are coded according to the disease involved (see 340.0 for meningitis due to H. influenzae, and 064.4 for unspecified infection due to H. influenzae)

093.0 - With pneumonia  
 Influenza: bronchopneumonia  
 pneumonia

093.1 - With other respiratory, digestive or nervous manifestations,  
 and unqualified influenza  
 NOS  
 Influenza with: upper respiratory infection  
 bronchitis  
 pleurisy  
 other respiratory manifestations, except  
 pneumonia  
 Intestinal influenza or grippe  
 Gastric influenza or grippe  
 Gastro-intestinal influenza or grippe  
 Influenza or grippe with nervous symptoms

094 - Primary atypical pneumonia  
 Pneumonia specified as:  
 acute interstitial  
 atypical (primary) (unknown etiology)  
 virus  
 viral  
 Pneumonitis (acute)  
 Pulmonitis (unknown etiology)

094.0 - Caused by infection with the virus of "primary atypical  
 pneumonia"

094.1 - Caused by infection with Adenoviruses

094.2 - Caused by infection with viruses of the Parainfluenza group

094.3 - Unspecified origin (etiology)

095 - Psittacosis and ornithosis  
 Ornithosis  
 Parrot fever  
 Psittacosis

D. Viral diseases accompanied by exanthem

096 - Smallpox  
 Smallpox (any form)  
 Variola: major  
 minor

- 097 - Cowpox  
Cowpox (not produced by vaccination)  
Vaccinia sine vaccinatione
- 098 - Chicken pox  
Varicella
- 099 - Herpes zoster  
Herpes zoster (any site)  
Zona (ophthalmica)  
Shingles
- 100 - Herpes febriles  
Herpes: NOS  
    febrilis  
    genitalis  
    labialis  
    simplex  
Keratitis dendritica  
    disciformis  
Herpes encephalitis  
Herpes meningitis  
Herpes meningoencephalitis (aseptic meningitis)
- 101 - Measles  
Measles (haemorrhagic)  
Morbilli  
Rubeola  
  
100.0 - Without mention of pneumonia or encephalitis  
  
100.1 - With mention of pneumonia  
  
100.2 - With mention of encephalitis
- 102 - Rubella (German measles)  
German measles  
Roseola  
Rubella
- 103 - Other viral exanthema  
Exanthema subitum  
    Roseola subitum  
    Roseola infantilis  
    Roseola infantum  
    Pseudorubella  
    Zahorsky disease  
    Rose rash of infants  
    Sixth disease

Exanthema infectiosum  
 Duke's disease  
 Fifth disease  
 Parascarlatina  
 Erythema infantum febrile  
 Boston exanthem, summer rash  
 Fourth disease

E. Viral diseases with involvement of other organs or systems

104 - Mumps

- 104.0 - Mumps unqualified  
 Parotitis or parotiditis, epidemic or infectious mumps with  
 involvement of any or several salivary glands
- 104.1 - Mumps with involvement of other glands  
 Mumps orchitis  
 Mumps pancreatitis
- 104.2 - Mumps meningoencephalitis (encephalitis)  
 Mumps aseptic meningitis

105 - Viral hepatitis

This title excludes: spirochaetal jaundice or other conditions included  
 under 072; it also excludes the hepatitis of unknown origin associated  
 with pregnancy under 642.5, 652, 686 .

- 105.0 - Infectious hepatitis  
 Hepatitis: epidemic  
                   infectious (acute or subacute)  
 Jaundice: catarrhal  
                   epidemic  
                   infectious (acute or subacute)

- 105.1 - Homologous serum jaundice (previously under N 995,  
 N 998.5, E 943 or E 998.5)  
 (Post) inoculation hepatitis  
 Post-immunization hepatitis  
 Post-immunization jaundice  
 Post-transfusion hepatitis  
 Post-transfusion jaundice

- 106 - Infectious mononucleosis (glandular fever)  
 Pfeiffer's disease  
 Benign acute lymphoblastosis  
 Minocytic angina

- 107 - Trachoma  
 Granular conjunctivitis

- 108 - Inclusion blenorria  
 Paratrachoma  
 Swimming-pool conjunctivitis

- New born conjunctivitis  
Ophthalmia neonatorum
- 109 - Infectious keratoconjunctivitis  
Epidemic keratoconjunctivitis  
Infectious keratoconjunctivitis  
Follicular conjunctivitis  
Industrial pink-eye  
Keratitis punctata  
Macular keratitis
- 110 - Other viral diseases
- 110.0 - Molluscum contagiosum
- 110.1 - Viral warts
- 110.2 - Epidemic hiccough  
Epidemic hiccough  
Singultus epidemicus
- 110.3 - Epidemic myalgia (Bornholm diseases)  
Bornholm's disease  
Epidemic myalgia  
Epidemic myositis  
Epidemic pleurodynia  
Devil's grip
- 110.4 - Epidemic viral gastroenteritis  
Febrile non-bacterial gastroenteritis  
Winter vomiting disease  
(Acute) viral gastroenteritis
- 110.5 - Cat-scratch disease  
Cat-scratch fever  
Inoculation (benign) lymphoreticulosis
- 110.6 - Viral myocarditis or encephalomyocarditis
- 110.7 - Cytomegalic inclusion disease  
Maxillary gland virus  
Generalized salivary gland infection
- 110.8 - Other

Rickettsial Diseases (111-120)

- 111 - Epidemic louse-borne typhus
- |                         |                                  |
|-------------------------|----------------------------------|
| Classical typhus        | Tabardillo (Mexican typhus)      |
| Epidemic typhus (fever) | specified as louse-borne         |
| Historic typhus         | Typhus exanthematicus, pediculus |
| Jail fever              | vestimenti causa                 |



- 112 - Endemic flea-borne typhus (murine)  
 Endemic typhus (fever)      Tabardillo (Mexican typhus) specified  
 Murine typhus                      as flea-borne or non-specified  
 Rat typhus                              Typhus exanthematicus, murine type
- 113 - Brill's disease (not specified as louse or flea-borne)  
 Brill-Zinsser disease      Recrudescence typhus  
 Brill's disease, unqualified
- 114 - Mite-borne typhus  
 Japanese river fever      Tropical typhus  
 Rural typhus                      Tsutsugamushi disease  
 Scrub typhus
- 115 - Tick-borne rickettsial diseases
- 115.0 - Rocky Mountain Spotted fever  
 American spotted fever      New World spotted fever  
 Black fever                      São Paulo fever  
 Bull fever                      Spotted fever  
 Mountain fever                      Typhomalaria fever
- 115.1 - Boutonneuse fever  
 Kenya typhus                      South African tick bite fever  
 Mediterranean (tick) fever      Tick-borne typhus
- 115.2 - Other tick-borne rickettsial diseases  
 India tick-bite rickettsiosis      Siberia (Northern Asia)  
 Queensland tick-typhus              tick-borne rickettsiosis
- 116 - Trench fever  
 Five-day typhus fever              Shin fever  
 Shank fever                              Wolhynian fever
- 117 - Q fever
- 118 - Rickettsialpox  
 Vesicular rickettsiosis
- 119 - Typhus unspecified
- 120 - Other rickettsial diseases  
 Other rickettsial diseases not classifiable under (111-119)