ICD-DA

Application of the International Classification of Diseases to Dentistry and Stomatology

Third Edition

World Health Organization
Geneva

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Preface to the third edition

On the initiative of the International Dental Federation, a meeting of consultants was convened by the World Health Organization in 1964 to consider the classification of diseases of the buccal cavity in relation to the impending Eighth (1965) Revision of the International Classification of Diseases (ICD). It was recognized that a manual and guide should be compiled to assist in the application of the ICD to dentistry and stomatology. Accordingly, a text was drafted and tested in four countries, then revised and published for general use. The first version of the *Application of the International Classification of Diseases to Dentistry and Stomatology* (*ICD-DA*) was issued in English in 1969, followed by publication in Spanish in 1970.[1] The first WHO edition was published in English in 1973.[2]

Publication of the Ninth Revision of ICD, which came into effect in Member States in 1978, gave rise to the second edition of ICD-DA.[3] This third edition has been prepared as a companion volume to ICD-10, the Tenth Revision of ICD.

WHO gratefully acknowledges the work done by the many national institutes and individual specialists who contributed to the preparation and revision of ICD-DA. Special acknowledgements are due to Professor I.R.H. Kramer, Emeritus Professor of Oral Pathology, University of London, London, England, and Professor J.J. Pindborg, Dental School, University of Copenhagen, Copenhagen, Denmark, who have assumed the major responsibility for the preparation of all three editions of ICD-DA.

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[1] *Application of the International Classification of Diseases to Dentistry and Stomatology* (*ICD-DA*). Copenhagen, Dental Department, University Hospital, 1969.

Clasificación internacional de enfermedades, aplicada a odontologia y estomatologia. Washington, DC, Pan American Health Organization, 1970 (PAHO Scientific Publication No. 206).

[2] *Application of the International Classification of Diseases to Dentistry and Stomatology* (*ICD-DA*). Geneva, World Health Organization, 1973.

[3] *Application of the International Classification of Diseases to Dentistry and Stomatology* (*ICD-DA*), 2nd ed. Geneva, World Health Organization, 1978.

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Introduction

When any substantial volume of data has to be recorded, a coherent system of classifying and coding the data is essential, particularly where electronic or mechanical means of retrieval or analysis are to be used.

The *Application of the International Classification of Diseases to Dentistry and Stomatology (ICD-DA)* is intended to provide a practical and convenient basis for the classification and coding of data by all those working in the field of oral and dental disorders. It is derived directly from the Tenth Revision of the International Classification of Diseases (ICD-10),[1] and is concerned with all diseases and conditions that occur in, have manifestations in, or are associated with the oral cavity and adjacent structures.

For the purposes of ICD-DA, most of the classifications provided by ICD-10 have been subdivided and expanded; however, data from ICD-DA can be reassembled into ICD categories by simple addition. It is strongly recommended that ICD-DA be used with ICD-10 available for reference; use of ICD-10 alone is unsuitable for the following reasons:

● categories for the diseases and conditions of interest to oral health personnel are insufficiently subdivided;

● the diseases and conditions are scattered throughout the large volume, which makes its use in oral health facilities both awkward and time-consuming.

The principal objectives of ICD-DA are thus:

● to focus the attention of oral health personnel on detailed diagnosis for each patient, using a comprehensive and consistent classification of oral diseases and oral manifestations of other diseases;

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[1] *International Statistical Classification of Diseases and Related Health Problems. Tenth revision.* Geneva, World Health Organization.
Volume 1. Tabular list. 1992
Volume 2. Instruction manual. 1993
Volume 3. Alphabetical index. 1994

- to provide a standard recording system for all oral diseases and conditions;

- by means of the recording system, to make possible the collection of data that will allow the prevalence of oral diseases and conditions to be compared at an international level.

In addition to facilitating international collaboration and exchange of information, it is hoped that the ICD-DA system will contribute substantially to the collection of epidemiological data on the rarer oral diseases, for which purpose the survey method is impracticable.

ICD-DA is of value to a wide variety of users, from governments collecting basic data to individual researchers, practitioners, and lecturers who require a convenient method for indexing their records and teaching material. It can be used in a contracted form, consisting of a relatively small number of broad headings, or in an expanded form that allows detailed analysis in areas of special interest.

The International Classification of Diseases

Readers and users of ICD-DA are referred to ICD-10 for a detailed treatment of the general principles, background, and description of the ICD classification. The following description includes only those features of immediate relevance to the use of ICD-DA.

The ICD is a systematic classification of diseases, subject to agreement by governments. It is widely used for national mortality and morbidity statistics, and is revised periodically. The Tenth Revision — ICD-10 — came into effect from January 1993; it consists of three separate volumes. Volume 1 includes an explanatory text and a tabular, alphanumeric presentation of the classification. Volume 2 is the instruction manual, which provides coding guidance and general advice on the use of the classification. Volume 3 is a detailed alphabetical index of all diseases and conditions covered by the classification. The taxonomic philosophy of the ICD is necessarily somewhat eclectic: because of differing national views on disease classification and terminology, no strictly systematic classification is entirely practicable.

Volume 1 of ICD-10 is arranged in 21 main sections, or chapters, and this arrangement has been followed for ICD-DA. It also contains a coded nomenclature of the morphology of neoplasms, an extract of which is included in ICD-DA. Not every condition is allotted an individual rubric or number, but there is a category to which every condition can be referred; this has been achieved by the method of selective grouping. The principles for determining which

conditions should be assigned to discrete categories are based on frequency, importance, and clarity of characterization of the conditions.

In the alphanumeric system of codes that has been adopted, the detailed categories of the classification are designated by a letter and two numbers. In many instances, the first two characters of the three-character code designate important or summary groups that are significant. The third character divides each summary group into categories that represent either specific disease entities or a classification of diseases or conditions according to some significant axis, such as anatomical site. The three-character categories have not been numbered consecutively: codes have been omitted from the order sequence to preserve the summary character of the first two characters wherever it is meaningful. No additional three-character categories may be introduced into the classification, except when the list is revised by international agreement. Use of a fourth character in the classification allows for more comprehensive studies of the causes of illness and disability.

Efforts have been made to show most of the diagnostic terms given in standard or official nomenclatures, as well as terms commonly used in different countries; these are collectively referred to as "inclusion terms". Where there is any significant risk of a condition being wrongly classified, cross-reference to relevant categories is achieved by means of "exclusion terms". The last two codes at the four-character level (.8 and .9) very often carry the connotation "other" and "unspecified" respectively. The abbreviation "NOS" is attached to many inclusion terms; it stands for "not otherwise specified" and is virtually the equivalent of "unspecified" and "unqualified".

Overall, the arrangement of ICD-10 differs little from that of ICD-9, although there is much additional detail. Certain innovations of ICD-10 are detailed on pages 13–15 of Volume 1.

ICD-DA

Like ICD-10, ICD-DA has a tabular section and a comprehensive alphabetical index. Liberal use has been made of inclusion and exclusion terms in the tabular section to afford users as much assistance as possible in finding the correct category for any condition diagnosed.

Coding system of ICD-DA

Each main code heading in the ICD-DA is an ICD code at the three-character level. Titles for each of these codes and for code groups and main sections remain exactly the same as those given in ICD-10.

However, much of ICD-DA is based on five-character codes related to ICD three- and four-character codes in the following way: the first three or four characters of any ICD-DA code are those of ICD-10; where a fifth character is used it is exclusive to ICD-DA. Where a five-character ICD-DA code relates to a three-character ICD-10 category that has no fourth character subdivisions, a dummy character "X" is used as the fourth character in ICD-DA. In a few instances, a fourth character exists in ICD-10 but is irrelevant to ICD-DA; in these cases it is replaced by the dummy fourth character "V". The fifth character identifies ICD-DA subdivisions of the ICD category; where the ICD-DA identifies a complete ICD category without further subdivisions, the dummy "X" is used as the fifth character. The coding system may be summarized as follows:

Character

1	A–Z	
2	0–9	ICD-10 three-character category
3	0–9	
4	0–9	ICD-10 fourth character
	X	ICD-10 fourth character does not exist
	V	ICD-10 fourth character exists but is not used in ICD-DA
5	0–9	ICD-DA fifth character
	X	ICD-DA fifth character does not exist

Use of the V code enables summaries to be made of oral manifestations of general disease categories. They would not be added to national returns to avoid duplication. The term "oral manifestations" is used in the broadest sense, referring both to conditions that may be observed on clinical inspection, e.g. oral manifestations of zoster (B02.8X), and to conditions not readily observed, e.g. oral manifestations of Albright's syndrome (Q78.1X) affecting the jaws.

Neoplasm section

The section on neoplasms, both malignant and benign, is primarily, and as far as possible, classified according to topography. Similarly, every effort has been made to make the malignant and benign classifications parallel and to distinguish between neoplasms and hyperplasias that are reactive or inflammatory.

Extracts from the International Histological Classification of Tumours have been included as annexes to ICD-DA. Those of special interest in the field of oral health are concerned with odontogenic tumours[1] and salivary gland tumours[2] and appear in Annexes 1 and 2 respectively.

For morphological coding of neoplasms, which is not provided by the ICD-DA proper, an extract of the relevant part of the morphology (M) code of the ICD-O[3] is given on pages 132–143.

Recommended use of ICD-DA

ICD-DA may be used at national, regional, institutional, or individual practice level. The recommended procedure is as follows:

1. All diagnoses must be recorded at the appropriate level, i.e. as three-, four-, or five-character codes.

   Pretesting has shown that it is extremely rare to have more than 12 diagnoses for any one patient.

2. The most effective way to introduce and maintain ICD-DA recording is probably office coding of written or electronically recorded diagnoses, rather than direct entry of ICD-DA numbers in clinical records at the time of examination. One clerical assistant, familiar with ICD-DA, could code each day's diagnoses for a number of examiners with a high level of consistency. An example of a form suitable for ICD-DA recording and for annual summary (mostly on the basis of number of cases per population) for national and international use is shown on the next page. Those using ICD-DA will probably find it most convenient to design their own forms, make local arrangements for computer summaries, and keep WHO in Geneva informed of annual results. In case of difficulty, the Oral Health unit of WHO[4] may be able to assist in designing computer summary forms tailored to the needs of a particular institution or country and in performing the annual summaries.

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[1] Kramer IRH, Pindborg JJ, Shear M. *Histological typing of odontogenic tumours*, 2nd ed. Berlin, Springer-Verlag, 1992.

[2] Seifert G. *Histological typing of salivary gland tumours*, 2nd ed. Berlin, Springer-Verlag, 1991.

[3] *International Classification of Diseases for Oncology, 2nd ed.* Geneva, World Health Organization, 1990.

[4] Oral Health, World Health Organization, 1211 Geneva 27, Switzerland.

Adaptation of existing record systems may be more appropriate for some national systems than introduction of the type of form shown below, but whatever provision is made for use of ICD-DA, allowance should be made for further subdivision resulting from periodic revisions of the ICD and ICD-DA.

3. Until users are familiar with the classification, it is important to consult the index, main headings, and inclusion/exclusion terms before recording a diagnosis.

Example 1

In general, the term "oral mucosa" is applicable to the superficial tissues of the tongue as well as to other soft tissue surfaces of the oral cavity. In many cases, however, there is a separate classification for a set of diseases or conditions depending on whether they occur in the tongue or in other parts of the oral mucosa. Thus K12.11 is geographic stomatitis of oral epithelium, but K14.1 is geographic tongue. Scanning the index under "geographic" should reveal this distinction, but even if the index were to refer only to geographic stomatitis K12.11, the exclusion term would reveal that geographic tongue is K14.1.

SEX M = 0 ☐ F = 1	ICD-DA CODES
AGE ☐☐ YEARS	1 ☐☐☐☐☐ 9 ☐☐☐☐☐
	2 ☐☐☐☐☐ 10 ☐☐☐☐☐
OPTIONAL CODES	3 ☐☐☐☐☐ 11 ☐☐☐☐☐
	4 ☐☐☐☐☐ 12 ☐☐☐☐☐
OCCUPATION ☐☐	5 ☐☐☐☐☐ 13 ☐☐☐☐☐
ETHNIC GROUP ☐☐	
PATIENT TYPE ☐☐	6 ☐☐☐☐☐ 14 ☐☐☐☐☐
RELIGION ☐☐	7 ☐☐☐☐☐ 15 ☐☐☐☐☐
TYPE OF INSTITUTION ☐☐	8 ☐☐☐☐☐ 16 ☐☐☐☐☐
EXAMINING STAFF ☐☐	

Example 2

The user may rapidly memorize the more important three-character titles such as K05 Gingivitis and periodontal diseases. In a case of, say, acute necrotizing ulcerative gingivitis, consultation of K05.0, Acute gingivitis, before the diagnosis is recorded would show—from the exclusion term—that the correct code for the condition is A69.10.

4. It is usual to reserve .8 and .9 in the first or second decimal place for "other" and "unspecified" conditions. The classification "other" is used for conditions that are specified, but not otherwise classified, e.g. B23.8X HIV disease resulting in other specified conditions—oral manifestations. The classification "unspecified" is used either for an omission in diagnosis, e.g. C00.9, Malignant neoplasm of lip, unspecified, where location on one or other lip has been omitted at examination; or for inability to be specific, e.g. K03.79, Posteruptive colour change of dental hard tissues, unspecified.

5. In coding a case in which the diagnosis is uncertain, the appropriate category must be found to indicate the general nature or site of the lesion, with an "unspecified" diagnosis.

   For example, if it is not established whether a lesion is a radicular cyst or an apical granuloma, the correct code is K04.9, Other and unspecified diseases of the pulp and periapical tissues, because the exact nature of the lesion cannot be specified. It would be incorrect to use two codings—K04.80, Radicular cyst, apical and lateral, and K04.5, Apical granuloma—to indicate the uncertainty.

   Similarly, if a patient has mucosal lesions that might be due to erythema multiforme, lichen planus, or mucous membrane pemphigoid, and the diagnosis is not established with confidence, the correct coding would be K13.79, Lesion of oral mucosa, unspecified; it would be wrong to code all three conditions included in the list of possible diagnoses.

6. In cases where no diagnosis is established, the coding used should indicate the nature, type, or location of the lesion as narrowly as possible. For example, an undiagnosed condition of the lips would be coded K13.09, Disease of lips, unspecified; and a glossitis of undetermined type would be coded K14.09, Glossitis, unspecified.

7. Wherever provision is made for recording oral manifestations of a general disease or condition, the results have no meaning in terms of national statistics for that disease or condition. They do, however, provide an estimate of the frequency of oral manifestations of the disease or condition, a measure that is unlikely to be available consistently elsewhere.

8. Synonyms are provided in parentheses where there is some controversy or in deference to usage, but the title outside parentheses is preferred.

9. Besides multiple topographical involvement, there are times when it is necessary to classify one disease or condition under more than one category. A syndrome (see complete list in index) should be classified by the specific code allotted to it, but certain aspects of the condition, e.g. oral clefts occurring as part of a syndrome, may also need to be classified under other codes.

10. It is essential for the user of ICD-DA to develop a consistent diagnostic system, and certain reference texts will be needed. The Oral Health unit of WHO[1] is prepared to assist by recommending suitable current texts on request.

11. The user should keep in mind the importance of providing feedback to the Oral Health unit of WHO on difficulties encountered in using the ICD-DA, so that improvements can be made.

12. In addition to its application to the collection of data for health statistics, ICD-DA is also being used by oral pathology departments in the context of storage of literature reference cards and collections of slides/transparencies for teaching purposes. Such materials are useful for teaching oral diagnosis, oral medicine, oral pathology, and oral surgery.

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[1]Oral Health, World Health Organization, 1211 Geneva 27, Switzerland.

ICD-DA tabular list

Certain infectious and parasitic diseases

Tuberculosis

A18   **Tuberculosis of other organs**

A18.0   **Tuberculosis of bones and joints**
     A18.00   Jaws
                  Temporomandibular joint

A18.2   **Tuberculous peripheral lymphadenopathy**
     A18.2X   Facial and cervical region

A18.8   **Tuberculosis of other specified organs**
     A18.8X   Mouth

A21   **Tularaemia**

A21.0   **Ulceroglandular tularaemia**
     A21.0X   Oral manifestations

A21.8   **Other forms of tularaemia**
     A21.8X   Oral manifestations

A22   **Anthrax**

A22.8   **Other forms of anthrax**
     A22.8X   Oral manifestations

Certain zoonotic bacterial diseases

A23   **Brucellosis**

A23.0   **Brucellosis due to *Brucella melitensis***
     A23.0X   Oral manifestations