International Classification of Functioning, Disability and Health

Short version

World Health Organization
Geneva
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ICF

Introduction
1. Background

This volume contains a concise version of the International Classification of Functioning, Disability and Health, known as ICF. The overall aim of the ICF classification is to provide a unified and standard language and framework for the description of health and health-related states. It defines components of health and some health-related components of well-being (such as education and labour). The domains contained in ICF can, therefore, be seen as health domains and health-related domains. These domains are described from the perspective of the body, the individual and society in two basic lists: (1) Body Functions and Structures; and (2) Activities and Participation. As a classification, ICF systematically groups different domains for a person in a given health condition (e.g. what a person with a disease or disorder does do or can do). Functioning is an umbrella term encompassing all body functions, activities and participation; similarly, disability serves as an umbrella term for impairments, activity limitations or

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1 The text represents a revision of the International Classification of Impairments, Disabilities, and Handicaps (ICIDH), which was first published by the World Health Organization for trial purposes in 1980. Developed after systematic field trials and international consultation over the past five years, it was endorsed by the Fifty-fourth World Health Assembly for international use on 22 May 2001 (resolution WHA54.21).

2 These terms, which replace the formerly used terms “impairment”, “disability” and “handicap”, extend the scope of the classification to allow positive experiences to be described. The new terms are further defined in this Introduction and are detailed within the classification. It should be noted that these terms are used with specific meanings that may differ from their everyday usage.

3 A domain is a practical and meaningful set of related physiological functions, anatomical structures, actions, tasks, or areas of life.
participation restrictions. ICF also lists environmental factors that interact with all these constructs. In this way, it enables the user to record useful profiles of individuals' functioning, disability and health in various domains.

ICF belongs to the "family" of international classifications developed by the World Health Organization (WHO) for application to various aspects of health. The WHO family of international classifications provides a framework to code a wide range of information about health (e.g. diagnosis, functioning and disability, reasons for contact with health services) and uses a standardized common language permitting communication about health and health care across the world in various disciplines and sciences.

In WHO's international classifications, health conditions (diseases, disorders, injuries, etc.) are classified primarily in ICD-10 (shorthand for the International Classification of Diseases, Tenth Revision), which provides an etiological framework. Functioning and disability associated with health conditions are classified in ICF. ICD-10 and ICF are therefore complementary, and users are encouraged to utilize these two members of the WHO family of international classifications together. ICD-10 provides a "diagnosis" of diseases, disorders or other health conditions, and this information is enriched by the additional information given by ICF on functioning. Together,

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5 It is also important to recognize the overlap between ICD-10 and ICF. Both classifications begin with the body systems. Impairments refer to body structures and functions, which are usually parts of the "disease process" and are therefore also used in the ICD-10. Nevertheless, ICD-10 uses impairments (as signs and symptoms) as parts of a constellation that forms a "disease", or sometimes as reasons for contact with health services, whereas the ICF system uses impairments as problems of body functions and structures associated with health conditions.
information on diagnosis plus functioning provides a broader and more meaningful picture of the health of people or populations, which can then be used for decision-making purposes.

The WHO family of international classifications provides a valuable tool to describe and compare the health of populations in an international context. The information on mortality (provided by ICD-10) and on health outcomes (provided by ICF) may be combined in summary measures of population health for monitoring the health of populations and its distribution, and also for assessing the contributions of different causes of mortality and morbidity.

ICF has moved away from being a "consequence of disease" classification (1980 version) to become a "components of health" classification. "Components of health" identifies the constituents of health, whereas "consequences" focus on the impacts of diseases or other health conditions that may follow as a result. Thus, ICF takes a neutral stand with regard to etiology so that researchers can draw causal inferences using appropriate scientific methods. Similarly, this approach is also different from a "determinants of health" or "risk factors" approach. To facilitate the study of determinants or risk factors, ICF includes a list of environmental factors that describe the context in which individuals live.

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6 Two persons with the same disease can have different levels of functioning, and two persons with the same level of functioning do not necessarily have the same health condition. Hence, joint use enhances data quality for medical purposes. Use of ICF should not bypass regular diagnostic procedures. In other uses, ICF may be used alone.
2. **Aims of ICF**

ICF is a multipurpose classification designed to serve various disciplines and different sectors. Its specific aims can be summarized as follows:

- to provide a scientific basis for understanding and studying health and health-related states, outcomes and determinants;
- to establish a common language for describing health and health-related states in order to improve communication between different users, such as health care workers, researchers, policy-makers and the public, including people with disabilities;
- to permit comparison of data across countries, health care disciplines, services and time;
- to provide a systematic coding scheme for health information systems.

These aims are interrelated, since the need for and uses of ICF require the construction of a meaningful and practical system that can be used by various consumers for health policy, quality assurance and outcome evaluation in different cultures.

2.1 **Applications of ICF**

Since its publication as a trial version in 1980, ICIDH has been used for various purposes, for example:

- as a statistical tool – in the collection and recording of data (e.g. in population studies and surveys or in management information systems);
as a research tool – to measure outcomes, quality of life or environmental factors;

as a clinical tool – in needs assessment, matching treatments with specific conditions, vocational assessment, rehabilitation and outcome evaluation;

as a social policy tool – in social security planning, compensation systems and policy design and implementation;

as an educational tool – in curriculum design and to raise awareness and undertake social actions.

Since ICF is inherently a health and health-related classification it is also used by sectors such as insurance, social security, labour, education, economics, social policy and general legislation development, and environmental modification. It has been accepted as one of the United Nations social classifications and is referred to in and incorporates *The Standard Rules on the Equalization of Opportunities for Persons with Disabilities.* Thus ICF provides an appropriate instrument for the implementation of stated international human rights mandates as well as national legislation.

ICF is useful for a broad spectrum of different applications, for example social security, evaluation in managed health care, and population surveys at local, national and international levels. It offers a conceptual framework for information that is applicable to personal health care, including prevention, health promotion, and the improvement of participation by removing or mitigating societal hindrances and encouraging the provision of social supports and facilitators. It is also useful for the study of health care systems, in terms of both evaluation and policy formulation.

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3. Properties of ICF

A classification should be clear about what it classifies: its universe, its scope, its units of classification, its organization, and how these elements are structured in terms of their relation to each other. The following sections explain these basic properties of ICF.

3.1 Universe of ICF

ICF encompasses all aspects of human health and some health-relevant components of well-being and describes them in terms of health domains and health-related domains. The classification remains in the broad context of health and does not cover circumstances that are not health-related, such as those brought about by socioeconomic factors. For example, because of their race, gender, religion or other socioeconomic characteristics people may be restricted in their execution of a task in their current environment, but these are not health-related restrictions of participation as classified in ICF.

There is a widely held misunderstanding that ICF is only about people with disabilities; in fact, it is about all people. The health and health-related states associated with all health conditions can be described using ICF. In other words, ICF has universal application.

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* Examples of health domains include seeing, hearing, walking, learning and remembering, while examples of health-related domains include transportation, education and social interactions.

3.2 Scope of ICF

ICF provides a description of situations with regard to human functioning and its restrictions and serves as a framework to organize this information. It structures the information in a meaningful, interrelated and easily accessible way.

ICF organizes information in two parts. Part 1 deals with Functioning and Disability, while Part 2 covers Contextual Factors. Each part has two components:

1. Components of Functioning and Disability

The Body component comprises two classifications, one for functions of body systems, and one for body structures. The chapters in both classifications are organized according to the body systems.

The Activities and Participation component covers the complete range of domains denoting aspects of functioning from both an individual and a societal perspective.

2. Components of Contextual Factors

A list of Environmental Factors is the first component of Contextual Factors. Environmental factors have an impact on all components of functioning and disability and are organized in sequence from the individual’s most immediate environment to the general environment.

Personal Factors is also a component of Contextual Factors but they are not classified in ICF because of the large social and cultural variance associated with them.

The components of Functioning and Disability in Part 1 of ICF can be expressed in two ways. At one end they can be used to indicate problems (e.g. impairment, activity limitation or participation restriction summarized under the umbrella term disability); on the other hand they can indicate nonproblematic
Introduction

(i.e. neutral) aspects of health and health-related states summarized under the umbrella term functioning).

These components of functioning and disability are interpreted by means of four separate but related constructs. These constructs are operationalized by using qualifiers. Body functions and structures can be interpreted by means of changes in physiological systems or in anatomical structures. For the Activities and Participation component, two constructs are available: capacity and performance (see section 4.2).

A person’s functioning and disability is conceived as a dynamic interaction\(^{10}\) between health conditions (diseases, disorders, injuries, traumas, etc.) and contextual factors. As indicate above, Contextual Factors include both personal and environmental factors. ICF includes a comprehensive list of environmental factors as an essential component of the classification. Environmental factors interact with all the components of functioning and disability. The basic construct of the Environmental Factors component is the facilitating or hindering impact of features of the physical, social and attitudinal world.

3.3 Unit of classification

ICF classifies health and health-related states. The unit of classification is, therefore, categories within health and health-related domains. It is important to note, therefore, that in ICF persons are not the units of classification; that is, ICF does not classify people, but describes the situation of each person within an array of health or health-related domains. Moreover, the description is always made within the context of environmental and personal factors.

\(^{10}\) This interaction can be viewed as a process or a result depending on the user.
3.4 Presentation of ICF

ICF is presented in two versions in order to meet the needs of different users for varying levels of detail.

The full version of ICF provides classification at four levels of detail. These four levels can be aggregated into a higher-level classification system that includes all the domains at the second level. The short version, which is contained in this volume, provides the first two levels of the classification.
4. Overview of ICF components

DEFINITIONS

In the context of health:

**Body functions** are the physiological functions of body systems (including psychological functions).

**Body structures** are anatomical parts of the body such as organs, limbs and their components.

**Impairments** are problems in body function or structure such as a significant deviation or loss.

**Activity** is the execution of a task or action by an individual.

**Participation** is involvement in a life situation.

**Activity limitations** are difficulties an individual may have in executing activities.

**Participation restrictions** are problems an individual may experience in involvement in life situations.

**Environmental factors** make up the physical, social and attitudinal environment in which people live and conduct their lives.

See also Annex 1, Taxonomic and terminological issues
An overview of these concepts is given in Table 1; they are explained further in operational terms in section 5.1. As the table indicates:

- ICF has two parts, each with two components:
  
  Part 1. Functioning and Disability
  
  (a) Body Functions and Structures
  (b) Activities and Participation

  Part 2. Contextual Factors
  
  (c) Environmental Factors
  (d) Personal Factors

- Each component can be expressed in both positive and negative terms.

- Each component consists of various domains and, within each domain, categories, which are the units of classification. Health and health-related states of an individual may be recorded by selecting the appropriate category code or codes and then adding qualifiers, which are numeric codes that specify the extent or the magnitude of the functioning or disability in that category, or the extent to which an environmental factor is a facilitator or barrier.
Table 1. An overview of ICF

<table>
<thead>
<tr>
<th>Components</th>
<th>Part 1: Functioning and Disability</th>
<th>Part 2: Contextual Factors</th>
</tr>
</thead>
<tbody>
<tr>
<td>Domains</td>
<td>Body functions and structures</td>
<td>Environmental Factors</td>
</tr>
<tr>
<td></td>
<td>Life areas (tasks, actions)</td>
<td>Personal Factors</td>
</tr>
<tr>
<td></td>
<td>External influences on functioning and disability</td>
<td></td>
</tr>
<tr>
<td>Constructs</td>
<td>Change in body functions (physiological)</td>
<td>Facilitating or hindering impact of features of the physical, social, and attitudinal world</td>
</tr>
<tr>
<td></td>
<td>Performance Executing tasks in the current environment</td>
<td></td>
</tr>
<tr>
<td>Positive aspect</td>
<td>Functional and structural integrity</td>
<td>Activities Participation</td>
</tr>
<tr>
<td></td>
<td>Functioning</td>
<td>Facilitators</td>
</tr>
<tr>
<td></td>
<td>not applicable</td>
<td></td>
</tr>
<tr>
<td>Negative aspect</td>
<td>Impairment</td>
<td>Activity limitation Participation restriction</td>
</tr>
<tr>
<td></td>
<td>Disability</td>
<td>Barriers / hindrances</td>
</tr>
<tr>
<td></td>
<td>not applicable</td>
<td></td>
</tr>
</tbody>
</table>
4.1 Body Functions and Structures and Impairments

Definitions:

Body functions are the physiological functions of body systems (including psychological functions).

Body structures are anatomical parts of the body such as organs, limbs and their components.

Impairments are problems in body function or structure as a significant deviation or loss.

(1) Body functions and body structures are classified in two different sections. These two classifications are designed for use in parallel. For example, body functions include basic human senses such as “seeing functions” and their structural correlates exist in the form of “eye and related structures”.

(2) “Body” refers to the human organism as a whole; hence it includes the brain and its functions, i.e. the mind. Mental (or psychological) functions are therefore subsumed under body functions.

(3) Body functions and structures are classified according to body systems; consequently, body structures are not considered as organs.\(^\text{12}\)

\(^\text{12}\) Although organ level was mentioned in the 1980 version of ICDH, the definition of an “organ” is not clear. The eye and ear are traditionally considered as organs; however, it is difficult to identify and define their boundaries, and the same is true of extremities and internal organs. Instead of an approach by “organ”, which implies the existence of an entity or unit within the body, ICF replaces this term with “body structure”.

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(4) Impairments of structure can involve an anomaly, defect, loss or other significant deviation in body structures. Impairments have been conceptualized in congruence with biological knowledge at the level of tissues or cells and at the subcellular or molecular level. For practical reasons, however, these levels are not listed. The biological foundations of impairments have guided the classification and there may be room for expanding the classification at the cellular or molecular levels. For medical users, it should be noted that impairments are not the same as the underlying pathology, but are the manifestations of that pathology.

(5) Impairments represent a deviation from certain generally accepted population standards in the biomedical status of the body and its functions, and definition of their constituents is undertaken primarily by those qualified to judge physical and mental functioning according to these standards.

(6) Impairments can be temporary or permanent; progressive, regressive or static; intermittent or continuous. The deviation from the population norm may be slight or severe and may fluctuate over time. These characteristics are captured in further descriptions, mainly in the codes, by means of qualifiers after the point.

(7) Impairments are not contingent on etiology or how they are developed; for example, loss of vision or a limb may arise from a genetic abnormality or an injury. The presence of an impairment necessarily implies a cause; however, the cause may not be sufficient to explain the resulting impairment.

13 Thus impairments coded using the full version of ICF should be detectable or noticeable by others or the person concerned by direct observation or by inference from observation.
Also, when there is an impairment, there is a dysfunction in body functions or structures, but this may be related to any of the various diseases, disorders or physiological states.

(8) Impairments may be part or an expression of a health condition, but do not necessarily indicate that a disease is present or that the individual should be regarded as sick.

(9) Impairments are broader and more inclusive in scope than disorders or diseases; for example, the loss of a leg is an impairment of body structure, but not a disorder or a disease.

(10) Impairments may result in other impairments; for example, a lack of muscle power may impair movement functions, heart functions may relate to deficit in respiratory functions, and impaired perception may relate to thought functions.

(11) Some categories of the Body Functions and Structures component and the ICD-10 categories seem to overlap, particularly with regard to symptoms and signs. However, the purposes of the two classifications are different. ICD-10 classifies symptoms in special chapters to document morbidity or service utilization, whereas ICF shows them as part of the body functions, which may be used for prevention or identifying patients’ needs. Most importantly, in ICF the Body Functions and Structures classification is intended to be used along with the Activities and Participation categories.

(12) Impairments are classified in the appropriate categories using defined identification criteria (e.g. as present or absent according to a threshold level). These criteria are the same for body functions and structures. They are: (a) loss or lack; (b) reduction; (c) addition or excess; and (d) deviation. Once an impairment is present, it may be scaled in terms of its severity using the generic qualifier in the ICF.
(13) Environmental factors interact with body functions, as in the interactions between air quality and breathing, light and seeing, sounds and hearing, distracting stimuli and attention, ground texture and balance, and ambient temperature and body temperature regulation.

4.2 Activities and Participation /activity limitations and participation restrictions

Definitions: Activity is the execution of a task or action by an individual. Participation is involvement in a life situation. Activity limitations are difficulties an individual may have in executing activities. Participation restrictions are problems an individual may experience in involvement in life situations.

(1) The domains for the Activities and Participation component are given in a single list that covers the full range of life areas (from basic learning or watching to composite areas such as interpersonal interactions or employment). The component can be used to denote activities (a) or participation (p) or both. The domains of this component are qualified by the two qualifiers of performance and capacity. Hence the information gathered from the list provides a data matrix that has no overlap or redundancy (see Table 2).
Table 2. Activities and Participation: information matrix

<table>
<thead>
<tr>
<th>Domains</th>
<th>Qualifiers</th>
</tr>
</thead>
<tbody>
<tr>
<td>d1 Learning and applying knowledge</td>
<td></td>
</tr>
<tr>
<td>d2 General tasks and demands</td>
<td></td>
</tr>
<tr>
<td>d3 Communication</td>
<td></td>
</tr>
<tr>
<td>d4 Mobility</td>
<td></td>
</tr>
<tr>
<td>d5 Self-care</td>
<td></td>
</tr>
<tr>
<td>d6 Domestic life</td>
<td></td>
</tr>
<tr>
<td>d7 Interpersonal interactions and relationships</td>
<td></td>
</tr>
<tr>
<td>d8 Major life areas</td>
<td></td>
</tr>
<tr>
<td>d9 Community, social and civic life</td>
<td></td>
</tr>
</tbody>
</table>

(2) The performance qualifier describes what an individual does in his or her current environment. Because the current environment includes a societal context, performance can also be understood as "involvement in a life situation" or "the lived experience" of people in the actual context in which they live. "This context includes the environmental factors - all aspects of the physical, social and attitudinal

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14 The definition of "participation" brings in the concept of involvement. Some proposed definitions of "involvement" incorporate taking part, being included or engaged in an area of life, being accepted, or having access to needed resources. Within the information matrix in Table 2, the only possible indicator of participation is coding through performance. This does not mean that participation is automatically equated with performance. The concept of involvement should also be distinguished from the subjective experience of involvement (the sense of "belonging"). Users who wish to code involvement separately should refer to the coding guidelines in Annex 2.
world which can be coded using the Environmental Factors component.

(3) The *capacity* qualifier describes an individual’s ability to execute a task or an action. This construct aims to indicate the highest probable level of functioning that a person may reach in a given domain at a given moment. To assess the full ability of the individual, one would need to have a “standardized” environment to neutralize the varying impact of different environments on the ability of the individual. This standardized environment may be: (a) an actual environment commonly used for capacity assessment in test settings; or (b) in cases where this is not possible, an assumed environment which can be thought to have a uniform impact. This environment can be called a “uniform” or “standard” environment. Thus, capacity reflects the environmentally adjusted ability of the individual. This adjustment has to be the same for all persons in all countries to allow for international comparisons. The features of the uniform or standard environment can be coded using the Environmental Factors classification. The gap between capacity and performance reflects the difference between the impacts of current and uniform environments, and thus provides a useful guide as to what can be done to the environment of the individual to improve performance.

(4) Both capacity and performance qualifiers can further be used with and without assistive devices or personal assistance. While neither devices nor personal assistance eliminate the impairments, they may remove limitations on functioning in specific domains. This type of coding is particularly useful to identify how much the functioning of the individual would be limited without the assistive devices (see coding guidelines in Annex 2)
(5) Difficulties or problems in these domains can arise when there is a qualitative or quantitative alteration in the way in which an individual carries out these domain functions. Limitations or restrictions are assessed against a generally accepted population standard. The standard or norm against which an individual’s capacity and performance is compared is that of an individual without a similar health condition (disease, disorder or injury, etc.). The limitation or restriction records the discordance between the observed and the expected performance. The expected performance is the population norm, which represents the experience of people without the specific health condition. The same norm is used in the capacity qualifier so that one can infer what can be done to the environment of the individual to enhance performance.

(6) A problem with performance can result directly from the social environment, even when the individual has no impairment. For example, an individual who is HIV-positive without any symptoms or disease, or someone with a genetic predisposition to a certain disease, may exhibit no impairments or may have sufficient capacity to work, yet may not do so because of the denial of access to services, discrimination or stigma.

(7) It is difficult to distinguish between "Activities" and "Participation" on the basis of the domains in the Activities and Participation component. Similarly, differentiating between “individual” and “societal” perspectives on the basis of domains has not been possible given international variation and differences in the approaches of professionals and theoretical frameworks. Therefore, ICF provides a single list that can be used, if users so wish, to differentiate activities and participation in their own operational ways. There are four possible ways of doing so:
(a) to designate some domains as activities and others as participation, not allowing any overlap;
(b) same as (a) above, but allowing partial overlap;
(c) to designate all detailed domains as activities and the broad category headings as participation;
(d) to use all domains as both activities and participation.

4.3 Contextual Factors

Contextual Factors represent the complete background of an individual’s life and living. They include two components: Environmental Factors and Personal Factors – which may have an impact on the individual with a health condition and that individual’s health and health-related states.

*Environmental factors* make up the physical, social and attitudinal environment in which people live and conduct their lives. The factors are external to individuals and can have a positive or negative influence on the individual’s performance as a member of society, on the individual’s capacity or on the individual’s body function or structure.

(1) Environmental factors are organized in the classification to focus on two different levels:

(a) *Individual* – in the immediate environment of the individual, including settings such as home, workplace and school. Included at this level are the physical and material features of the environment that an individual comes face to face with, as well as direct contact with others such as family, acquaintances, peers and strangers.
(b) **Societal** – formal and informal social structures, services and overarching approaches or systems in the community or society that have an impact on individuals. This level includes organizations and services related to the work environment, community activities, government agencies, communication and transportation services, and informal social networks as well as laws, regulations, formal and informal rules, attitudes and ideologies.

(2) Environmental factors interact with the components of Body Functions and Structures and Activities and Participation. For each component, the nature and extent of that interaction may be elaborated by future scientific work. Disability is characterized as the outcome or result of a complex relationship between an individual’s health condition and personal factors, and of the external factors that represent the circumstances in which the individual lives. Because of this relationship, different environments may have a very different impact on the same individual with a given health condition. An environment with barriers, or without facilitators, will restrict the individual’s performance; other environments that are more facilitating may increase that performance. Society may hinder an individual’s performance because either it creates barriers (e.g. inaccessible buildings) or it does not provide facilitators (e.g. unavailability of assistive devices).

**Personal factors** are the particular background of an individual’s life and living, and comprise features of the individual that are not part of a health condition or health states. These factors may include gender, race, age, other health conditions, fitness, lifestyle, habits, upbringing, coping styles, social background, education, profession, past and current experience (past life events and concurrent events), overall behaviour pattern and
character style, individual psychological assets and other characteristics, all or any of which may play a role in disability at any level. Personal factors are not classified in ICF. However, they are included in Fig. 1 to show their contribution, which may have an impact on the outcome of various interventions.
5. Model of Functioning and Disability

5.1 Process of functioning and disability

As a classification, ICF does not model the "process" of functioning and disability. It can be used, however, to describe the process by providing the means to map the different constructs and domains. It provides a multi-perspective approach to the classification of functioning and disability as an interactive and evolutionary process. It provides the building blocks for users who wish to create models and study different aspects of this process. In this sense, ICF can be seen as a language: the texts that can be created with it depend on the users, their creativity and their scientific orientation. In order to visualize the current understanding of interaction of various components, the diagram presented in Fig. 1 may be helpful.\(^\text{15}\)

\(^\text{15}\) ICF differs substantially from the 1980 version of ICD\(H\) in the depiction of the interrelations between functioning and disability. It should be noted that any diagram is likely to be incomplete and prone to misrepresentation because of the complexity of interactions in a multidimensional model. The model is drawn to illustrate multiple interactions. Other depictions indicating other important foci in the process are certainly possible. Interpretations of interactions between different components and constructs may also vary (for example, the impact of environmental factors on body functions certainly differs from their impact on participation).
Fig. 1. Interactions between the components of ICF

In this diagram, an individual's functioning in a specific domain is an interaction or complex relationship between the health condition and contextual factors (i.e. environmental and personal factors). There is a dynamic interaction among these entities: interventions in one entity have the potential to modify one or more of the other entities. These interactions are specific and not always in a predictable one-to-one relationship. The interaction works in two directions; the presence of disability may even modify the health condition itself. To infer a limitation in capacity from one or more impairments, or a restriction of performance from one or more limitations, may often seem reasonable. It is important, however, to collect data on these constructs independently and thereafter explore associations and causal links between them. If the full health experience is to be described, all components are useful. For example, one may:
• have impairments without having capacity limitations (e.g. a disfigurement in leprosy may have no effect on a person's capacity);

• have performance problems and capacity limitations without evident impairments (e.g. reduced performance in daily activities associated with many diseases);

• have performance problems without impairments or capacity limitations (e.g. an HIV-positive individual, or an ex-patient recovered from mental illness, facing stigmatization or discrimination in interpersonal relations or work);

• have capacity limitations without assistance, and no performance problems in the current environment (e.g. an individual with mobility limitations may be provided by society with assistive technology to move around);

• experience a degree of influence in a reverse direction (e.g. lack of use of limbs can cause muscle atrophy; institutionalization may result in loss of social skills).

The scheme shown in Fig. 1 demonstrates the role that contextual factors (i.e. environmental and personal factors) play in the process. These factors interact with the individual with a health condition and determine the level and extent of the individual's functioning. Environmental factors are extrinsic to the individual (e.g. the attitudes of the society, architectural characteristics, the legal system) and are classified in the Environmental Factors classification. Personal Factors, on the other hand, are not classified in the current version of ICF. They include gender, race, age, fitness, lifestyle, habits, coping styles and other such factors. Their assessment is left to the user, if needed.
5.2 Medical and social models

A variety of conceptual models\(^6\) has been proposed to understand and explain disability and functioning. These may be expressed in a dialectic of “medical model” versus “social model”. The *medical model* views disability as a problem of the person, directly caused by disease, trauma or other health condition, which requires medical care provided in the form of individual treatment by professionals. Management of the disability is aimed at cure or the individual’s adjustment and behaviour change. Medical care is viewed as the main issue, and at the political level the principal response is that of modifying or reforming health care policy. The *social model* of disability, on the other hand, sees the issue mainly as a socially created problem, and basically as a matter of the full integration of individuals into society. Disability is not an attribute of an individual, but rather a complex collection of conditions, many of which are created by the social environment. Hence the management of the problem requires social action, and it is the collective responsibility of society at large to make the environmental modifications necessary for the full participation of people with disabilities in all areas of social life. The issue is therefore an attitudinal or ideological one requiring social change, which at the political level becomes a question of human rights. For this model disability is a political issue.

ICF is based on an integration of these two opposing models. In order to capture the integration of the various perspectives of functioning, a “biopsychosocial” approach is used. Thus, ICF attempts to achieve a synthesis, in order to provide a coherent view of different perspectives of health from a biological, individual and social perspective.

\(^6\) The term “model” here means construct or paradigm, which differs from the use of the term in the previous section.
6. Use of ICF

ICF is a classification of human functioning and disability. It systematically groups health and health-related domains. Within each component, domains are further grouped according to their common characteristics (such as their origin, type, or similarity) and ordered in a meaningful way. The classification is organized according to a set of principles (see Annex 1). These principles refer to the interrelatedness of the levels and the hierarchy of the classification (sets of levels). However, some categories in ICF are arranged in a non-hierarchical manner, with no ordering but as equal members of a branch.

The following are structural features of the classification that have a bearing on its use.

(1) ICF gives standard operational definitions of the health and health-related domains as opposed to “vernacular” definitions of health. These definitions describe the essential attributes of each domain (e.g. qualities, properties, and relationships) and contain information as to what is included and excluded in each domain. The definitions contain commonly used anchor points for assessment so that they can be translated into questionnaires. Conversely, results from existing assessment instruments can be coded in ICF terms. For example, “seeing functions” are defined in terms of functions of sensing form and contour, from varying distances, using one or both eyes, so that the severity of difficulties of vision can be coded at mild, moderate, severe or total levels in relation to these parameters.

(2) ICF uses an alphanumeric system in which the letters b, s, d and e are used to denote Body Functions, Body Structures, Activities and Participation, and Environmental Factors.
These letters are followed by a numeric code that starts with the chapter number (one digit), followed by the second level (two digits), and the third and fourth levels (one digit each).

(3) ICF categories are “nested” so that broader categories are defined to include more detailed subcategories of the parent category. (For example, Chapter 4 in the Activities and Participation component, on Mobility, includes separate categories on standing, sitting, walking, carrying items, and so on). The short (concise) version covers two levels, whereas the full (detailed) version extends to four levels. The short version and full version codes are in correspondence, and the short version can be aggregated from the full version.

(4) Any individual may have a range of codes at each level. These may be independent or interrelated.

(5) The ICF codes are only complete with the presence of a qualifier, which denotes a magnitude of the level of health (e.g. severity of the problem). Qualifiers are coded as one, two or more numbers after a point (or separator). Use of any code should be accompanied by at least one qualifier. Without qualifiers, codes have no inherent meaning.

(6) The first qualifier for Body Functions and Structures, the performance and capacity qualifiers for Activities and Participation, and the first qualifier for Environmental Factors all describe the extent of problems in the respective component.

(7) All three components classified in ICF (Body Functions and Structures, Activities and Participation, and Environmental Factors) are quantified using the same generic scale. Having a problem may mean an impairment, limitation, restriction or barrier depending on the construct. Appropriate
qualifying words as shown in brackets below should be
chosen according to the relevant classification domain
(where xxx stands for the second-level domain number).
For this quantification to be used in a universal manner,
assessment procedures need to be developed through
research. Broad ranges of percentages are provided for
those cases in which calibrated assessment instruments or
other standards are available to quantify the impairment,
capacity limitation, performance problem or barrier. For
example, when “no problem” or “complete problem” is
specified the coding has a margin of error of up to 5%.
“Moderate problem” is defined as up to half of the time or
half the scale of total difficulty. The percentages are to be
calibrated in different domains with reference to relevant
population standards as percentiles.

xxx.0 NO problem  (none, absent, negligible, . . .)  0-4 %
xxx.1 MILD problem (slight, low, . . .)  5-24 %
xxx.2 MODERATE problem (medium, fair, . . .)  25-49 %
xxx.3 SEVERE problem (high, extreme, . . .)  50-95 %
xxx.4 COMPLETE problem (total, . . .)  96-100 %
xxx.8 not specified
xxx.9 not applicable

(8) In the case of environmental factors, this first qualifier can
be used to denote either the extent of positive effects of the
environment, i.e. facilitators, or the extent of negative
effects, i.e. barriers. Both use the same 0-4 scale, but to
denote facilitators the point is replaced by a plus sign: for
example e110+2. Environmental Factors can be coded (a)
in relation to each construct individually, or (b) overall,
without reference to any individual construct. The first
option is preferable, since it identifies the impact and
attribution more clearly.

(9) For different users, it might be appropriate and helpful to
add other kinds of information to the coding of each item.
There are a variety of additional qualifiers that could be
useful. Table 3 sets out the details of the qualifiers for each component as well as suggested additional qualifiers to be developed.

(10) The descriptions of health and health-related domains refer to their use at a given moment (i.e. as a snapshot). However, use at multiple time points is possible to describe a trajectory over time and process.

(11) In ICF, a person's health and health-related states are given an array of codes that encompass the two parts of the classification. Thus the maximum number of codes per person can be 34 at the one-digit level (8 body functions, 8 body structures, 9 performance and 9 capacity codes). Similarly, for the two-level items the total number of codes is 362. At more detailed levels, these codes number up to 1424 items. In real-life applications of ICF, a set of 3 to 18 codes may be adequate to describe a case with two-level (three-digit) precision. Generally the more detailed four-level version is used for specialist services (e.g. rehabilitation outcomes, geriatrics), whereas the two-level classification can be used for surveys and clinical outcome evaluation.

Further coding guidelines are presented in Annex 2. Users are strongly recommended to obtain training in the use of the classification through WHO and its network of collaborating centres.
### Table 3. Qualifiers

<table>
<thead>
<tr>
<th>Components</th>
<th>First qualifier</th>
<th>Second qualifier</th>
</tr>
</thead>
<tbody>
<tr>
<td>Body Functions (b)</td>
<td>Generic qualifier with the negative scale used to indicate the extent or magnitude of an impairment. Example: b168.3 to indicate a severe impairment in specific mental functions of language</td>
<td>None</td>
</tr>
<tr>
<td>Body Structures (s)</td>
<td>Generic qualifier with the negative scale used to indicate the extent or magnitude of an impairment. Example: s730.3 to indicate a severe impairment of the upper extremity</td>
<td>Used to indicate the nature of the change in the respective body structure: 0 no change in structure, 1 total absence, 2 partial absence, 3 additional part, 4 aberrant dimensions, 5 discontinuity, 6 deviating position, 7 qualitative changes in structure, including accumulation of fluid, 8 not specified, 9 not applicable. Example: s730.32 to indicate the partial absence of the upper extremity</td>
</tr>
<tr>
<td>Components</td>
<td>First qualifier</td>
<td>Second qualifier</td>
</tr>
<tr>
<td>----------------------------------</td>
<td>---------------------------------------------------------------------------------</td>
<td>----------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Activities and Participation (d)</td>
<td>Performance&lt;br&gt;Generic qualifier&lt;br&gt;Problem in the person's current environment&lt;br&gt;Example: d5101.1 to indicate mild difficulty with bathing the whole body with the use of assistive devices that are available to the person in his or her current environment</td>
<td>Capacity&lt;br&gt;Generic qualifier&lt;br&gt;Limitation without assistance&lt;br&gt;Example: d5101.2 to indicate moderate difficulty with bathing the whole body; implies that there is moderate difficulty without the use of assistive devices or personal help</td>
</tr>
<tr>
<td>Environmental Factors (e)</td>
<td>Generic qualifier, with negative and positive scale, to denote extent of barriers and facilitators respectively&lt;br&gt;Example: e130.2 to indicate that products for education are a moderate barrier. Conversely, e130+2 would indicate that products for education are a moderate facilitator</td>
<td>None</td>
</tr>
</tbody>
</table>
54th World Health Assembly endorsement of ICF for international use

The resolution WHA54.21 reads as follows:

The Fifty-fourth World Health Assembly,

1. **ENDORSES** the second edition of the International Classification of Impairments, Disabilities and Handicaps (ICIDH), with the title International Classification of Functioning, Disability and Health, henceforth referred to in short as ICF;

2. **URGES** Member States to use ICF in their research, surveillance and reporting as appropriate, taking into account specific situations in Member States and, in particular, in view of possible future revisions;

3. **REQUESTS** the Director-General to provide support to Member States, at their request, in making use of ICF.
One-Level Classification

List of chapter headings in the classification
Body functions

Chapter 1    Mental functions
Chapter 2    Sensory functions and pain
Chapter 3    Voice and speech functions
Chapter 4    Functions of the cardiovascular, haematological, immunological and respiratory systems
Chapter 5    Functions of the digestive, metabolic and endocrine systems
Chapter 6    Genitourinary and reproductive functions
Chapter 7    Neuromusculoskeletal and movement-related functions
Chapter 8    Functions of the skin and related structures

Body structures

Chapter 1    Structures of the nervous system
Chapter 2    The eye, ear and related structures
Chapter 3    Structures involved in voice and speech
Chapter 4    Structures of the cardiovascular, immunological and respiratory systems
Chapter 5    Structures related to the digestive, metabolic and endocrine systems
Chapter 6  Structures related to the genitourinary and reproductive systems
Chapter 7  Structures related to movement
Chapter 8  Skin and related structures

Activities and participation

Chapter 1  Learning and applying knowledge
Chapter 2  General tasks and demands
Chapter 3  Communication
Chapter 4  Mobility
Chapter 5  Self-care
Chapter 6  Domestic life
Chapter 7  Interpersonal interactions and relationships
Chapter 8  Major life areas
Chapter 9  Community, social and civic life

Environmental factors

Chapter 1  Products and technology
Chapter 2  Natural environment and human-made changes to environment
Chapter 3  Support and relationships
Chapter 4  Attitudes
Chapter 5  Services, systems and policies
Two-Level classification

List of chapter headings and first branching level in the classification
BODY FUNCTIONS

Chapter 1 Mental functions

Global mental functions (b110-b139)
b110  Consciousness functions
b114  Orientation functions
b117  Intellectual functions
b122  Global psychosocial functions
b126  Temperament and personality functions
b130  Energy and drive functions
b134  Sleep functions
b139  Global mental functions, other specified and unspecified

Specific mental functions (b140-b189)
b140  Attention functions
b144  Memory functions
b147  Psychomotor functions
b152  Emotional functions
b156  Perceptual functions
b160  Thought functions
b164  Higher-level cognitive functions
b167  Mental functions of language
b172  Calculation functions
b176  Mental function of sequencing complex movements
b180  Experience of self and time functions
b189  Specific mental functions, other specified and unspecified
b198  Mental functions, other specified
b199  Mental functions, unspecified
Chapter 2 Sensory functions and pain

Seeing and related functions (b210-b229)
b210 Seeing functions
b215 Functions of structures adjoining the eye
b220 Sensations associated with the eye and adjoining structures
b229 Seeing and related functions, other specified and unspecified

Hearing and vestibular functions (b230-b249)
b230 Hearing functions
b235 Vestibular functions
b240 Sensations associated with hearing and vestibular function
b249 Hearing and vestibular functions, other specified and unspecified

Additional sensory functions (b250-b279)
b250 Taste function
b255 Smell function
b260 Proprioceptive function
b265 Touch function
b270 Sensory functions related to temperature and other stimuli
b279 Additional sensory functions, other specified and unspecified

Pain (b280-b289)
b280 Sensation of pain
b289 Sensation of pain, other specified and unspecified
b298 Sensory functions and pain, other specified
b299 Sensory functions and pain, unspecified
Chapter 3 Voice and speech functions
b310 Voice functions
b320 Articulation functions
b330 Fluency and rhythm of speech functions
b340 Alternative vocalization functions
b398 Voice and speech functions, other specified
b399 Voice and speech functions, unspecified

Chapter 4 Functions of the cardiovascular, haematological, immunological and respiratory systems

Functions of the cardiovascular system (b410-b429)
b410 Heart functions
b415 Blood vessel functions
b420 Blood pressure functions
b429 Functions of the cardiovascular system, other specified and unspecified

Functions of the haematological and immunological systems (b430-b439)
b430 Haematological system functions
b435 Immunological system functions
b439 Functions of the haematological and immunological systems, other specified and unspecified

Functions of the respiratory system (b440-b449)
b440 Respiration functions
b445 Respiratory muscle functions
b449 Functions of the respiratory system, other specified and unspecified
Additional functions and sensations of the cardiovascular and respiratory systems (b450-b469)
b450 Additional respiratory functions
b455 Exercise tolerance functions
b460 Sensations associated with cardiovascular and respiratory functions
b469 Additional functions and sensations of the cardiovascular and respiratory systems, other specified and unspecified
b498 Functions of the cardiovascular, haematological, immunological and respiratory systems, other specified
b499 Functions of the cardiovascular, haematological, immunological and respiratory systems, unspecified

Chapter 5 Functions of the digestive, metabolic and endocrine systems

Functions related to the digestive system (b510-b539)
b510 Ingestion functions
b515 Digestive functions
b520 Assimilation functions
b525 Defecation functions
b530 Weight maintenance functions
b535 Sensations associated with the digestive system
b539 Functions related to the digestive system, other specified and unspecified

Functions related to metabolism and the endocrine system (b540-b559)
b540 General metabolic functions
b545 Water, mineral and electrolyte balance functions
b550 Thermoregulatory functions
b555 Endocrine gland functions
b559 Functions related to metabolism and the endocrine system, other specified and unspecified
Chapter 6 Genitourinary and reproductive functions

Urinary functions (b610-b639)
b610 Urinary excretory functions
b620 Urination functions
b630 Sensations associated with urinary functions
b639 Urinary functions, other specified and unspecified

Genital and reproductive functions (b640-b679)
b640 Sexual functions
b650 Menstruation functions
b660 Procreation functions
b670 Sensations associated with genital and reproductive functions
b679 Genital and reproductive functions, other specified and unspecified
b698 Genitourinary and reproductive functions, other specified
b699 Genitourinary and reproductive functions, unspecified

Chapter 7 Neuromusculoskeletal and movement-related functions

Functions of the joints and bones (b710-b729)
b710 Mobility of joint functions
b715 Stability of joint functions
b720 Mobility of bone functions
b729 Functions of the joints and bones, other specified and unspecified
Muscle functions (b730-b749)
b730  Muscle power functions
b735  Muscle tone functions
b740  Muscle endurance functions
b749  Muscle functions, other specified and unspecified

Movement functions (b750-b789)
b750  Motor reflex functions
b755  Involuntary movement reaction functions
b760  Control of voluntary movement functions
b765  Involuntary movement functions
b770  Gait pattern functions
b780  Sensations related to muscles and movement functions
b789  Movement functions, other specified and unspecified
b798  Neuromusculoskeletal and movement-related functions, other specified
b799  Neuromusculoskeletal and movement-related functions, unspecified

Chapter 8  Functions of the skin and related structures

Functions of the skin (b810-b849)
b810  Protective functions of the skin
b820  Repair functions of the skin
b830  Other functions of the skin
b840  Sensation related to the skin
b849  Functions of the skin, other specified and unspecified

Functions of the hair and nails (b850-b869)
b850  Functions of hair
b860  Functions of nails
b869  Functions of the hair and nails, other specified and unspecified
<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>b898</td>
<td>Functions of the skin and related structures, other specified</td>
</tr>
<tr>
<td>b899</td>
<td>Functions of the skin and related structures, unspecified</td>
</tr>
</tbody>
</table>
BODY STRUCTURES

Chapter 1 Structures of the nervous system
s 110 Structure of brain
s 120 Spinal cord and related structures
s 130 Structure of meninges
s 140 Structure of sympathetic nervous system
s 150 Structure of parasympathetic nervous system
s 198 Structure of the nervous system, other specified
s 199 Structure of the nervous system, unspecified

Chapter 2 The eye, ear and related structures
s 210 Structure of eye socket
s 220 Structure of eyeball
s 230 Structures around eye
s 240 Structure of external ear
s 250 Structure of middle ear
s 260 Structure of inner ear
s 298 Eye, ear and related structures, other specified
s 299 Eye, ear and related structures, unspecified

Chapter 3 Structures involved in voice and speech
s 310 Structure of nose
s 320 Structure of mouth
s 330 Structure of pharynx
s 340 Structure of larynx
s 398 Structures involved in voice and speech, other specified
s 399 Structures involved in voice and speech, unspecified
Chapter 4 Structures of the cardiovascular, immunological and respiratory systems
s410 Structure of cardiovascular system
s420 Structure of immune system
s430 Structure of respiratory system
s498 Structures of the cardiovascular, immunological and respiratory systems, other specified
s499 Structures of the cardiovascular, immunological and respiratory systems, unspecified

Chapter 5 Structures related to the digestive, metabolic and endocrine systems
s510 Structure of salivary glands
s520 Structure of oesophagus
s530 Structure of stomach
s540 Structure of intestine
s550 Structure of pancreas
s560 Structure of liver
s570 Structure of gall bladder and ducts
s580 Structure of endocrine glands
s598 Structures related to the digestive, metabolic and endocrine systems, other specified
s599 Structures related to the digestive, metabolic and endocrine systems, unspecified

Chapter 6 Structures related to the genitourinary and reproductive systems
s610 Structure of urinary system
s620 Structure of pelvic floor
s630 Structure of reproductive system
s698 Structures related to the genitourinary and reproductive systems, other specified
s699 Structures related to the genitourinary and reproductive systems, unspecified
Chapter 7 Structures related to movement
s710 Structure of head and neck region
s720 Structure of shoulder region
s730 Structure of upper extremity
s740 Structure of pelvic region
s750 Structure of lower extremity
s760 Structure of trunk
s770 Additional musculoskeletal structures related to movement
s798 Structures related to movement, other specified
s799 Structures related to movement, unspecified

Chapter 8 Skin and related structures
s810 Structure of areas of skin
s820 Structure of skin glands
s830 Structure of nails
s840 Structure of hair
s898 Skin and related structures, other specified
s899 Skin and related structures, unspecified

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ACTIVITIES AND PARTICIPATION

Chapter 1 Learning and applying knowledge

_Purposeful sensory experiences (d110-d129)_
- d110 Watching
- d115 Listening
- d120 Other purposeful sensing
- d129 Purposeful sensory experiences, other specified and unspecified

_Basic learning (d130-d159)_
- d130 Copying
- d135 Rehearsing
- d140 Learning to read
- d145 Learning to write
- d150 Learning to calculate
- d155 Acquiring skills
- d159 Basic learning, other specified and unspecified

_Applying knowledge (d160-d179)_
- d160 Focusing attention
- d163 Thinking
- d166 Reading
- d170 Writing
- d172 Calculating
- d175 Solving problems
- d177 Making decisions
- d179 Applying knowledge, other specified and unspecified
- d198 Learning and applying knowledge, other specified
- d199 Learning and applying knowledge, unspecified
Chapter 2 General tasks and demands

- d210 Undertaking a single task
- d220 Undertaking multiple tasks
- d230 Carrying out daily routine
- d240 Handling stress and other psychological demands
- d298 General tasks and demands, other specified
- d299 General tasks and demands, unspecified

Chapter 3 Communication

Communicating - receiving (d310-d329)

- d310 Communicating with - receiving - spoken messages
- d315 Communicating with - receiving - nonverbal messages
- d320 Communicating with - receiving - formal sign language messages
- d325 Communicating with - receiving - written messages
- d329 Communicating - receiving, other specified and unspecified

Communicating - producing (d330-d349)

- d330 Speaking
- d335 Producing nonverbal messages
- d340 Producing messages in formal sign language
- d345 Writing messages
- d349 Communication - producing, other specified and unspecified

Conversation and use of communication devices and techniques (d350-d369)

- d350 Conversation
- d355 Discussion
- d360 Using communication devices and techniques
- d369 Conversation and use of communication devices and techniques, other specified and unspecified
- d398 Communication, other specified
Chapter 4 Mobility

Changing and maintaining body position (d410-d429)
d410 Changing basic body position
d415 Maintaining a body position
d420 Transferring oneself
d429 Changing and maintaining body position, other specified and unspecified

Carrying, moving and handling objects (d430-d449)
d430 Lifting and carrying objects
d435 Moving objects with lower extremities
d440 Fine hand use
d445 Hand and arm use
d449 Carrying, moving and handling objects, other specified and unspecified

Walking and moving (d450-d469)
d450 Walking
d455 Moving around
d460 Moving around in different locations
d465 Moving around using equipment
d469 Walking and moving, other specified and unspecified

Moving around using transportation (d470-d489)
d470 Using transportation
d475 Driving
d480 Riding animals for transportation
d489 Moving around using transportation, other specified and unspecified
d498 Mobility, other specified
d499 Mobility, unspecified
Chapter 5 Self-care

- d510 Washing oneself
- d520 Caring for body parts
- d530 Toileting
- d540 Dressing
- d550 Eating
- d560 Drinking
- d570 Looking after one’s health
- d598 Self-care, other specified
- d599 Self-care, unspecified

Chapter 6 Domestic life

**Acquisition of necessities (d610-d629)**
- d610 Acquiring a place to live
- d620 Acquisition of goods and services
- d629 Acquisition of necessities, other specified and unspecified

**Household tasks (d630-d649)**
- d630 Preparing meals
- d640 Doing housework
- d649 Household tasks, other specified and unspecified

**Caring for household objects and assisting others (d650-d669)**
- d650 Caring for household objects
- d660 Assisting others
- d669 Caring for household objects and assisting others, other specified and unspecified
- d698 Domestic life, other specified
- d699 Domestic life, unspecified
Chapter 7 Interpersonal interactions and relationships

General interpersonal interactions (d710-d729)
d710 Basic interpersonal interactions
d720 Complex interpersonal interactions
d729 General interpersonal interactions, other specified and unspecified

Particular interpersonal relationships (d730-d779)
d730 Relating with strangers
d740 Formal relationships
d750 Informal social relationships
d760 Family relationships
d770 Intimate relationships
d779 Particular interpersonal relationships, other specified and unspecified
d798 Interpersonal interactions and relationships, other specified
d799 Interpersonal interactions and relationships, unspecified

Chapter 8 Major life areas

Education (d810-d839)
d810 Informal education
d815 Preschool education
d820 School education
d825 Vocational training
d830 Higher education
d839 Education, other specified and unspecified

Work and employment (d840-d859)
d840 Apprenticeship (work preparation)
d845 Acquiring, keeping and terminating a job
d850 Remunerative employment
d855 Non-remunerative employment
Two Level Classification

d859  Work and employment, other specified and unspecified

Economic life (d860-d879)
d860  Basic economic transactions
d865  Complex economic transactions
d870  Economic self-sufficiency
d879  Economic life, other specified and unspecified
d898  Major life areas, other specified
d899  Major life areas, unspecified

Chapter 9 Community, social and civic life

d910  Community life
d920  Recreation and leisure
d930  Religion and spirituality
d940  Human rights
d950  Political life and citizenship
d998  Community, social and civic life, other specified
d999  Community, social and civic life, unspecified
ENVIRONMENTAL FACTORS

Chapter 1 Products and technology
  e110 Products or substances for personal consumption
  e115 Products and technology for personal use in daily living
  e120 Products and technology for personal indoor and
    outdoor mobility and transportation
  e125 Products and technology for communication
  e130 Products and technology for education
  e135 Products and technology for employment
  e140 Products and technology for culture, recreation and sport
  e145 Products and technology for the practice of religion and
    spirituality
  e150 Design, construction and building products and
    technology of buildings for public use
  e155 Design, construction and building products and
    technology of buildings for private use
  e160 Products and technology of land development
  e165 Assets
  e198 Products and technology, other specified
  e199 Products and technology, unspecified

Chapter 2 Natural environment and human-
  made changes to environment
  e210 Physical geography
  e215 Population
  e220 Flora and fauna
  e225 Climate
  e230 Natural events
  e235 Human-caused events
  e240 Light

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Chapter 3 Support and relationships

Chapter 4 Attitudes
Chapter 5 Services, systems and policies

- e510 Services, systems and policies for the production of consumer goods
- e515 Architecture and construction services, systems and policies
- e520 Open space planning services, systems and policies
- e525 Housing services, systems and policies
- e530 Utilities services, systems and policies
- e535 Communication services, systems and policies
- e540 Transportation services, systems and policies
- e545 Civil protection services, systems and policies
- e550 Legal services, systems and policies
- e555 Associations and organizational services, systems and policies
- e560 Media services, systems and policies
- e565 Economic services, systems and policies
- e570 Social security services, systems and policies
- e575 General social support services, systems and policies
- e580 Health services, systems and policies
- e585 Education and training services, systems and policies
- e590 Labour and employment services, systems and policies
- e595 Political services, systems and policies
- e598 Services, systems and policies, other specified
- e599 Services, systems and policies, unspecified
ICF

Detailed classification with definitions

All second level categories with their definitions, inclusions and exclusions
BODY FUNCTIONS

Definitions: Body functions are the physiological functions of body systems (including psychological functions).

Impairments are problems in body function or structure as a significant deviation or loss.

Qualifier
Generic qualifier with the negative scale, used to indicate the extent or magnitude of an impairment:

xxx.0 NO impairment (none, absent, negligible, ...) 0-4 %
xxx.1 MILD impairment (slight, low, ...) 5-24 %
xxx.2 MODERATE impairment (medium, fair, ...) 25-49 %
xxx.3 SEVERE impairment (high, extreme, ...) 50-95 %
xxx.4 COMPLETE impairment (total,...) 96-100 %
xxx.8 not specified
xxx.9 not applicable

Broad ranges of percentages are provided for those cases in which calibrated assessment instruments or other standards are available to quantify the impairment in body function. For example, when “no impairment” or “complete impairment” in body function is coded, this scaling may have margin of error of up to 5%. “Moderate impairment” is generally up to half of the scale of total impairment. The percentages are to be calibrated in different domains with reference to population standards as percentiles. For this quantification to be used in a uniform manner, assessment procedures need to be developed through research.

For a further explanation of coding conventions in ICF, refer to Annex 2.
Chapter 1

Mental functions

This chapter is about the functions of the brain: both global mental functions, such as consciousness, energy and drive, and specific mental functions, such as memory, language and calculation mental functions.

Global mental functions (b110-b139)

b110  Consciousness functions
General mental functions of the state of awareness and alertness, including the clarity and continuity of the wakeful state.

Inclusions: functions of the state, continuity and quality of consciousness; loss of consciousness, coma, vegetative states, fugues, trance states, possession states, drug-induced altered consciousness, delirium, stupor

Exclusions: orientation functions (b114); energy and drive functions (b130); sleep functions (b134)
Orientation functions
General mental functions of knowing and ascertaining one’s relation to self, to others, to time and to one’s surroundings.

Inclusions: functions of orientation to time, place and person; orientation to self and others; disorientation to time, place and person

Exclusions: consciousness functions (b110); attention functions (b140); memory functions (b144)

Intellectual functions
General mental functions, required to understand and constructively integrate the various mental functions, including all cognitive functions and their development over the life span.

Inclusions: functions of intellectual growth; intellectual retardation, mental retardation, dementia

Exclusions: memory functions (b144); thought functions (b160); higher-level cognitive functions (b164)

Global psychosocial functions
General mental functions, as they develop over the life span, required to understand and constructively integrate the mental functions that lead to the formation of the interpersonal skills needed to establish reciprocal social interactions, in terms of both meaning and purpose.

Inclusion: such as in autism
**Temperament and personality functions**

General mental functions of constitutional disposition of the individual to react in a particular way to situations, including the set of mental characteristics that makes the individual distinct from others.

*Inclusions: functions of extraversion, introversion, agreeableness, conscientiousness, psychic and emotional stability, and openness to experience; optimism; novelty seeking; confidence; trustworthiness*

*Exclusions: intellectual functions (b117); energy and drive functions (b130); psychomotor functions (b147); emotional functions (b152)*

**Energy and drive functions**

General mental functions of physiological and psychological mechanisms that cause the individual to move towards satisfying specific needs and general goals in a persistent manner.

*Inclusions: functions of energy level, motivation, appetite, craving (including craving for substances that can be abused), and impulse control*

*Exclusions: consciousness functions (b110); temperament and personality functions (b126); sleep functions (b134); psychomotor functions (b147); emotional functions (b152)*
Sleep functions
General mental functions of periodic, reversible and selective physical and mental disengagement from one's immediate environment accompanied by characteristic physiological changes.

Inclusions: functions of amount of sleeping, and onset, maintenance and quality of sleep; functions involving the sleep cycle, such as in insomnia, hypersomnia and narcolepsy

Exclusions: consciousness functions (b110); energy and drive functions (b130); attention functions (b140); psychomotor functions (b147)

Global mental functions, other specified and unspecified
Specific mental functions (b140-b189)

**b140**  
**Attention functions**  
Specific mental functions of focusing on an external stimulus or internal experience for the required period of time.

*Inclusions*: functions of sustaining attention, shifting attention, dividing attention, sharing attention; concentration; distractibility

*Exclusions*: consciousness functions (b110); energy and drive functions (b130); sleep functions (b134); memory functions (b144); psychomotor functions (b147); perceptual functions (b156)

**b144**  
**Memory functions**  
Specific mental functions of registering and storing information and retrieving it as needed.

*Inclusions*: functions of short-term and long-term memory, immediate, recent and remote memory; memory span; retrieval of memory; remembering; functions used in recalling and learning, such as in nominal, selective and dissociative amnesia

*Exclusions*: consciousness functions (b110); orientation functions (b114); intellectual functions (b117); attention functions (b140); perceptual functions (b156); thought functions (b160); higher-level cognitive functions (b164); mental functions of language (b167); calculation functions (b172)
Psychomotor functions
Specific mental functions of control over both motor and psychological events at the body level.

Inclusions: functions of psychomotor control, such as psychomotor retardation, excitement and agitation, posturing, catatonia, negativism, ambivalence, echopraxia and echolalia; quality of psychomotor function

Exclusions: consciousness functions (b110); orientation functions (b114); intellectual functions (b117); energy and drive functions (b130); attention functions (b140); mental functions of language (b167); mental functions of sequencing complex movements (b176)

Emotional functions
Specific mental functions related to the feeling and affective components of the processes of the mind.

Inclusions: functions of appropriateness of emotion, regulation and range of emotion; affect; sadness, happiness, love, fear, anger, hate, tension, anxiety, joy, sorrow; lability of emotion; flattening of affect

Exclusions: temperament and personality functions (b126); energy and drive functions (b130)
**Perceptual functions**
Specific mental functions of recognizing and interpreting sensory stimuli.

*Inclusions:* functions of auditory, visual, olfactory, gustatory, tactile and visuospatial perception, such as hallucination or illusion

*Exclusions:* consciousness functions (b110); orientation functions (b114); attention functions (b140); memory functions (b144); mental functions of language (b167); seeing and related functions (b210-b229); hearing and vestibular functions (b230-b249); additional sensory functions (b250-b279)

**Thought functions**
Specific mental functions related to the ideational component of the mind.

*Inclusions:* functions of pace, form, control and content of thought; goal-directed thought functions, non-goal directed thought functions; logical thought functions, such as pressure of thought, flight of ideas, thought block, incoherence of thought, tangentiality, circumstantiality, delusions, obsessions and compulsions

*Exclusions:* intellectual functions (b117); memory functions (b144); psychomotor functions (b147); perceptual functions (b156); higher-level cognitive functions (b164); mental functions of language (b167); calculation functions (b172)
Higher-level cognitive functions
Specific mental functions especially dependent on the frontal lobes of the brain, including complex goal-directed behaviours such as decision-making, abstract thinking, planning and carrying out plans, mental flexibility, and deciding which behaviours are appropriate under what circumstances; often called executive functions.

Inclusions: functions of abstraction and organization of ideas; time management, insight and judgement; concept formation, categorization and cognitive flexibility

Exclusions: memory functions (b144); thought functions (b160); mental functions of language (b167); calculation functions (b172)

Mental functions of language
Specific mental functions of recognizing and using signs, symbols and other components of a language.

Inclusions: functions of reception and decryption of spoken, written or other forms of language such as sign language; functions of expression of spoken, written or other forms of language; integrative language functions, spoken and written, such as involved in receptive, expressive, Broca’s, Wernicke’s and conduction aphasia

Exclusions: attention functions (b140); memory functions (b144); perceptual functions (b156); thought functions (b160); higher-level cognitive functions (b164); calculation functions (b172); mental functions of complex movements (b176); Chapter 2 Sensory Functions and Pain; Chapter 3 Voice and Speech Functions
**Calculation functions**
Specific mental functions of determination, approximation and manipulation of mathematical symbols and processes.

*Inclusions: functions of addition, subtraction, and other simple mathematical calculations; functions of complex mathematical operations*

*Exclusions: attention functions (b140); memory functions (b144); thought functions (b160); higher-level cognitive functions (b164); mental functions of language (b167)*

**Mental function of sequencing complex movements**
Specific mental functions of sequencing and coordinating complex, purposeful movements.

*Inclusions: impairments such as in ideation, ideomotor, dressing, oculomotor and speech apraxia*

*Exclusions: psychomotor functions (b147); higher-level cognitive functions (b164); Chapter 7 Neuromusculoskeletal and Movement-Related Functions*

**Experience of self and time functions**
Specific mental functions related to the awareness of one's identity, one's body, one's position in the reality of one's environment and of time.

*Inclusions: functions of experience of self, body image and time*
ICF

Body Functions

b 189  Specific mental functions, other specified and unspecified

b 198  Mental functions, other specified

b 199  Mental functions, unspecified
Chapter 2

Sensory functions and pain

This chapter is about the functions of the senses, seeing, hearing, tasting and so on, as well as the sensation of pain.

Seeing and related functions (b210-b229)

Seeing functions

Sensory functions relating to sensing the presence of light and sensing the form, size, shape and colour of the visual stimuli.

Inclusions: visual acuity functions; visual field functions; quality of vision; functions of sensing light and colour, visual acuity of distant and near vision, monocular and binocular vision; visual picture quality; impairments such as myopia, hypermetropia, astigmatism, hemianopia, colour-blindness, tunnel vision, central and peripheral scotoma, diplopia, night blindness and impaired adaptability to light

Exclusion: perceptual functions (b156)
**b 215** Functions of structures adjoining the eye
Functions of structures in and around the eye that facilitate seeing functions.

Inclusions: functions of internal muscles of the eye, eyelid, external muscles of the eye, including voluntary and tracking movements and fixation of the eye, lacrimal glands, accommodation, pupillary reflex; impairments such as in nystagmus, xerophthalmia and ptosis

Exclusions: seeing functions (b210); Chapter 7 Neuromusculoskeletal and Movement-related Functions

**b 220** Sensations associated with the eye and adjoining structures
Sensations of tired, dry and itching eye and related feelings.

Inclusions: feelings of pressure behind the eye, of something in the eye, eye strain, burning in the eye; eye irritation

Exclusion: sensation of pain (b280)

**b 229** Seeing and related functions, other specified and unspecified
Hearing and vestibular functions (b230-b249)

**Hearing functions**
Sensory functions relating to sensing the presence of sounds and discriminating the location, pitch, loudness and quality of sounds.

*Inclusions:* functions of hearing, auditory discrimination, localization of sound source, lateralization of sound, speech discrimination; impairments such as deafness, hearing impairment and hearing loss

*Exclusions:* perceptual functions (b156) and mental functions of language (b167)

**Vestibular functions**
Sensory functions of the inner ear related to position, balance and movement.

*Inclusions:* functions of position and positional sense; functions of balance of the body and movement

*Exclusion:* sensation associated with hearing and vestibular functions (b240)

**Sensations associated with hearing and vestibular function**
Sensations of dizziness, falling, tinnitus and vertigo.

*Inclusions:* sensations of ringing in ears, irritation in ear, aural pressure, nausea associated with dizziness or vertigo

*Exclusions:* vestibular functions (b235); sensation of pain (b280)
Hearing and vestibular functions, other specified and unspecified

**Additional sensory functions (b250-b279)**

**b 250**  
Taste function  
Sensory functions of sensing qualities of bitterness, sweetness, sourness and saltiness.

*Inclusions: gustatory functions; impairments such as ageusia and hypogeusia*

**b 255**  
Smell function  
Sensory functions of sensing odours and smells.

*Inclusions: olfactory functions; impairments such as anosmia or hyposmia*

**b 260**  
Proprioceptive function  
Sensory functions of sensing the relative position of body parts.

*Inclusions: functions of statoesthesia and kinaesthesia*

*Exclusions: vestibular functions (b235); sensations related to muscles and movement functions (b780)*
**b 265**  Touch function
Sensory functions of sensing surfaces and their texture or quality.

*Inclusions: functions of touching, feeling of touch; impairments such as numbness, anaesthesia, tingling, paraesthesia and hyperaesthesia*

*Exclusions: sensory functions related to temperature and other stimuli (b270)*

**b 270**  Sensory functions related to temperature and other stimuli
Sensory functions of sensing temperature, vibration, pressure and noxious stimulus.

*Inclusions: functions of being sensitive to temperature, vibration, shaking or oscillation, superficial pressure, deep pressure, burning sensation or a noxious stimulus*

*Exclusions: touch functions (b265); sensation of pain (b280)*

**b 279**  Additional sensory functions, other specified and unspecified
Pain (b280-b289)

**b 280**  Sensation of pain
Sensation of unpleasant feeling indicating potential or actual damage to some body structure.

_Inclusions: sensations of generalized or localized pain, in one or more body part, pain in a dermatome, stabbing pain, burning pain, dull pain, aching pain; impairments such as myalgia, analgesia and hyperalgesia_

**b 289**  Sensation of pain, other specified and unspecified

**b 298**  Sensory functions and pain, other specified

**b 299**  Sensory functions and pain, unspecified
Chapter 3
Voice and speech functions

This chapter is about the functions of producing sounds and speech.

Voice functions
Functions of the production of various sounds by the passage of air through the larynx.

Inclusions: functions of production and quality of voice; functions of phonation, pitch, loudness and other qualities of voice; impairments such as aphony, dysphonia, hoarseness, hypernasality and hyponasality

Exclusions: mental functions of language (b167); articulation functions (b320)

Articulation functions
Functions of the production of speech sounds.

Inclusions: functions of enunciation, articulation of phonemes; spastic, ataxic, flaccid dysarthria; anarthria

Exclusions: mental functions of language (b167); voice functions (b310)
**b 330** Fluency and rhythm of speech functions
Functions of the production of flow and tempo of speech.

Inclusions: functions of fluency, rhythm, speed and melody of speech; prosody and intonation; impairments such as stuttering, stammering, cluttering, bradylalia and tachylalia

Exclusions: mental functions of language (b167); voice functions (b310); articulation functions (b320)

**b 340** Alternative vocalization functions
Functions of the production of other manners of vocalization.

Inclusions: functions of the production of notes and range of sounds, such as in singing, chanting, babbling and humming; crying aloud and screaming

Exclusions: mental functions of language (b167); voice functions (b310); articulation functions (b320); fluency and rhythm of speech functions (b330)

**b 398** Voice and speech functions, other specified

**b 399** Voice and speech functions, unspecified
Chapter 4

Functions of the cardiovascular, haematological, immunological and respiratory systems

This chapter is about the functions involved in the cardiovascular system (functions of the heart and blood vessels), the haematological and immunological systems (functions of blood production and immunity), and the respiratory system (functions of respiration and exercise tolerance).

Functions of the cardiovascular system (b410-b429)

**b410** Heart functions
Functions of pumping the blood in adequate or required amounts and pressure throughout the body.

Inclusions: functions of heart rate, rhythm and output; contraction force of ventricular muscles; functions of heart valves; pumping the blood through the pulmonary circuit; dynamics of circulation to the heart; impairments such as tachycardia, bradycardia and irregular heart beat and as in heart failure, cardiomyopathy, myocarditis, and coronary insufficiency

Exclusions: blood vessel functions (b415); blood pressure functions (b420); exercise tolerance functions (b455)
Blood vessel functions
Functions of transporting blood throughout the body.

Inclusions: functions of arteries, capillaries and veins; vasomotor function; functions of pulmonary arteries, capillaries and veins; functions of valves of veins; impairments such as in blockage or constriction of arteries; atherosclerosis, arteriosclerosis, thromboembolism and varicose veins

Exclusions: heart functions (b410); blood pressure functions (b420); haematological system functions (b430); exercise tolerance functions (b455)

Blood pressure functions
Functions of maintaining the pressure of blood within the arteries.

Inclusions: functions of maintenance of blood pressure; increased and decreased blood pressure; impairments such as in hypotension, hypertension and postural hypotension

Exclusions: heart functions (b410); blood vessel functions (b415); exercise tolerance functions (b455)

Functions of the cardiovascular system, other specified and unspecified
Functions of the haematological and immunological systems (b430-b439)

b430  Haematological system functions
Functions of blood production, oxygen and metabolite carriage, and clotting.

Inclusions: functions of the production of blood and bone marrow; oxygen-carrying functions of blood; blood-related functions of spleen; metabolite-carrying functions of blood; clotting; impairments such as anaemia, haemophilia and other clotting dysfunctions

Exclusions: functions of the cardiovascular system (b410-b429); immunological system functions (b435); exercise tolerance functions (b455)

b435  Immunological system functions
Functions of the body related to protection against foreign substances, including infections, by specific and non-specific immune responses.

Inclusions: immune response (specific and non-specific); hypersensitivity reactions; functions of lymphatic vessels and nodes; functions of cell-mediated immunity, antibody-mediated immunity; response to immunization; impairments such as in autoimmunity, allergic reactions, lymphadenitis and lymphoedema

Exclusion: haematological system functions (b430)

b439  Functions of the haematological and immunological systems, other specified and unspecified
Functions of the respiratory system (b440-b449)

Respiration functions
Functions of inhaling air into the lungs, the exchange of gases between air and blood, and exhaling air.

Inclusions: functions of respiration rate, rhythm and depth; impairments such as apnoea, hyperventilation, irregular respiration, paradoxical respiration, and bronchial spasm, and as in pulmonary emphysema

Exclusions: respiratory muscle functions (b445); additional respiratory functions (b450); exercise tolerance functions (b455)

Respiratory muscle functions
Functions of the muscles involved in breathing.

Inclusions: functions of thoracic respiratory muscles; functions of the diaphragm; functions of accessory respiratory muscles

Exclusions: respiration functions (b440); additional respiratory functions (b450); exercise tolerance functions (b455)

Functions of the respiratory system, other specified and unspecified
Additional functions and sensations of the cardiovascular and respiratory systems (b450-b469)

**b450** Additional respiratory functions
Additional functions related to breathing, such as coughing, sneezing and yawning.

*Inclusions: functions of blowing, whistling and mouth breathing*

**b455** Exercise tolerance functions
Functions related to respiratory and cardiovascular capacity as required for enduring physical exertion.

*Inclusions: functions of physical endurance, aerobic capacity, stamina and fatiguability*

*Exclusions: functions of the cardiovascular system (b410-b429); haematological system functions (b430); respiration functions (b440); respiratory muscle functions (b445); additional respiratory functions (b450)*

**b460** Sensations associated with cardiovascular and respiratory functions
Sensations such as missing a heart beat, palpitation and shortness of breath.

*Inclusions: sensations of tightness of chest, feelings of irregular beat, dyspnoea, air hunger, choking, gagging and wheezing*

*Exclusion: sensation of pain (b280)*
b469 Additional functions and sensations of the cardiovascular and respiratory systems, other specified and unspecified

b498 Functions of the cardiovascular, haematological, immunological and respiratory systems, other specified

b499 Functions of the cardiovascular, haematological, immunological and respiratory systems, unspecified
Chapter 5
Functions of the digestive, metabolic and endocrine systems
This chapter is about the functions of ingestion, digestion and elimination, as well as functions involved in metabolism and the endocrine glands.

Functions related to the digestive system (b510-b539)

**b510**  Ingestion functions
Functions related to taking in and manipulating solids or liquids through the mouth into the body.

Inclusions: functions of sucking, chewing and biting, manipulating food in the mouth, salivation, swallowing, burping, regurgitation, spitting and vomiting; impairments such as dysphagia, aspiration of food, aerophagia, excessive salivation, drooling and insufficient salivation

Exclusion: sensations associated with digestive system (b535)
Digestive functions
Functions of transporting food through the gastrointestinal tract, breakdown of food and absorption of nutrients.

Inclusions: functions of transport of food through the stomach, peristalsis; breakdown of food, enzyme production and action in stomach and intestines; absorption of nutrients and tolerance to food; impairments such as in hyperacidity of stomach, malabsorption, intolerance to food, hypermotility of intestines, intestinal paralysis, intestinal obstruction and decreased bile production.

Exclusions: ingestion functions (b510); assimilation functions (b520); defecation functions (b525); sensations associated with the digestive system (b535)

Assimilation functions
Functions by which nutrients are converted into components of the living body.

Inclusion: functions of storage of nutrients in the body

Exclusions: digestive functions (b515); defecation functions (b525); weight maintenance functions (b530); general metabolic functions (b540)
Defecation functions
Functions of elimination of wastes and undigested food as faeces and related functions.

Inclusions: functions of elimination, faecal consistency, frequency of defecation; faecal continence, flatulence; impairments such as constipation, diarrhoea, watery stool and anal sphincter incompetence or incontinence

Exclusions: digestive functions (b515); assimilation functions (b520); sensations associated with the digestive system (b535)

Weight maintenance functions
Functions of maintaining appropriate body weight, including weight gain during the developmental period.

Inclusions: functions of maintenance of acceptable Body Mass Index (BMI); and impairments such as underweight, cachexia, wasting, overweight, emaciation and such as in primary and secondary obesity

Exclusions: assimilation functions (b520); general metabolic functions (b540); endocrine gland functions (b555)
Sensations associated with the digestive system
Sensations arising from eating, drinking and related digestive functions.

Inclusions: sensations of nausea, feeling bloated, and the feeling of abdominal cramps; fullness of stomach, globus feeling, spasm of stomach, gas in stomach and heartburn

Exclusions: sensation of pain (b280); ingestion functions (b510); digestive functions (b515); defecation functions (b525)

Functions related to the digestive system, other specified and unspecified

Functions related to metabolism and the endocrine system (b540-b559)

General metabolic functions
Functions of regulation of essential components of the body such as carbohydrates, proteins and fats, the conversion of one to another, and their breakdown into energy.

Inclusions: functions of metabolism, basal metabolic rate, metabolism of carbohydrate, protein and fat, catabolism, anabolism, energy production in the body; increase or decrease in metabolic rate

Exclusions: assimilation functions (b520); weight maintenance functions (b530); water, mineral and electrolyte balance functions (b545); thermoregulatory functions (b550); endocrine glands functions (b555)
**Water, mineral and electrolyte balance functions**
Functions of the regulation of water, mineral and electrolytes in the body.

Inclusions: functions of water balance, balance of minerals such as calcium, zinc and iron, and balance of electrolytes such as sodium and potassium; impairments such as in water retention, dehydration, hypercalcaemia, hypocalcaemia, iron deficiency, hypernatraemia, hyponatraemia, hyperkalaemia and hypokalaemia

Exclusions: haematological system functions (b430); general metabolic functions (b540); endocrine gland functions (b555)

**Thermoregulatory functions**
Functions of the regulation of body temperature.

Inclusions: functions of maintenance of body temperature; impairments such as hypothermia, hyperthermia

Exclusions: general metabolic functions (b540); endocrine gland functions (b555)
Endocrine gland functions
Functions of production and regulation of hormonal levels in the body, including cyclical changes.

Inclusions: functions of hormonal balance; hyperpituitarism, hypopituitarism, hyperthyroidism, hypothyroidism, hyperadrenalism, hypoadrenalism, hyperparathyroidism, hypoparathyroidism, hypergonadism, hypogonadism

Exclusions: general metabolic functions (b540); water, mineral and electrolyte balance functions (b545); thermoregulatory functions (b550); sexual functions (b640); menstruation functions (b650)

Functions related to metabolism and the endocrine system, other specified and unspecified

Functions of the digestive, metabolic and endocrine systems, other specified

Functions of the digestive, metabolic and endocrine systems, unspecified
Chapter 6
Genitourinary and reproductive functions

This chapter is about the functions of urination and the reproductive functions, including sexual and procreative functions.

Urinary functions (b610-b639)

b610 Urinary excretory functions
Functions of filtration and collection of the urine.

Inclusions: functions of urinary filtration, collection of urine; impairments such as in renal insufficiency, anuria, oliguria, hydronephrosis, hypotonic urinary bladder and ureteric obstruction

Exclusion: urination functions (b620)

b620 Urination functions
Functions of discharge of urine from the urinary bladder.

Inclusions: functions of urination, frequency of urination, urinary continence; impairments such as in stress, urge, reflex, overflow, continuous incontinence, dribbling, automatic bladder, polyuria, urinary retention and urinary urgency

Exclusions: urinary excretory functions (b610); sensations associated with urinary functions (b630)
b630  Sensations associated with urinary functions
Sensations arising from voiding and related urinary functions

Inclusions: sensations of incomplete voiding of urine, feeling of fullness of bladder

Exclusions: sensations of pain (b280); urination functions (b620)

b639  Urinary functions, other specified and unspecified

Genital and reproductive functions (b640-b679)

b640  Sexual functions
Mental and physical functions related to the sexual act, including the arousal, preparatory, orgasmic and resolution stages.

Inclusions: functions of the sexual arousal, preparatory, orgasmic and resolution phase; functions related to sexual interest, performance, penile erection, clitoral erection, vaginal lubrication, ejaculation, orgasm; impairments such as impotence, frigidity, vaginismus, premature ejaculation, priapism and delayed ejaculation

Exclusions: procreation functions (b660); sensations associated with genital and reproductive functions (b670)
Menstruation functions
Functions associated with the menstrual cycle, including regularity of menstruation and discharge of menstrual fluids.

Inclusions: functions of regularity and interval of menstruation, extent of menstrual bleeding, menarche, menopause; impairments such as primary and secondary amenorrhoea, menorrhagia, polymenorrhoea and retrograde menstruation; premenstrual tension

Exclusions: sexual functions (b640); procreation functions (b660); sensations associated with genital and reproductive functions (b670); sensation of pain (b280)

Procreation functions
Functions associated with fertility, pregnancy, childbirth and lactation.

Inclusions: functions of male fertility and female fertility, pregnancy and childbirth, and lactation; impairments such as azoospermia, oligozoospermia, agalactorrhoea, galactorrhoea, alactation and such as in subfertility, sterility, spontaneous abortions, ectopic pregnancy, miscarriage, small fetus, hydramnios and premature childbirth, and delayed childbirth

Exclusions: sexual functions (b640); menstruation functions (b650)
Sensations associated with genital and reproductive functions
Sensations arising from sexual arousal, intercourse, menstruation, and related genital or reproductive functions.

Inclusions: sensations of dyspareunia, dysmenorrhoea, hot flushes during menopause and night sweats during menopause

Exclusions: sensation of pain (b280); sensations associated with urinary functions (b630); sexual functions (b640); menstruation functions (b650); procreation functions (b660)

Genital and reproductive functions, other specified and unspecified

Genitourinary and reproductive functions, other specified

Genitourinary and reproductive functions, unspecified
Chapter 7

Neuromusculoskeletal and movement-related functions

This chapter is about the functions of movement and mobility, including functions of joints, bones, reflexes and muscles.

Functions of the joints and bones (b710-b729)

b710   Mobility of joint functions
Functions of the range and ease of movement of a joint.

Inclusions: functions of mobility of single or several joints, vertebral, shoulder, elbow, wrist, hip, knee, ankle, small joints of hands and feet; mobility of joints generalized; impairments such as in hypermobility of joints, frozen joints, frozen shoulder, arthritis

Exclusions: stability of joint functions (b715); control of voluntary movement functions (b760)
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**B715 Stability of joint functions**
Functions of the maintenance of structural integrity of the joints.

*Inclusions: functions of the stability of a single joint, several joints, and joints generalized; impairments such as in unstable shoulder joint, dislocation of a joint, dislocation of shoulder and hip*

*Exclusion: mobility of joint functions (B710)*

**B720 Mobility of bone functions**
Functions of the range and ease of movement of the scapula, pelvis, carpal and tarsal bones.

*Inclusions: impairments such as frozen scapula and frozen pelvis*

*Exclusion: mobility of joints functions (B710)*

**B729 Functions of the joints and bones, other specified and unspecified**
Muscle functions (b730-b749)

**b730**  
Muscle power functions  
Functions related to the force generated by the contraction of a muscle or muscle groups.

*Inclusions:* functions associated with the power of specific muscles and muscle groups, muscles of one limb, one side of the body, the lower half of the body, all limbs, the trunk and the body as a whole; impairments such as weakness of small muscles in feet and hands, muscle paresis, muscle paralysis, monoplegia, hemiplegia, paraplegia, quadriplegia and akinetic mutism

*Exclusions:* functions of structures adjoining the eye (b215); muscle tone functions (b735); muscle endurance functions (b740)

**b735**  
Muscle tone functions  
Functions related to the tension present in the resting muscles and the resistance offered when trying to move the muscles passively.

*Inclusions:* functions associated with the tension of isolated muscles and muscle groups, muscles of one limb, one side of the body and the lower half of the body, muscles of all limbs, muscles of the trunk, and all muscles of the body; impairments such as hypotonia, hypertonia and muscle spasticity

*Exclusions:* muscle power functions (b730); muscle endurance functions (b740)
**b740** Muscle endurance functions
Functions related to sustaining muscle contraction for the required period of time.

*Inclusions: functions associated with sustaining muscle contraction for isolated muscles and muscle groups, and all muscles of the body; impairments such as in myasthenia gravis*

*Exclusions: exercise tolerance functions (b455); muscle power functions (b730); muscle tone functions (b735)*

**b749** Muscle functions, other specified and unspecified

**Movement functions (b750-b789)**

**b750** Motor reflex functions
Functions of involuntary contraction of muscles automatically induced by specific stimuli.

*Inclusions: functions of stretch motor reflex, automatic local joint reflex, reflexes generated by noxious stimuli and other exteroceptive stimuli; withdrawal reflex, biceps reflex, radius reflex, quadriceps reflex, patellar reflex, ankle reflex*
**Involuntary movement reaction functions**
Functions of involuntary contractions of large muscles or the whole body induced by body position, balance and threatening stimuli.

*Inclusions: functions of postural reactions, righting reactions, body adjustment reactions, balance reactions, supporting reactions, defensive reactions*

*Exclusion: motor reflex functions (b750)*

**Control of voluntary movement functions**
Functions associated with control over and coordination of voluntary movements.

*Inclusions: functions of control of simple voluntary movements and of complex voluntary movements, coordination of voluntary movements, supportive functions of arm or leg, right left motor coordination, eye hand coordination, eye foot coordination; impairments such as control and coordination problems, e.g. dysdiadochokinesia*

*Exclusions: muscle power functions (b730); involuntary movement functions (b765); gait pattern functions (b770)*
Involuntary movement functions
Functions of unintentional, non- or semi-purposive involuntary contractions of a muscle or group of muscles.

Inclusions: involuntary contractions of muscles; impairments such as tremors, tics, mannerisms, stereotypies, motor perseveration, chorea, athetosis, vocal tics, dystonic movements and dyskinesia

Exclusions: control of voluntary movement functions (b760); gait pattern functions (b770)

Gait pattern functions
Functions of movement patterns associated with walking, running or other whole body movements.

Inclusions: walking patterns and running patterns; impairments such as spastic gait, hemiplegic gait, paraplegic gait, asymmetric gait, limping and stiff gait pattern

Exclusions: muscle power functions (b730); muscle tone functions (b735); control of voluntary movement functions (b760); involuntary movement functions (b765)
**b 780** Sensations related to muscles and movement functions
Sensations associated with the muscles or muscle groups of the body and their movement.

*Inclusions: sensations of muscle stiffness and tightness of muscles, muscle spasm or constriction, and heaviness of muscles*

*Exclusion: sensation of pain (b280)*

**b 789** Movement functions, other specified and unspecified

**b 798** Neuromusculoskeletal and movement-related functions, other specified

**b 799** Neuromusculoskeletal and movement-related functions, unspecified
Chapter 8
Functions of the skin and related structures

This chapter is about the functions of skin, nails and hair.

*Functions of the skin (b810-b849)*

**b810** Protective functions of the skin
Functions of the skin for protecting the body from physical, chemical and biological threats.

*Inclusions: functions of protecting against the sun and other radiation, photosensitivity, pigmentation, quality of skin; insulating function of skin, callus formation, hardening; impairments such as broken skin, ulcers, bedsores and thinning of skin*

*Exclusions: repair functions of the skin (b820); other functions of the skin (b830)*

**b820** Repair functions of the skin
Functions of the skin for repairing breaks and other damage to the skin.

*Inclusions: functions of scab formation, healing, scarring; bruising and keloid formation*

*Exclusions: protective functions of the skin (b810); other functions of the skin (b830)*
Other functions of the skin
Functions of the skin other than protection and repair, such as cooling and sweat secretion.

Inclusions: functions of sweating, glandular functions of the skin and resulting body odour

Exclusions: protective functions of the skin (b810); repair functions of the skin (b820)

Sensation related to the skin
Sensations related to the skin such as itching, burning sensation and tingling.

Inclusions: impairments such as pins and needles sensation and crawling sensation

Exclusion: sensation of pain (b280)

Functions of the skin, other specified and unspecified

Functions of the hair and nails (b850-b869)

Functions of hair
Functions of the hair, such as protection, coloration and appearance.

Inclusions: functions of growth of hair, pigmentation of hair, location of hair; impairments such as loss of hair or alopecia
Functions of nails
Functions of the nails, such as protection, scratching and appearance.

Inclusions: growth and pigmentation of nails, quality of nails

Functions of the hair and nails, other specified and unspecified

Functions of the skin and related structures, other specified

Functions of the skin and related structures, unspecified
BODY STRUCTURES

Definitions:  

*Body structures* are anatomical parts of the body such as organs, limbs and their components.

*Impairments* are problems in body function or structure as a significant deviation or loss.

First qualifier

Generic qualifier with the negative scale used to indicate the extent or magnitude of an impairment:

<table>
<thead>
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<th>Code</th>
<th>Description</th>
<th>Percentage</th>
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</thead>
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<td>(none, absent, negligible,...)</td>
</tr>
<tr>
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<td>MILD impairment</td>
<td>(slight, low,...)</td>
</tr>
<tr>
<td>xxx.2</td>
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<td>xxx.3</td>
<td>SEvere impairment</td>
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<tr>
<td>xxx.9</td>
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Broad ranges of percentages are provided for those cases in which calibrated assessment instruments or other standards are available to quantify the impairment in body structure. For example, when “no impairment” or “complete impairment” in body structure is coded, this scaling may have margin of error of up to 5%. “Moderate impairment” is generally up to half of the scale of total impairment. The percentages are to be calibrated in different domains with reference to population standards as percentiles. For this quantification to be used in a uniform manner, assessment procedures need to be developed through research.
Second qualifier
Used to indicate the nature of the change in the respective body structure:

0  no change in structure
1  total absence
2  partial absence
3  additional part
4  aberrant dimensions
5  discontinuity
6  deviating position
7  qualitative changes in structure, including accumulation of fluid
8  not specified
9  not applicable

Third qualifier (suggested)
To be developed to indicate localization

0  more than one region
1  right
2  left
3  both sides
4  front
5  back
6  proximal
7  distal
8  not specified
9  not applicable

For a further explanation of coding conventions in ICF, refer to Annex 2.
Chapter 1
Structures of the nervous system

s110  Structure of brain
s120  Spinal cord and related structures
s130  Structure of meninges
s140  Structure of sympathetic nervous system
s150  Structure of parasympathetic nervous system
s198  Structure of the nervous system, other specified
s199  Structure of the nervous system, unspecified
Chapter 2
The eye, ear and related structures

\begin{itemize}
  \item [s210] Structure of eye socket
  \item [s220] Structure of eyeball
  \item [s230] Structures around eye
  \item [s240] Structure of external ear
  \item [s250] Structure of middle ear
  \item [s260] Structure of inner ear
  \item [s298] Eye, ear and related structures, other specified
  \item [s299] Eye, ear and related structures, unspecified
\end{itemize}
Chapter 3

Structures involved in voice and speech

- Structure of nose
- Structure of mouth
- Structure of pharynx
- Structure of larynx
- Structures involved in voice and speech, other specified
- Structures involved in voice and speech, unspecified
Chapter 4
Structures of the cardiovascular, immunological and respiratory systems

- **s410** Structure of cardiovascular system
- **s420** Structure of immune system
- **s430** Structure of respiratory system
- **s498** Structures of the cardiovascular, immunological and respiratory systems, other specified
- **s499** Structures of the cardiovascular, immunological and respiratory systems, unspecified
Chapter 5
Structures related to the digestive, metabolic and endocrine systems

- **s 510** Structure of salivary glands
- **s 520** Structure of oesophagus
- **s 530** Structure of stomach
- **s 540** Structure of intestine
- **s 550** Structure of pancreas
- **s 560** Structure of liver
- **s 570** Structure of gall bladder and ducts
- **s 580** Structure of endocrine glands
- **s 598** Structures related to the digestive, metabolic and endocrine systems, other specified
- **s 599** Structures related to the digestive, metabolic and endocrine systems, unspecified
Chapter 6
Structures related to the genitourinary and reproductive systems

- **s610**: Structure of urinary system
- **s620**: Structure of pelvic floor
- **s630**: Structure of reproductive system
- **s698**: Structures related to the genitourinary and reproductive systems, other specified
- **s699**: Structures related to the genitourinary and reproductive systems, unspecified
Chapter 7
Structures related to movement

- S710 Structure of head and neck region
- S720 Structure of shoulder region
- S730 Structure of upper extremity
- S740 Structure of pelvic region
- S750 Structure of lower extremity
- S760 Structure of trunk
- S770 Additional musculoskeletal structures related to movement
- S798 Structures related to movement, other specified
- S799 Structures related to movement, unspecified
Chapter 8
Skin and related structures

810 Structure of areas of skin
820 Structure of skin glands
830 Structure of nails
840 Structure of hair
898 Skin and related structures, other specified
899 Skin and related structures, unspecified
ACTIVITIES AND PARTICIPATION

Definitions:
Activity is the execution of a task or action by an individual.

Participation is involvement in a life situation.

Activity limitations are difficulties an individual may have in executing activities.

Participation restrictions are problems an individual may experience in involvement in life situations.

Qualifiers
The domains for the Activities and Participation component are given in a single list that covers the full range of life areas (from basic learning and watching to composite areas such as social tasks). This component can be used to denote activities (a) or participation (p) or both.

The two qualifiers for the Activities and Participation component are the performance qualifier and the capacity qualifier. The performance qualifier describes what an individual does in his or her current environment. Because the current environment brings in a societal context, performance as recorded by this qualifier can also be understood as "involvement in a life situation" or "the lived experience" of people in the actual context in which they live. This context includes the environmental factors – all aspects of the physical,
social and attitudinal world, which can be coded using the Environmental Factors component.

The capacity qualifier describes an individual’s ability to execute a task or an action. This qualifier identifies the highest probable level of functioning that a person may reach in a given domain at a given moment. Capacity is measured in a uniform or standard environment, and thus reflects the environmentally adjusted ability of the individual. The Environmental Factors component can be used to describe the features of this uniform or standard environment.

Both capacity and performance qualifiers can be used both with and without assistive devices or personal assistance, and in accordance with the following scale:

- **XXX.0** NO difficulty (none, absent, negligible, …) 0-4 %
- **XXX.1** MILD difficulty (slight, low, …) 5-24 %
- **XXX.2** MODERATE difficulty (medium, fair, …) 25-49 %
- **XXX.3** SEVERE difficulty (high, extreme, …) 50-95 %
- **XXX.4** COMPLETE difficulty (total, …) 96-100 %
- **XXX.8** not specified
- **XXX.9** not applicable

Broad ranges of percentages are provided for those cases in which calibrated assessment instruments or other standards are available to quantify the performance problem or capacity limitation. For example, when no performance problem or a complete performance problem is coded, this scaling has a margin of error of up to 5%. A moderate performance problem is defined as up to half of the scale of a total performance problem. The percentages are to be calibrated in different domains with reference to population standards as percentiles. For this quantification to be used in a uniform manner, assessment procedures need to be developed through research.

For a further explanation of coding convention in ICF, refer to Annex 2.
Chapter 1
Learning and applying knowledge

This chapter is about learning, applying the knowledge that is learned, thinking, solving problems, and making decisions.

**Purposeful sensory experiences (d110-d129)**

**d110  Watching**
Using the sense of seeing intentionally to experience visual stimuli, such as watching a sporting event or children playing.

**d115  Listening**
Using the sense of hearing intentionally to experience auditory stimuli, such as listening to a radio, music or a lecture.

**d120  Other purposeful sensing**
Using the body’s other basic senses intentionally to experience stimuli, such as touching and feeling textures, tasting sweets or smelling flowers.

**d129  Purposeful sensory experiences, other specified and unspecified**
Basic learning (d130-d159)

**d130** Copying
Imitating or mimicking as a basic component of learning, such as copying a gesture, a sound or the letters of an alphabet.

**d135** Rehearsing
Repeating a sequence of events or symbols as a basic component of learning, such as counting by tens or practising the recitation of a poem.

**d140** Learning to read
Developing the competence to read written material (including Braille) with fluency and accuracy, such as recognizing characters and alphabets, sounding out words with correct pronunciation, and understanding words and phrases.

**d145** Learning to write
Developing the competence to produce symbols that represent sounds, words or phrases in order to convey meaning (including Braille writing), such as spelling effectively and using correct grammar.

**d150** Learning to calculate
Developing the competence to manipulate numbers and perform simple and complex mathematical operations, such as using mathematical signs for addition and subtraction and applying the correct mathematical operation to a problem.
ICF

Activities and Participation

**d155** Acquiring skills
Developing basic and complex competencies in integrated sets of actions or tasks so as to initiate and follow through with the acquisition of a skill, such as manipulating tools or playing games like chess.

*Inclusions: acquiring basic and complex skills*

**d159** Basic learning, other specified and unspecified

**Applying knowledge (d160-d179)**

**d160** Focusing attention
Intentionally focusing on specific stimuli, such as by filtering out distracting noises.

**d163** Thinking
Formulating and manipulating ideas, concepts, and images, whether goal-oriented or not, either alone or with others, such as creating fiction, proving a theorem, playing with ideas, brainstorming, meditating, pondering, speculating, or reflecting.

*Exclusions: solving problems (d175); making decisions (d177)*

**d166** Reading
Performing activities involved in the comprehension and interpretation of written language (e.g. books, instructions or newspapers in text or Braille), for the purpose of obtaining general knowledge or specific information.

*Exclusion: learning to read (d140)*
Writing
Using or producing symbols or language to convey information, such as producing a written record of events or ideas or drafting a letter.

Exclusion: learning to write (d145)

Calculating
Performing computations by applying mathematical principles to solve problems that are described in words and producing or displaying the results, such as computing the sum of three numbers or finding the result of dividing one number by another.

Exclusion: learning to calculate (d150)

Solving problems
Finding solutions to questions or situations by identifying and analysing issues, developing options and solutions, evaluating potential effects of solutions, and executing a chosen solution, such as in resolving a dispute between two people.

Inclusions: solving simple and complex problems
Exclusions: thinking (d163); making decisions (d177)

Making decisions
Making a choice among options, implementing the choice, and evaluating the effects of the choice, such as selecting and purchasing a specific item, or deciding to undertake and undertaking one task from among several tasks that need to be done.

Exclusions: thinking (d163); solving problems (d175)
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<tr>
<td>d179</td>
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<td>d198</td>
<td>Learning and applying knowledge, other specified</td>
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<td>d199</td>
<td>Learning and applying knowledge, unspecified</td>
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Chapter 2

General tasks and demands

This chapter is about general aspects of carrying out single or multiple tasks, organizing routines and handling stress. These items can be used in conjunction with more specific tasks or actions to identify the underlying features of the execution of tasks under different circumstances.

**d210**  
**Undertaking a single task**
Carrying out simple or complex and coordinated actions related to the mental and physical components of a single task, such as initiating a task, organizing time, space and materials for a task, pacing task performance, and carrying out, completing, and sustaining a task.

*Inclusions: undertaking a simple or complex task; undertaking a single task independently or in a group*

*Exclusions: acquiring skills (d155); solving problems (d175); making decisions (d177); undertaking multiple tasks (d220)***
d220 Undertaking multiple tasks
Carrying out simple or complex and coordinated actions as components of multiple, integrated and complex tasks in sequence or simultaneously.

Inclusions: undertaking multiple tasks; completing multiple tasks; undertaking multiple tasks independently and in a group

Exclusions: acquiring skills (d155); solving problems (d175); making decisions (d177); undertaking a single task (d210)

d230 Carrying out daily routine
Carrying out simple or complex and coordinated actions in order to plan, manage and complete the requirements of day-to-day procedures or duties, such as budgeting time and making plans for separate activities throughout the day.

Inclusions: managing and completing the daily routine; managing one's own activity level

Exclusion: undertaking multiple tasks (d220)

d240 Handling stress and other psychological demands
Carrying out simple or complex and coordinated actions to manage and control the psychological demands required to carry out tasks demanding significant responsibilities and involving stress, distraction, or crises, such as driving a vehicle during heavy traffic or taking care of many children.

Inclusions: handling responsibilities; handling stress and crisis
d298  General tasks and demands, other specified

d299  General tasks and demands, unspecified
Chapter 3

Communication

This chapter is about general and specific features of communicating by language, signs and symbols, including receiving and producing messages, carrying on conversations, and using communication devices and techniques.

**Communicating - receiving (d310-d329)**

**d310** Communicating with - receiving - spoken messages
Comprehending literal and implied meanings of messages in spoken language, such as understanding that a statement asserts a fact or is an idiomatic expression.

**d315** Communicating with - receiving - nonverbal messages
Comprehending the literal and implied meanings of messages conveyed by gestures, symbols and drawings, such as realizing that a child is tired when she rubs her eyes or that a warning bell means that there is a fire.

*Inclusions: communicating with - receiving - body gestures, general signs and symbols, drawings and photographs*

**d320** Communicating with - receiving - formal sign language messages
Receiving and comprehending messages in formal sign language with literal and implied meaning.
Communicating with - receiving - written messages
Comprehending the literal and implied meanings of messages that are conveyed through written language (including Braille), such as following political events in the daily newspaper or understanding the intent of religious scripture.

Communicating - receiving, other specified and unspecified

**Communicating - producing** *(d330-d349)*

**d330**
Speaking
Producing words, phrases and longer passages in spoken messages with literal and implied meaning, such as expressing a fact or telling a story in oral language.

**d335**
Producing nonverbal messages
Using gestures, symbols and drawings to convey messages, such as shaking one's head to indicate disagreement or drawing a picture or diagram to convey a fact or complex idea.

*Inclusions: producing body gestures, signs, symbols, drawings and photographs*

**d340**
Producing messages in formal sign language
Conveying, with formal sign language, literal and implied meaning.
Writing messages
Producing the literal and implied meanings of messages that are conveyed through written language, such as writing a letter to a friend.

Communication - producing, other specified and unspecified

Conversation and use of communication devices and techniques (d350-d369)

Conversation
Starting, sustaining and ending an interchange of thoughts and ideas, carried out by means of spoken, written, sign or other forms of language, with one or more people one knows or who are strangers, in formal or casual settings.

Inclusions: starting, sustaining and ending a conversation; conversing with one or many people

Discussion
Starting, sustaining and ending an examination of a matter, with arguments for or against, or debate carried out by means of spoken, written, sign or other forms of language, with one or more people one knows or who are strangers, in formal or casual settings.

Inclusion: discussion with one person or many people
Using communication devices and techniques
Using devices, techniques and other means for the purposes of communicating, such as calling a friend on the telephone.

Inclusions: using telecommunication devices, using writing machines and communication techniques

Conversation and use of communication devices and techniques, other specified and unspecified

Communication, other specified

Communication, unspecified
Chapter 4

Mobility

This chapter is about moving by changing body position or location or by transferring from one place to another, by carrying, moving or manipulating objects, by walking, running or climbing, and by using various forms of transportation.

Changing and maintaining body position (d410-d429)

**d410** Changing basic body position
Getting into and out of a body position and moving from one location to another, such as getting up out of a chair to lie down on a bed, and getting into and out of positions of kneeling or squatting.

*Inclusions: changing body position from lying down, from squatting or kneeling, from sitting or standing, bending and shifting the body’s centre of gravity*

*Exclusion: transferring oneself (d420)*

**d415** Maintaining a body position
Staying in the same body position as required, such as remaining seated or remaining standing for work or school.

*Inclusions: maintaining a lying, squatting, kneeling, sitting and standing position*
**Activities and Participation**

**d420** Transferring oneself
Moving from one surface to another, such as sliding along a bench or moving from a bed to a chair, without changing body position.

*Inclusions: transferring oneself while sitting or lying*

*Exclusion: changing basic body position (d410)*

**d429** Changing and maintaining body position, other specified and unspecified

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**Carrying, moving and handling objects (d430-d449)**

**d430** Lifting and carrying objects
Raising up an object or taking something from one place to another, such as when lifting a cup or carrying a child from one room to another.

*Inclusions: lifting, carrying in the hands or arms, or on shoulders, hip, back or head; putting down*

**d435** Moving objects with lower extremities
Performing coordinated actions aimed at moving an object by using the legs and feet, such as kicking a ball or pushing pedals on a bicycle.

*Inclusions: pushing with lower extremities; kicking*
**d 440** Fine hand use
Performing the coordinated actions of handling objects, picking up, manipulating and releasing them using one's hand, fingers and thumb, such as required to lift coins off a table or turn a dial or knob.

*Inclusions: picking up, grasping, manipulating and releasing*

*Exclusion: lifting and carrying objects (d430)*

**d 445** Hand and arm use
Performing the coordinated actions required to move objects or to manipulate them by using hands and arms, such as when turning door handles or throwing or catching an object.

*Inclusions: pulling or pushing objects; reaching; turning or twisting the hands or arms; throwing; catching*

*Exclusion: fine hand use (d440)*

**d 449** Carrying, moving and handling objects, other specified and unspecified
Walking and moving (d450-d469)

Walking
Moving along a surface on foot, step by step, so that one foot is always on the ground, such as when strolling, sauntering, walking forwards, backwards, or sideways.

Inclusions: walking short or long distances; walking on different surfaces; walking around obstacles

Exclusions: transferring oneself (d420); moving around (d455)

Moving around
Moving the whole body from one place to another by means other than walking, such as climbing over a rock or running down a street, skipping, scampering, jumping, somersaulting or running around obstacles.

Inclusions: crawling, climbing, running, jogging, jumping, and swimming

Exclusions: transferring oneself (d420); walking (d450)
d460 Moving around in different locations
Walking and moving around in various places and situations, such as walking between rooms in a house, within a building, or down the street of a town.

Inclusions: moving around within the home, crawling or climbing within the home; walking or moving within buildings other than the home, and outside the home and other buildings

d465 Moving around using equipment
Moving the whole body from place to place, on any surface or space, by using specific devices designed to facilitate moving or create other ways of moving around, such as with skates, skis, or scuba equipment, or moving down the street in a wheelchair or a walker.

Exclusions: transferring oneself (d420); walking (d450); moving around (d455); using transportation (d470); driving (d475)

d469 Walking and moving, other specified and unspecified
Moving around using transportation (d470-d489)

**d470 Using transportation**
Using transportation to move around as a passenger, such as being driven in a car or on a bus, rickshaw, jitney, animal-powered vehicle, or private or public taxi, bus, train, tram, subway, boat or aircraft.

*Inclusions: using human-powered transportation; using private motorized or public transportation*

*Exclusions: moving around using equipment (d465); driving (d475)*

**d475 Driving**
Being in control of and moving a vehicle or the animal that draws it, travelling under one’s own direction or having at one’s disposal any form of transportation, such as a car, bicycle, boat or animal-powered vehicle.

*Inclusions: driving human-powered transportation, motorized vehicles, animal-powered vehicles*

*Exclusions: moving around using equipment (d465); using transportation (d470)*

**d480 Riding animals for transportation**
Travelling on the back of an animal, such as a horse, ox, camel or elephant

*Exclusions: driving (d475); recreation and leisure (d920)*
d489  Moving around using transportation, other specified and unspecified

d498  Mobility, other specified

d499  Mobility, unspecified
Chapter 5
Self-care

This chapter is about caring for oneself, washing and drying oneself, caring for one's body and body parts, dressing, eating and drinking, and looking after one's health.

**d510 Washing oneself**
Washing and drying one's whole body, or body parts, using water and appropriate cleaning and drying materials or methods, such as bathing, showering, washing hands and feet, face and hair, and drying with a towel.

*Inclusions: washing body parts, the whole body; and drying oneself*

*Exclusions: caring for body parts (d520); toileting (d530)*

**d520 Caring for body parts**
Looking after those parts of the body, such as skin, face, teeth, scalp, nails and genitals, that require more than washing and drying.

*Inclusions: caring for skin, teeth, hair, finger and toe nails*

*Exclusions: washing oneself (d510); toileting (d530)*
**Toileting**
Planning and carrying out the elimination of human waste (menstruation, urination and defecation), and cleaning oneself afterwards.

*Inclusions: regulating urination, defecation and menstrual care*

*Exclusions: washing oneself (d510); caring for body parts (d520)*

**Dressing**
Carrying out the coordinated actions and tasks of putting on and taking off clothes and footwear in sequence and in keeping with climatic and social conditions, such as by putting on, adjusting and removing shirts, skirts, blouses, pants, undergarments, saris, kimono, tights, hats, gloves, coats, shoes, boots, sandals and slippers.

*Inclusions: putting on or taking off clothes and footwear and choosing appropriate clothing*

**Eating**
Carrying out the coordinated tasks and actions of eating food that has been served, bringing it to the mouth and consuming it in culturally acceptable ways, cutting or breaking food into pieces, opening bottles and cans, using eating implements, having meals, feasting or dining.

*Exclusion: drinking (d560)*
Drinking
Taking hold of a drink, bringing it to the mouth, and consuming the drink in culturally acceptable ways, mixing, stirring and pouring liquids for drinking, opening bottles and cans, drinking through a straw or drinking running water such as from a tap or a spring; feeding from the breast.

Exclusion: eating (d550)

Looking after one’s health
Ensuring physical comfort, health and physical and mental well-being, such as by maintaining a balanced diet, and an appropriate level of physical activity, keeping warm or cool, avoiding harms to health, following safe sex practices, including using condoms, getting immunizations and regular physical examinations.

Inclusions: ensuring one’s physical comfort; managing diet and fitness; maintaining one’s health

Self-care, other specified
Self-care, unspecified
Chapter 6

Domestic life

This chapter is about carrying out domestic and everyday actions and tasks. Areas of domestic life include acquiring a place to live, food, clothing and other necessities, household cleaning and repairing, caring for personal and other household objects, and assisting others.

Acquisition of necessities (d610-d629)

**d610**

Acquiring a place to live
Buying, renting, furnishing and arranging a house, apartment or other dwelling.

*Inclusions: buying or renting a place to live and furnishing a place to live*

*Exclusions: acquisition of goods and services (d620); caring for household objects (d650)*

**d620**

Acquisition of goods and services
Selecting, procuring and transporting all goods and services required for daily living, such as selecting, procuring, transporting and storing food, drink, clothing, cleaning materials, fuel, household items, utensils, cooking ware, domestic appliance and tools; procuring utilities and other household services.

*Inclusions: shopping and gathering daily necessities*

*Exclusion: acquiring a place to live (d610)*
Acquisition of necessities, other specified and unspecified

**Household tasks (d630-d649)**

**d630** Preparing meals
Planning, organizing, cooking and serving simple and complex meals for oneself and others, such as by making a menu, selecting edible food and drink, getting together ingredients for preparing meals, cooking with heat and preparing cold foods and drinks, and serving the food.

*Inclusions: preparing simple and complex meals*

*Exclusions: eating (d550); drinking (d560); acquisition of goods and services (d620); doing housework (d640); caring for household objects (d650); assisting others (d660)*
**Doing housework**
Managing a household by cleaning the house, washing clothes, using household appliances, storing food and disposing of garbage, such as by sweeping, mopping, washing counters, walls and other surfaces; collecting and disposing of household garbage; tidying rooms, closets and drawers; collecting, washing, drying, folding and ironing clothes; cleaning footwear; using brooms, brushes and vacuum cleaners; using washing machines, driers and irons.

*Inclusions:* washing and drying clothes and garments; cleaning cooking area and utensils; cleaning living area; using household appliances, storing daily necessities and disposing of garbage

*Exclusions:* acquiring a place to live (d610); acquisition of goods and services (d620); preparing meals (d630); caring for household objects (d650); assisting others (d660)

**Household tasks, other specified and unspecified**
Caring for household objects and assisting others (d650-d669)

**d650 Caring for household objects**
Maintaining and repairing household and other personal objects, including house and contents, clothes, vehicles and assistive devices, and caring for plants and animals, such as painting or wallpapering rooms, fixing furniture, repairing plumbing, ensuring the proper working order of vehicles, watering plants, grooming and feeding pets and domestic animals.

Inclusions: making and repairing clothes; maintaining dwelling, furnishings and domestic appliances; maintaining vehicles; maintaining assistive devices; taking care of plants (indoor and outdoor) and animals

Exclusions: acquiring a place to live (d610); acquisition of goods and services (d620); doing housework (d640); caring for others (d660); remunerative employment (d850)

**d660 Assisting others**
Assisting household members and others with their learning, communicating, self-care, movement, within the house or outside; being concerned about the well-being of household members and others.

Inclusions: assisting others with self-care, movement, communication, interpersonal relations, nutrition and health maintenance

Exclusion: remunerative employment (d850)
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Chapter 7

Interpersonal interactions and relationships

This chapter is about carrying out the actions and tasks required for basic and complex interactions with people (strangers, friends, relatives, family members and lovers) in a contextually and socially appropriate manner.

General interpersonal interactions (d710-d729)

Basic interpersonal interactions
Interacting with people in a contextually and socially appropriate manner, such as by showing consideration and esteem when appropriate, or responding to the feelings of others.

Inclusions: showing respect, warmth, appreciation, and tolerance in relationships; responding to criticism and social cues in relationships; and using appropriate physical contact in relationships
Complex interpersonal interactions
Maintaining and managing interactions with other people, in a contextually and socially appropriate manner, such as by regulating emotions and impulses, controlling verbal and physical aggression, acting independently in social interactions, and acting in accordance with social rules and conventions.

Inclusions: forming and terminating relationships; regulating behaviours within interactions; interacting according to social rules; and maintaining social space

General interpersonal interactions, other specified and unspecified

Particular interpersonal relationships
(d730-d779)

Relating with strangers
Engaging in temporary contacts and links with strangers for specific purposes, such as when asking for directions or making a purchase.

Formal relationships
Creating and maintaining specific relationships in formal settings, such as with employers, professionals or service providers.

Inclusions: relating with persons in authority, with subordinates and with equals
Informal social relationships
Entering into relationships with others, such as casual relationships with people living in the same community or residence, or with co-workers, students, playmates or people with similar backgrounds or professions.

Inclusions: informal relationships with friends, neighbours, acquaintances, co-inhabitants and peers

Family relationships
Creating and maintaining kinship relationships, such as with members of the nuclear family, extended family, foster and adopted family and step-relationships, more distant relationships such as second cousins, or legal guardians.

Inclusions: parent-child and child-parent relationships, sibling and extended family relationships

Intimate relationships
Creating and maintaining close or romantic relationships between individuals, such as husband and wife, lovers or sexual partners.

Inclusions: romantic, spousal and sexual relationships

Particular interpersonal relationships, other specified and unspecified

Interpersonal interactions and relationships, other specified

Interpersonal interactions and relationships, unspecified
Chapter 8

Major life areas

This chapter is about carrying out the tasks and actions required to engage in education, work and employment and to conduct economic transactions.

Education (d810-d839)

**d810** Informal education
Learning at home or in some other non-institutional setting, such as learning crafts and other skills from parents or family members, or home schooling.

**d815** Preschool education
Learning at an initial level of organized instruction, designed primarily to introduce a child to the school-type environment and prepare it for compulsory education, such as by acquiring skills in a day-care or similar setting as preparation for advancement to school.

**d820** School education
Gaining admission to school, education, engaging in all school-related responsibilities and privileges, and learning the course material, subjects and other curriculum requirements in a primary or secondary education programme, including attending school regularly, working cooperatively with other students, taking direction from teachers, organizing, studying and completing assigned tasks and projects, and advancing to other stages of education.
Vocational training
Engaging in all activities of a vocational programme and learning the curriculum material in preparation for employment in a trade, job or profession.

Higher education
Engaging in the activities of advanced educational programmes in universities, colleges and professional schools and learning all aspects of the curriculum required for degrees, diplomas, certificates and other accreditations, such as completing a university bachelor’s or master’s course of study, medical school or other professional school.

Education, other specified and unspecified

Work and employment (d840-d859)

Apprenticeship (work preparation)
Engaging in programmes related to preparation for employment, such as performing the tasks required of an apprenticeship, internship, articling and in-service training.

Exclusion: vocational training (d825)
Acquiring, keeping and terminating a job
Seeking, finding and choosing employment, being hired and accepting employment, maintaining and advancing through a job, trade, occupation or profession, and leaving a job in an appropriate manner.

Inclusions: seeking employment; preparing a resume or curriculum vitae; contacting employers and preparing interviews; maintaining a job; monitoring one's own work performance; giving notice; and terminating a job

Remunerative employment
Engaging in all aspects of work, as an occupation, trade, profession or other form of employment, for payment, as an employee, full or part time, or self-employed, such as seeking employment and getting a job, doing the required tasks of the job, attending work on time as required, supervising other workers or being supervised, and performing required tasks alone or in groups.

Inclusions: self-employment, part-time and full-time employment
Non-remunerative employment
Engaging in all aspects of work in which pay is not provided, full-time or part-time, including organized work activities, doing the required tasks of the job, attending work on time as required, supervising other workers or being supervised, and performing required tasks alone or in groups, such as volunteer work, charity work, working for a community or religious group without remuneration, working around the home without remuneration.

Exclusion: Chapter 6 Domestic Life

Work and employment, other specified and unspecified

Economic life (d860-d879)

Basic economic transactions
Engaging in any form of simple economic transaction, such as using money to purchase food or bartering, exchanging goods or services; or saving money.

Complex economic transactions
Engaging in any form of complex economic transaction that involves the exchange of capital or property, and the creation of profit or economic value, such as buying a business, factory, or equipment, maintaining a bank account, or trading in commodities.
Economic self-sufficiency
Having command over economic resources, from private or public sources, in order to ensure economic security for present and future needs.

*Inclusions: personal economic resources and public economic entitlements*

Economic life, other specified and unspecified

Major life areas, other specified

Major life areas, unspecified
Chapter 9

Community, social and civic life

This chapter is about the actions and tasks required to engage in organized social life outside the family, in community, social and civic areas of life.

Community life
Engaging in all aspects of community social life, such as engaging in charitable organizations, service clubs or professional social organizations.

Inclusions: informal and formal associations; ceremonies

Exclusions: non-remunerative employment (d855); recreation and leisure (d920); religion and spirituality (d930); political life and citizenship (d950)
Recreation and leisure
Engaging in any form of play, recreational or leisure activity, such as informal or organized play and sports, programmes of physical fitness, relaxation, amusement or diversion, going to art galleries, museums, cinemas or theatres; engaging in crafts or hobbies, reading for enjoyment, playing musical instruments; sightseeing, tourism and travelling for pleasure.

Inclusions: play, sports, arts and culture, crafts, hobbies and socializing

Exclusions: riding animals for transportation (d480); remunerative and non-remunerative work (d850 and d855); religion and spirituality (d930); political life and citizenship (d950)

Religion and spirituality
Engaging in religious or spiritual activities, organizations and practices for self-fulfilment, finding meaning, religious or spiritual value and establishing connection with a divine power, such as is involved in attending a church, temple, mosque or synagogue, praying or chanting for a religious purpose, and spiritual contemplation.

Inclusions: organized religion and spirituality
**Activities and Participation**

**d940** Human rights

Enjoying all nationally and internationally recognized rights that are accorded to people by virtue of their humanity alone, such as human rights as recognized by the United Nations Universal Declaration of Human Rights (1948) and the United Nations Standard Rules for the Equalization of Opportunities for Persons with Disabilities (1993); the right to self-determination or autonomy; and the right to control over one's destiny.

*Exclusion: political life and citizenship (d950)*

**d950** Political life and citizenship

Engaging in the social, political and governmental life of a citizen, having legal status as a citizen and enjoying the rights, protections, privileges and duties associated with that role, such as the right to vote and run for political office, to form political associations; enjoying the rights and freedoms associated with citizenship (e.g. the rights of freedom of speech, association, religion, protection against unreasonable search and seizure, the right to counsel, to a trial and other legal rights and protection against discrimination); having legal standing as a citizen.

*Exclusion: human rights (d940)*

**d998** Community, social and civic life, other specified

**d999** Community, social and civic life, unspecified
ENVIRONMENTAL FACTORS

Definition: *Environmental factors make up the physical, social and attitudinal environment in which people live and conduct their lives.*

*Coding environmental factors*
Environmental Factors is a component of Part 2 (Contextual factors) of the classification. These factors must be considered for each component of functioning and coded accordingly (see Annex 2).

Environmental factors are to be coded from the perspective of the person whose situation is being described. For example, kerb cuts without textured paving may be coded as a facilitator for a wheelchair user but as a barrier for a blind person.

The first qualifier indicates the extent to which a factor is a facilitator or a barrier. There are several reasons why an environmental factor may be a facilitator or a barrier, and to what extent. For facilitators, the coder should keep in mind issues such as the accessibility of a resource, and whether access is dependable or variable, of good or poor quality, and so on. In the case of barriers, it might be relevant how often a factor hinders the person, whether the hindrance is great or small, or avoidable or not. It should also be kept in mind that an environmental factor can be a barrier either because of its presence (for example, negative attitudes towards people with disabilities) or its absence (for example, the unavailability of a needed service). The effects that environmental factors have on
the lives of people with health conditions are varied and complex, and it is hoped that future research will lead to better understanding of this interaction and, possibly, show the usefulness of a second qualifier for these factors.

In some instances, a diverse collection of environmental factors is summarized with a single term, such as poverty, development, rural or urban setting or social capital. These summary terms are not themselves found in the classification. Rather, the coder should separate the constituent factors and code these. Once again, further research is required to determine whether there are clear and consistent sets of environmental factors that make up each of these summary terms.

**First qualifier**
The following is the negative and positive scale for the extent to which an environmental factor acts as a barrier or a facilitator. A point or separator alone denotes a barrier, and the + sign denotes a facilitator, as indicated below:

|xxx.0| NO barrier | (none, absent, negligible, ... ) | 0-4% |
|xxx.1| MILD barrier | (slight, low, ... ) | 5-24% |
|xxx.2| MODERATE barrier | (medium, fair, ... ) | 25-49% |
|xxx.3| SEVERE barrier | (high, extreme, ... ) | 50-95% |
|xxx.4| COMPLETE barrier | (total, ... ) | 96-100% |

|xxx+0| NO facilitator | (none, absent, negligible, ... ) | 0-4% |
|xxx+1| MILD facilitator | (slight, low, ... ) | 5-24% |
|xxx+2| MODERATE facilitator | (medium, fair, ... ) | 25-49% |
|xxx+3| SUBSTANTIAL facilitator | (high, extreme, ... ) | 50-95% |
|xxx+4| COMPLETE facilitator | (total, ... ) | 96-100% |

|xxx.8| barrier, not specified |
|xxx+8| facilitator, not specified |
|xxx.9| not applicable |
Broad ranges of percentages are provided for those cases in which calibrated assessment instruments or other standards are available to quantify the extent of the barrier or facilitator in the environment. For example, when “no barrier” or a “complete barrier” is coded, this scaling has a margin of error of up to 5%. A “moderate barrier” is defined as up to half of the scale of a total barrier. The percentages are to be calibrated in different domains with reference to population standards as percentiles. For this quantification to be used in a uniform manner, assessment procedures have to be developed through research.

Second qualifier: To be developed.
Chapter 1

Products and technology

This chapter is about the natural or human-made products or systems of products, equipment and technology in an individual's immediate environment that are gathered, created, produced or manufactured. The ISO 9999 classification of technical aids defines these as "any product, instrument, equipment or technical system used by a disabled person, especially produced or generally available, preventing, compensating, monitoring, relieving or neutralizing" disability. It is recognized that any product or technology can be assistive. (See ISO 9999: Technical aids for disabled persons - Classification (second version); ISO/TC 173/SC 2; ISO/DIS 9999 (rev.).) For the purposes of this classification of environmental factors, however, assistive products and technology are defined more narrowly as any product, instrument, equipment or technology adapted or specially designed for improving the functioning of a disabled person.

**e110** Products or substances for personal consumption

Any natural or human-made object or substance gathered, processed or manufactured for ingestion.

_inclusion: food and drugs_
e115 Products and technology for personal use in daily living
Equipment, products and technologies used by people in daily activities, including those adapted or specially designed, located in, on or near the person using them.
Inclusions: general and assistive products and technology for personal use

e120 Products and technology for personal indoor and outdoor mobility and transportation
Equipment, products and technologies used by people in activities of moving inside and outside buildings, including those adapted or specially designed, located in, on or near the person using them.
Inclusions: general and assistive products and technology for personal indoor and outdoor mobility and transportation

e125 Products and technology for communication
Equipment, products and technologies used by people in activities of sending and receiving information, including those adapted or specially designed, located in, on or near the person using them.
Inclusions: general and assistive products and technology for communication
**Products and technology for education**
Equipment, products, processes, methods and technology used for acquisition of knowledge, expertise or skill, including those adapted or specially designed.

*Inclusions: general and assistive products and technology for education*

**Products and technology for employment**
Equipment, products and technology used for employment to facilitate work activities.

*Inclusions: general and assistive products and technology for employment*

**Products and technology for culture, recreation and sport**
Equipment, products and technology used for the conduct and enhancement of cultural, recreational and sporting activities, including those adapted or specially designed.

*Inclusions: general and assistive products and technology for culture, recreation and sport*
**e 145**

**Products and technology for the practice of religion and spirituality**

Products and technology, unique or mass-produced, that are given or take on a symbolic meaning in the context of the practice of religion or spirituality, including those adapted or specially designed.

*Inclusions: general and assistive products and technology for the practice of religion and spirituality*

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**e 150**

**Design, construction and building products and technology of buildings for public use**

Products and technology that constitute an individual's indoor and outdoor human-made environment that is planned, designed and constructed for public use, including those adapted or specially designed.

*Inclusions: design, construction and building products and technology of entrances and exits, facilities and routing*

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**e 155**

**Design, construction and building products and technology of buildings for private use**

Products and technology that constitute an individual's indoor and outdoor human-made environment that is planned, designed and constructed for private use, including those adapted or specially designed.

*Inclusions: design, construction and building products and technology of entrances and exits, facilities and routing*


**Products and technology of land development**
Products and technology of land areas, as they affect an individual's outdoor environment through the implementation of land use policies, design, planning and development of space, including those adapted or specially designed.

*Inclusions: products and technology of land areas that have been organized by the implementation of land use policies, such as rural areas, suburban areas, urban areas, parks, conservation areas and wildlife reserves*

**Assets**
Products or objects of economic exchange such as money, goods, property and other valuables that an individual owns or of which he or she has rights of use.

*Inclusions: tangible and intangible products and goods, financial assets*

**Products and technology, other specified**

**Products and technology, unspecified**
Chapter 2
Natural environment and human-made changes to environment

This chapter is about animate and inanimate elements of the natural or physical environment, and components of that environment that have been modified by people, as well as characteristics of human populations within that environment.

**e210**  
Physical geography  
Features of land forms and bodies of water.

*Inclusions: features of geography included within orography (relief, quality and expanse of land and land forms, including altitude) and hydrography (bodies of water such as lakes, rivers, sea)*

**e215**  
Population  
Groups of people living in a given environment who share the same pattern of environmental adaptation.

*Inclusions: demographic change; population density*

**e220**  
Flora and fauna  
Plants and animals.

*Exclusions: domesticated animals (e350); population (e215)*
Climate
Meteorological features and events, such as the weather.

Inclusions: temperature, humidity, atmospheric pressure, precipitation, wind and seasonal variations

Natural events
Geographic and atmospheric changes that cause disruption in an individual's physical environment, occurring regularly or irregularly, such as earthquakes and severe or violent weather conditions, e.g. tornadoes, hurricanes, typhoons, floods, forest fires and ice-storms.

Human-caused events
Alterations or disturbances in the natural environment, caused by humans, that may result in the disruption of people's day-to-day lives, including events or conditions linked to conflict and wars, such as the displacement of people, destruction of social infrastructure, homes and lands, environmental disasters and land, water or air pollution (e.g. toxic spills).

Light
Electromagnetic radiation by which things are made visible by either sunlight or artificial lighting (e.g. candles, oil or paraffin lamps, fires and electricity), and which may provide useful or distracting information about the world.

Inclusions: light intensity; light quality; colour contrasts
Time-related changes
Natural, regular or predictable temporal change.

Inclusions: day/night and lunar cycles

Sound
A phenomenon that is or may be heard, such as banging, ringing, thumping, singing, whistling, yelling or buzzing, in any volume, timbre or tone, and that may provide useful or distracting information about the world.

Inclusions: sound intensity; sound quality

Vibration
Regular or irregular to and fro motion of an object or an individual caused by a physical disturbance, such as shaking, quivering, quick jerky movements of things, buildings or people caused by small or large equipment, aircraft and explosions.

Exclusion: natural events (e230), such as vibration or shaking of the earth caused by earthquakes

Air quality
Characteristics of the atmosphere (outside buildings) or enclosed areas of air (inside buildings), and which may provide useful or distracting information about the world.

Inclusions: indoor and outdoor air quality

Natural environment and human-made changes to environment, other specified

Natural environment and human-made changes to environment, unspecified
Chapter 3

Support and relationships

This chapter is about people or animals that provide practical physical or emotional support, nurturing, protection, assistance and relationships to other persons, in their home, place of work, school or at play or in other aspects of their daily activities. The chapter does not encompass the attitudes of the person or people that are providing the support. The environmental factor being described is not the person or animal, but the amount of physical and emotional support the person or animal provides.

**e310** Immediate family
Individuals related by birth, marriage or other relationship recognized by the culture as immediate family, such as spouses, partners, parents, siblings, children, foster parents, adoptive parents and grandparents.

*Exclusions: extended family (e315); personal care providers and personal assistants (e340)*

**e315** Extended family
Individuals related through family or marriage or other relationships recognized by the culture as extended family, such as aunts, uncles, nephews and nieces.

*Exclusion: immediate family (e310)*
**Friends**
Individuals who are close and ongoing participants in relationships characterized by trust and mutual support.

**Acquaintances, peers, colleagues, neighbours and community members**
Individuals who are familiar to each other as acquaintances, peers, colleagues, neighbours, and community members, in situations of work, school, recreation, or other aspects of life, and who share demographic features such as age, gender, religious creed or ethnicity or pursue common interests.

*Exclusions: associations and organizational services (e5550)*

**People in positions of authority**
Individuals who have decision-making responsibilities for others and who have socially defined influence or power based on their social, economic, cultural or religious roles in society, such as teachers, employers, supervisors, religious leaders, substitute decision-makers, guardians or trustees.

**People in subordinate positions**
Individuals whose day-to-day life is influenced by people in positions of authority in work, school or other settings, such as students, workers and members of a religious group.

*Exclusion: immediate family (e310)*
**Personal care providers and personal assistants**

Individuals who provide services as required to support individuals in their daily activities and maintenance of performance at work, education or other life situation, provided either through public or private funds, or else on a voluntary basis, such as providers of support for home-making and maintenance, personal assistants, transport assistants, paid help, nannies and others who function as primary caregivers.

*Exclusions: immediate family (e310); extended family (e315); friends (e320); general social support services (e5750); health professionals (e355)*

**Strangers**

Individuals who are unfamiliar and unrelated, or those who have not yet established a relationship or association, including persons unknown to the individual but who are sharing a life situation with them, such as substitute teachers co-workers or care providers.

**Domesticated animals**

Animals that provide physical, emotional, or psychological support, such as pets (dogs, cats, birds, fish, etc.) and animals for personal mobility and transportation.

*Exclusions: animals (e2201); assets (e165)*
Health professionals
All service providers working within the context of the health system, such as doctors, nurses, physiotherapists, occupational therapists, speech therapists, audiologists, orthotist-prosthetists, medical social workers.

Exclusion: other professionals (e360)

Other professionals
All service providers working outside the health system, including social workers, lawyers, teachers, architects, and designers.

Exclusion: health professionals (e355)

Support and relationships, other specified

Support and relationships, unspecified
Chapter 4

Attitudes

This chapter is about the attitudes that are the observable consequences of customs, practices, ideologies, values, norms, factual beliefs and religious beliefs. These attitudes influence individual behaviour and social life at all levels, from interpersonal relationships and community associations to political, economic and legal structures; for example, individual or societal attitudes about a person’s trustworthiness and value as a human being may motivate positive, honorific practices or negative and discriminatory practices (e.g. stigmatizing, stereotyping and marginalizing or neglect of the person). The attitudes classified are those of people external to the person whose situation is being described. They are not those of the person themselves. The individual attitudes are categorized according to the kinds of relationships listed in Environmental Factors Chapter 3. Values and beliefs are not coded separately from attitudes as they are assumed to be the driving forces behind the attitudes.

**e410 Individual attitudes of immediate family members**
General or specific opinions and beliefs of immediate family members about the person or about other matters (e.g. social, political and economic issues), that influence individual behaviour and actions.

**e415 Individual attitudes of extended family members**
General or specific opinions and beliefs of extended family members about the person or about other matters (e.g. social, political and economic issues), that influence individual behaviour and actions.
Individual attitudes of friends
General or specific opinions and beliefs of friends about the person or about other matters (e.g. social, political and economic issues), that influence individual behaviour and actions.

Individual attitudes of acquaintances, peers, colleagues, neighbours and community members
General or specific opinions and beliefs of acquaintances, peers, colleagues, neighbours and community members about the person or about other matters (e.g. social, political and economic issues), that influence individual behaviour and actions.

Individual attitudes of people in positions of authority
General or specific opinions and beliefs of people in positions of authority about the person or about other matters (e.g. social, political and economic issues), that influence individual behaviour and actions.

Individual attitudes of people in subordinate positions
General or specific opinions and beliefs of people in subordinate positions about the person or about other matters (e.g. social, political and economic issues), that influence individual behaviour and actions.
Individual attitudes of personal care providers and personal assistants
General or specific opinions and beliefs of personal care providers and personal assistants about the person or about other matters (e.g. social, political and economic issues), that influence individual behaviour and actions.

Individual attitudes of strangers
General or specific opinions and beliefs of strangers about the person or about other matters (e.g. social, political and economic issues), that influence individual behaviour and actions.

Individual attitudes of health professionals
General or specific opinions and beliefs of health professionals about the person or about other matters (e.g. social, political and economic issues), that influence individual behaviour and actions.

Individual attitudes of other professionals
General or specific opinions and beliefs of health-related and other professionals about the person or about other matters (e.g. social, political and economic issues), that influence individual behaviour and actions.
Societal attitudes
General or specific opinions and beliefs generally held by people of a culture, society, subcultural or other social group about other individuals or about other social, political and economic issues, that influence group or individual behaviour and actions.

Social norms, practices and ideologies
Customs, practices, rules and abstract systems of values and normative beliefs (e.g. ideologies, normative world views and moral philosophies) that arise within social contexts and that affect or create societal and individual practices and behaviours, such as social norms of moral and religious behaviour or etiquette; religious doctrine and resulting norms and practices; norms governing rituals or social gatherings.

Attitudes, other specified

Attitudes, unspecified
Chapter 5

Services, systems and policies

This chapter is about:

1. Services that provide benefits, structured programmes and operations, in various sectors of society, designed to meet the needs of individuals. (Included in services are the people who provide them.) Services may be public, private or voluntary, and may be established at a local, community, regional, state, provincial, national or international level by individuals, associations, organizations, agencies or governments. The goods provided by these services may be general or adapted and specially designed.

2. Systems that are administrative control and organizational mechanisms, and are established by governments at the local, regional, national, and international levels, or by other recognized authorities. These systems are designed to organize, control and monitor services that provide benefits, structured programmes and operations in various sectors of society.

3. Policies constituted by rules, regulations, conventions and standards established by governments at the local, regional, national, and international levels, or by other recognized authorities. Policies govern and regulate the systems that organize, control and monitor services, structured programmes and operations in various sectors of society.

e510  Services, systems and policies for the production of consumer goods

Services, systems and policies that govern and provide for the production of objects and products consumed or used by people.
e515  Architecture and construction services, systems and policies
Services, systems and policies for the design and construction of buildings, public and private.

Exclusion: open space planning services, systems and policies (e520)

e520  Open space planning services, systems and policies
Services, systems and policies for the planning, design, development and maintenance of public lands, (e.g. parks, forests, shorelines, wetlands) and private lands in the rural, suburban and urban context.

Exclusion: architecture and construction services, systems and policies (e515)

e525  Housing services, systems and policies
Services, systems and policies for the provision of shelters, dwellings or lodging for people.

e530  Utilities services, systems and policies
Services, systems and policies for publicly provided utilities, such as water, fuel, electricity, sanitation, public transportation and essential services.

Exclusion: civil protection services, systems and policies (e545)

e535  Communication services, systems and policies
Services, systems and policies for the transmission and exchange of information.
Transportation services, systems and policies
Services, systems and policies for enabling people or goods to move or be moved from one location to another.

Civil protection services, systems and policies
Services, systems and policies aimed at safeguarding people and property.

Exclusion: utilities services, systems and policies (e530)

Legal services, systems and policies
Services, systems and policies concerning the legislation and other law of a country.

Associations and organizational services, systems and policies
Services, systems and policies relating to groups of people who have joined together in the pursuit of common, noncommercial interests, often with an associated membership structure.

Media services, systems and policies
Services, systems and policies for the provision of mass communication through radio, television, newspapers and internet.
**e565 Economic services, systems and policies**
Services, systems and policies related to the overall system of production, distribution, consumption and use of goods and services.

*Exclusion: social security services, systems and policies (e570)*

**e570 Social security services, systems and policies**
Services, systems and policies aimed at providing income support to people who, because of age, poverty, unemployment, health condition or disability, require public assistance that is funded either by general tax revenues or contributory schemes.

*Exclusion: economic services, systems and policies (e565)*

**e575 General social support services, systems and policies**
Services, systems and policies aimed at providing support to those requiring assistance in areas such as shopping, housework, transport, self-care and care of others, in order to function more fully in society.

*Exclusions: social security services, systems and policies (e570); personal care providers and personal assistants (e340); health services, systems and policies (e580)*

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Health services, systems and policies
Services, systems and policies for preventing and treating health problems, providing medical rehabilitation and promoting a healthy lifestyle.

Exclusion: general social support services, systems and policies (e575)

Education and training services, systems and policies
Services, systems and policies for the acquisition, maintenance and improvement of knowledge, expertise and vocational or artistic skills. See UNESCO’s International Standard Classification of Education (ISCED-1997).

Labour and employment services, systems and policies
Services, systems and policies related to finding suitable work for persons who are unemployed or looking for different work, or to support individuals already employed who are seeking promotion.

Exclusion: economic services, systems and policies (e565)

Political services, systems and policies
Services, systems and policies related to voting, elections and governance of countries, regions and communities, as well as international organizations.

Services, systems and policies, other specified

Services, systems and policies, unspecified
Annex 1

Taxonomic and terminological issues

The ICF classification is organized in a hierarchical scheme keeping in mind the following standard taxonomic principles:

- The components of Body Functions and Structures, Activities and Participation, and Environmental Factors are classified independently. Hence, a term included under one component is not repeated under another.

- Within each component, the categories are arranged in a stem–branch–leaf scheme, so that a lower-level category shares the attributes of the higher-level categories of which it is a member.

- Categories are mutually exclusive, i.e. no two categories at the same level share exactly the same attributes. However, this should not be confused with the use of more than one category to classify a particular individual's functioning. Such a practice is allowed, indeed encouraged, where necessary.

1. Terms for categories in ICF

Terms are the designation of defined concepts in linguistic expressions, such as words or phrases. Most of the terms over which confusion arises are used with common-sense meanings in everyday speech and writing. For example, impairment, disability and handicap are often used interchangeably in everyday contexts, although in the 1980 version of ICIDH these terms had stipulated definitions, which gave them a defined
meaning. During the revision process, the term “handicap” was abandoned and “disability” has been used as an umbrella term for all three perspectives - body, individual and societal. Clarity and precision, however, are needed to define the various concepts, so that appropriate terms may be chosen to express each of the underlying concepts unambiguously. This is particularly important because ICF, as a written classification, will be translated into many languages. Beyond a common understanding of the concepts, it is also essential that an agreement be reached on the term that best reflects the content in each language. There may be many alternatives, and decisions should be made based on accuracy, acceptability, and overall usefulness. It is hoped that the usefulness of ICF will go in parallel with its clarity.

With this aim in mind, notes on some of the terms used in ICF follow:

*Well-being* is a general term encompassing the total universe of human life domains, including physical, mental and social aspects, that make up what can be called a “good life”. Health domains are a subset of domains that make up the total universe of human life. This relationship is presented in the following diagram representing well-being:
Fig. 1 The universe of well-being

*Other domains of well-being*
- Education
- Employment
- Environment
- Etc.

*Health domains of well-being*
- Seeing
- Speaking
- Remembering
- Etc.

**Health states and health domains:** A health state is the level of functioning within a given health domain of ICF. Health domains denote areas of life that are interpreted to be within the "health” notion, such as those which, for health systems purposes, can be defined as the primary responsibility of the health system. ICF does not dictate a fixed boundary between health and health-related domains. There may be a grey zone depending on differing conceptualizations of health and health-related elements which can then be mapped onto the ICF domains.

**Health-related states and health-related domains:** A health-related state is the level of functioning within a given health-related domain of ICF. Health-related domains are those areas of functioning that, while they have a strong relationship to a health condition, are not likely to be the primary responsibility of the health system, but rather of other systems contributing to overall well-being. In ICF, only those domains of well-being related to health are covered.

**Health condition** is an umbrella term for disease (acute or chronic), disorder, injury or trauma. A health condition may
also include other circumstances such as pregnancy, ageing, stress, congenital anomaly, or genetic predisposition. Health conditions are coded using ICD-10.

*Functioning* is an umbrella term for body functions, body structures, activities and participation. It denotes the positive aspects of the interaction between an individual (with a health condition) and that individual’s contextual factors (environmental and personal factors).

*Disability* is an umbrella term for impairments, activity limitations and participation restrictions. It denotes the negative aspects of the interaction between an individual (with a health condition) and that individual’s contextual factors (environmental and personal factors).

*Body functions* are the physiological functions of body systems, including psychological functions. “Body” refers to the human organism as a whole, and thus includes the brain. Hence, mental (or psychological) functions are subsumed under body functions. The standard for these functions is considered to be the statistical norm for humans.

*Body structures* are the structural or anatomical parts of the body such as organs, limbs and their components classified according to body systems. The standard for these structures is considered to be the statistical norm for humans.

*Impairment* is a loss or abnormality in body structure or physiological function (including mental functions). Abnormality here is used strictly to refer to a significant variation from established statistical norms (i.e. as a deviation from a population mean within measured standard norms) and should be used only in this sense.

*Activity* is the execution of a task or action by an individual. It represents the individual perspective of functioning.
Activity limitations are difficulties an individual may have in executing activities. An activity limitation may range from a slight to a severe deviation in terms of quality or quantity in executing the activity in a manner or to the extent that is expected of people without the health condition.

Participation is a person's involvement in a life situation. It represents the societal perspective of functioning.

Participation restrictions are problems an individual may experience in involvement in life situations. The presence of a participation restriction is determined by comparing an individual's participation to that which is expected of an individual without disability in that culture or society.

Contextual factors are the factors that together constitute the complete context of an individual's life, and in particular the background against which health states are classified in ICF. There are two components of contextual factors: Environmental Factors and Personal Factors.

Environmental factors constitute a component of ICF, and refer to all aspects of the external or extrinsic world that form the context of an individual's life and, as such, have an impact on that person's functioning. Environmental factors include the physical world and its features, the human-made physical world, other people in different relationships and roles, attitudes and values, social systems and services, and policies, rules and laws.

Personal factors are contextual factors that relate to the individual such as age, gender, social status, life experiences and so on, which are not currently classified in ICF but which users may incorporate in their applications of the classification.

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17 "Activity limitation" replaces the term "disability" used in the 1980 version of ICDH.

18 "Participation restriction" replaces the term "handicap" used in the 1980 version of ICDH.
Facilitators are factors in a person's environment that, through their absence or presence, improve functioning and reduce disability. These include aspects such as a physical environment that is accessible, the availability of relevant assistive technology, and positive attitudes of people towards disability, as well as services, systems and policies that aim to increase the involvement of all people with a health condition in all areas of life. Absence of a factor can also be facilitating, for example the absence of stigma or negative attitudes. Facilitators can prevent an impairment or activity limitation from becoming a participation restriction, since the actual performance of an action is enhanced, despite the person's problem with capacity.

Barriers are factors in a person's environment that, through their absence or presence, limit functioning and create disability. These include aspects such as a physical environment that is inaccessible, lack of relevant assistive technology, and negative attitudes of people towards disability, as well as services, systems and policies that are either nonexistent or that hinder the involvement of all people with a health condition in all areas of life.

Capacity is a construct that indicates, as a qualifier, the highest probable level of functioning that a person may reach in a domain in the Activities and Participation list at a given moment. Capacity is measured in a uniform or standard environment, and thus reflects the environmentally adjusted ability of the individual. The Environmental Factors component can be used to describe the features of this uniform or standard environment.

Performance is a construct that describes, as a qualifier, what individuals do in their current environment, and so brings in the aspect of a person's involvement in life situations. The current environment is also described using the Environmental Factors component.
Fig. 2  Structure of ICF
2. ICF as a classification

In order to understand the overall classification of ICF, it is important to understand its structure. This is reflected in the definitions of the following terms and illustrated in Fig. 2.

*Classification* is the overall structure and universe of ICF. In the hierarchy, this is the top term.

*Parts of the classification* are each of the two main subdivisions of the classification.

- Part 1 covers Functioning and Disability
- Part 2 covers Contextual Factors.

*Components* are each of the two main subdivisions of the parts.

The components of Part 1 are:

- Body Functions and Structures
- Activities and Participation.

The components of Part 2 are:

- Environmental Factors
- Personal Factors (not classified in ICF).

*Constructs* are defined through the use of qualifiers with relevant codes.

There are four constructs for Part 1 and one for Part 2.

For Part 1, the constructs are:

- Change in body function
- Change in body structure
- Capacity
- Performance
For Part 2, the construct is:

- Facilitators or barriers in environmental factors

**Domains** are a practical, meaningful set of related physiological functions, anatomical structures, actions, tasks, or areas of life. Domains make up the different chapters and blocks within each component.

**Categories** are classes and subclasses within a domain of a component, i.e. units of classification.

**Levels** make up the hierarchical order providing indications as to the detail of categories (i.e. granularity of the domains and categories). The first level comprises all the second-level items, and so on.

### 3. Definitions for ICF categories

Definitions are statements that set out the essential attributes (i.e. qualities, properties or relationships) of the concept designated by the category. A definition states what sort of thing or phenomenon the term denotes, and operationally, notes how it differs from other related things or phenomena.

During the construction of the definitions of the ICF categories, the following ideal characteristics of operational definitions, including inclusions and exclusions, were kept in mind:

- Definitions should be meaningful and logically consistent.
- They must uniquely identify the concept intended by the category.
- They must present essential attributes of the concept - both intentional (what the concept signifies intrinsically) and extensional (what objects or phenomena it refers to).
They should be precise, unambiguous, and cover the full meaning of the term.

They should be expressed in operational terms (e.g. in terms of severity, duration, relative importance, and possible associations).

They should avoid circularity, i.e. the term itself, or any synonym for it, should not appear in the definition, nor should it include a term defined elsewhere using the first term in its definition.

Where appropriate, they should refer to possible etiological or interactive factors.

They must fit the attributes of the higher-ranking terms (e.g. a third-level term should include the general characteristics of the second-level category to which it belongs).

They must be consistent with the attributes of the subordinate terms (e.g. the attributes of a second-level term cannot contradict those of third-level terms under it).

They must not be figurative or metaphorical, but operational.

They should make empirical statements that are observable, testable or inferable by indirect means.

They should be expressed in neutral terms as far as possible, without undue negative connotation.

They should be short and avoid technical terms where possible (with the exception of some Body Functions and Structures terms).
They should have inclusions that provide synonyms and examples that take into account cultural variation and differences across the life span.

They should have exclusions to alert users to possible confusion with related terms.

4. Additional note on terminology

Underlying the terminology of any classification is the fundamental distinction between the phenomena being classified and the structure of the classification itself. As a general matter, it is important to distinguish between the world and the terms we use to describe the world. For example, the terms 'dimension' or 'domain' could be precisely defined to refer to the world and 'component' and 'category' defined to refer only to the classification.

At the same time, there is a correspondence (i.e. a matching function) between these terms and it is possible that a wide variety of users may use these terms interchangeably. For more highly specialized requirements, for database construction and research modelling for example, it is essential for users to identify separately, and with a clearly distinct terminology, the elements of the conceptual model and those of the classification structure. Yet, it has been felt that the precision and purity that such an approach provides is not worth the price paid in a level of abstraction that might undermine the usefulness of the ICF, or more importantly to restrict the range of potential users of this classification.
Annex 2

Coding guidelines for ICF

ICF is intended for the coding of different health and health-related states. Users are strongly recommended to read through the introduction to ICF before studying the coding rules and guidelines. Furthermore, it is highly recommended that users obtain training in the use of the classification through WHO and its network of collaborating centres.

The following are features of the classification that have a bearing on its use.

1. Organization and structure

Parts of the Classification
ICF is organized into two parts.

Part 1 is composed of the following components:

- Body Functions and Body Structures
- Activities and Participation.

Part 2 is composed of the following components:

- Environmental Factors
- Personal Factors (currently not classified in the ICF).

\[^{19}\text{The disease itself should not be coded. This can be done using the International Statistical Classification of Diseases and Related Health Problems, Tenth Revision (ICD-10), which is a classification designed to permit the systematic recording, analysis, interpretation and comparison of mortality and morbidity data on diagnoses of diseases and other health problems. Users of ICF are encouraged to use this classification in conjunction with ICD-10 (see page 3 of Introduction regarding overlap between the classifications).}^\]
These components are denoted by prefixes in each code.

- \( b \) for Body Functions and
- \( s \) for Body Structures
- \( d \) for Activities and Participation
- \( e \) for Environmental Factors

The prefix \( d \) denotes the domains within the component of Activities and Participation. At the user’s discretion, the prefix \( d \) can be replaced by \( a \) or \( p \), to denote activities and participation respectively.

The letters \( b, s, d \) and \( e \) are followed by a numeric code that starts with the chapter number (one digit), followed by the second level (two digits), and the third and fourth level\(^{20}\) (one digit each). For example, in the Body Functions classification there are these codes:

- \( b2 \) Sensory functions and pain (first-level item)
- \( b210 \) Seeing functions (second-level item)
- \( b2102 \) Quality of vision (third-level item)
- \( b21022 \) Contrast sensitivity (fourth-level item)

Depending on the user’s needs, any number of applicable codes can be employed at each level. To describe an individual’s situation, more than one code at each level may be applicable. These may be independent or interrelated.

In ICF, a person’s health state may be assigned an array of codes across the domains of the components of the classification. The maximum number of codes available for each application is 34 at the chapter level (8 body functions, 8 body structures, 9 performance and 9 capacity codes), and 362 at the second level.

\(^{20}\) Only the Body Functions and Body Structure classifications contain fourth-level items.
At the third and fourth levels, there are up to 1424 codes available, which together constitute the full version of the classification. In real-life applications of ICF, a set of 3 to 18 codes may be adequate to describe a case with two-level (three-digit) precision. Generally, the more detailed four-level version is intended for specialist services (e.g. rehabilitation outcomes, geriatrics, or mental health), whereas the two-level classification can be used for surveys and health outcome evaluation.

The domains should be coded as applicable to a given moment (i.e. as a snapshot description of an encounter), which is the default position. Use over time, however, is also possible in order to describe a trajectory over time or a process. Users should then identify their coding style and the time-frame that they use.

**Chapters**

Each component of the classification is organized into chapter and domain headings under which are common categories or specific items. For example, in the Body Functions classification, Chapter 1 deals with all mental functions.

**Blocks**

The chapters are often subdivided into “blocks” of categories. For example, in Chapter 3 of the Activities and Participation classification (Communication), there are three blocks: Communicating-Receiving (d310–d329), Communicating-Producing (d330–d349), and Conversation and using communication devices and techniques (d350–d369). Blocks are provided as a convenience to the user and, strictly speaking, are not part of the structure of the classification and normally will not be used for coding purposes.
Categories
Within each chapter there are individual two-, three- or four-level categories, each with a short definition and inclusions and exclusions as appropriate to assist in the selection of the appropriate code.

Definitions
ICF gives operational definitions of the health and health-related categories, as opposed to "vernacular" or layperson's definitions. These definitions describe the essential attributes of each domain (e.g. qualities, properties, and relationships) and contain information as to what is included and excluded in each category. The definitions also contain commonly used anchor points for assessment, for application in surveys and questionnaires, or alternatively, for the results of assessment instruments coded in ICF terms. For example, visual acuity functions are defined in terms of monocular and binocular acuity at near and far distances so that the severity of visual acuity difficulty can be coded as none, mild, moderate, severe or total.

Inclusion terms
Inclusion terms are listed after the definition of many categories. They are provided as a guide to the content of the category, and are not meant to be exhaustive. In the case of second-level items, the inclusions cover all embedded, third-level items.

Exclusion terms
Exclusion terms are provided where, owing to the similarity with another term, application might prove difficult. For example, it might be thought that the category "Toileting" includes the category "Caring for body parts". To distinguish the two, however, "Toileting" is excluded from category d520 "Caring for body parts" and coded to d530.
Other specified

At the end of each embedded set of third- or fourth-level items, and at the end of each chapter, are “other specified” categories (uniquely identified by the final code number 8). These allow for the coding of aspects of functioning that are not included within any of the other specific categories. When “other specified” is employed, the user should specify the new item in an additional list.

Unspecified

The last categories within each embedded set of third- or fourth-level items, and at the end of each chapter, are “unspecified” categories that allow for the coding of functions that fit within the group but for which there is insufficient information to permit the assignment of a more specific category. This code has the same meaning as the second- or third-level term immediately above, without any additional information (for blocks, the “other specified” and “unspecified” categories are joined into a single item, but are always identified by the final code number 9).

Qualifiers

The ICF codes require the use of one or more qualifiers, which denote, for example, the magnitude of the level of health or severity of the problem at issue. Qualifiers are coded as one, two or more numbers after a point. Use of any code should be accompanied by at least one qualifier. Without qualifiers codes have no inherent meaning (by default, WHO interprets incomplete codes as signifying the absence of a problem —xxx.00). The first qualifier for Body Functions and Structures, the performance and capacity qualifiers for Activities and Participation, and the first qualifier for Environmental Factors all describe the extent of problems in the respective component.
All components are quantified using the same generic scale. Having a problem may mean an impairment, limitation, restriction or barrier, depending on the construct. Appropriate qualifying words as shown in brackets below should be chosen according to the relevant classification domain (where xxx stands for the second-level domain number):

xxx.0 NO problem (none, absent, negligible, ...) 0–4 %
xxx.1 MILD problem (slight, low, ...) 5–24 %
xxx.2 MODERATE problem (medium, fair, ...) 25–49 %
xxx.3 SEVERE problem (high, extreme, ...) 50–95 %
xxx.4 COMPLETE problem (total, ...) 96–100 %
xxx.8 not specified
xxx.9 not applicable

Broad ranges of percentages are provided for those cases in which calibrated assessment instruments or other standards are available to quantify the impairment, capacity limitation, performance problem or environmental barrier/facilitator. For example, when “no problem” or “complete problem” is coded, this may have a margin of error of up to 5%. A “moderate problem” is defined as up to half of the scale of total difficulty. The percentages are to be calibrated in different domains with reference to population standards as percentiles. For this quantification to be used in a universal manner, assessment procedures have to be developed through research.

In the case of the Environmental Factors component, this first qualifier can also be used to denote the extent of positive aspects of the environment, or facilitators. To denote facilitators, the same 0–4 scale can be used, but the point is replaced by a plus sign: e.g. e110+2. Environmental factors can be coded either (i) in relation to each component; or (ii) without relation to each component (see section 3 below). The first style is preferable since it identifies the impact and attribution more clearly.
Additional qualifications

For different users, it might be appropriate and helpful to add other kinds of information to the coding of each item. There are a variety of additional qualifiers that could be useful, as mentioned later.

Coding positive aspects

At the user's discretion coding scales can be developed to capture the positive aspects of functioning:

- **Positive**
  - Body Functions
  - Activity
  - Participation

- **Negative**
  - Impairment
  - Activity limitation
  - Participation restriction
2. General coding rules

The following rules are essential for accurate retrieval of information for the various uses of the classification.

Select an array of codes to form an individual’s profile

ICF classifies health and health-related states and therefore requires the assigning of a series of codes that best describe the profile of the person’s functioning. ICF is not an “event classification” like ICD-10 in which a particular health condition is classified with a single code. As the functioning of a person can be affected at the body, individual and societal level, the user should always take into consideration all components of the classification, namely Body Functions and Structures, Activities and Participation, and Environmental Factors. Though it is impractical to expect that all the possible codes will be used for every encounter, depending on the setting of the encounter users will select the most salient codes for their purpose to describe a given health experience.

Code relevant information

Coded information is always in the context of a health condition. Although to use the codes it is not necessary to trace the links between the health condition and the aspects of functioning and disability that are coded, ICF is a health classification and so presumes the presence of a health condition of some kind. Therefore, information about what a person does or does not choose to do is not related to a functioning problem associated with a health condition and should not be coded. For example, if a person decides not to begin new relationships with his or her neighbours for reasons other than health, then it is not appropriate to use category d7200, which includes the actions of forming relationships. Conversely, if the person’s decision is
linked to a health condition (e.g. depression), then the code should be applied. Information that reflects the person’s feeling of involvement or satisfaction with the level of functioning is currently not coded in ICF. Further research may provide additional qualifiers that will allow this information to be coded.

Only those aspects of the person’s functioning relevant to a predefined time-frame should be coded. Functions that relate to an earlier encounter and have no bearing on the current encounter should not be recorded.

*Code explicit information*

When assigning codes, the user should not make an inference about the inter-relationship between an impairment of body functions or structure, activity limitation or participation restriction. For example, if a person has a limitation in functioning in moving around, it is not justifiable to assume that the person has an impairment of movement functions. Similarly, from the fact that a person has a limited capacity to move around it is unwarranted to infer that he or she has a performance problem in moving around. The user must obtain explicit information on Body Functions and Structures and on capacity and performance separately. (In some instances, mental functions for example, an inference from other observations is required since the body function in question is not directly observable.)

*Code specific information*

Health and health-related states should be recorded as specifically as possible, by assigning the most appropriate ICF category. For example, the most specific code for a person with night blindness is b21020 “Light sensitivity”. If, however, for some reason this level of detail cannot be applied, the corresponding “parent” code in the hierarchy can be used.
instead (in this case, b2102 Quality of vision, b210 Seeing functions, or b2 Sensory functions and pain).
To identify the appropriate code easily and quickly, the use of the ICF Browser,\textsuperscript{11} which provides a search engine function with an electronic index of the full version of the classification, is strongly recommended. Alternatively, the alphabetical index can be used.

3. Coding conventions for the Environmental Factors component

For the coding of environmental factors, three coding conventions are open for use:

\textit{Convention 1}

Environmental factors are coded alone, without relating these codes to body functions, body structures or activities and participation.

\begin{tabular}{ll}
Body functions & \\
Body structures & \\
Activities and Participation & \\
Environment & \\
\end{tabular}

\textit{Convention 2}

Environmental factors are coded for every component.

\begin{tabular}{ll}
Body functions & E code \\
Body structures & E code \\
Activities and Participation & E code \\
\end{tabular}

\textsuperscript{11} The ICF Browser in different languages can be downloaded from the ICF website: http://www.who.int/classification/icf
Convention 3
Environmental factors are coded for capacity and performance qualifiers in the Activities and Participation component for every item.

Performance qualifier _________ E code _______
Capacity qualifier _________ E code _______

4. Component-specific coding rules

4.1 Coding body functions

Definitions

Body functions are the physiological functions of body systems (including psychological functions). Impairments are problems in body function or structure as a significant deviation or loss.

Using the qualifier for body functions

Body functions are coded with one qualifier that indicates the extent or magnitude of the impairment. The presence of an impairment can be identified as a loss or lack, reduction, addition or excess, or deviation.

The impairment of a person with hemiparesis can be described with code b7302 Power of muscles of one side of the body:

b7302. _______ Extent of impairment (first qualifier)
Once an impairment is present, it can be scaled in severity using the generic qualifier. For example:

b7302.1  MILD impairment of power of muscles of one side of body  (5–24 %)

b7302.2  MODERATE impairment of power of muscles of one side of body  (25–49 %)

b7302.3  SEVERE impairment of power of muscles of one side of body  (50–95 %)

b7302.4  COMPLETE impairment of power of muscles of one side of body  (96–100 %)

The absence of an impairment (according to a predefined threshold level) is indicated by the value "0" for the generic qualifier. For example:

b7302.0  NO impairment in power of muscles of one side of body

If there is insufficient information to specify the severity of the impairment, the value "8" should be used. For example, if a person’s health record states that the person is suffering from weakness of the right side of the body without giving further details, then the following code can be applied:

b7302.8  Impairment of power of muscles of one side of body, not specified

There may be situations where it is inappropriate to apply a particular code. For example, the code b650 Menstruation functions is not applicable for women before or beyond a certain age (pre-menarche or post-menopause). For these cases, the value "9" is assigned:

b650.9  Menstruation functions, not applicable
Structural correlates of body functions

The classifications of Body Functions and Body Structures are designed to be parallel. When a body function code is used, the user should check whether the corresponding body structure code is applicable. For example, body functions include basic human senses such as b210-b229 Seeing and related functions,” and their structural correlates occur between s210 and s230 as “eye and related structures”.

Interrelationship between impairments

Impairments may result in other impairments; for example, muscle power may impair movement functions, heart functions may relate to respiratory functions, perception may relate to thought functions.

Identifying impairments in body functions

For those impairments that cannot always be observed directly (e.g. mental functions), the user can infer the impairment from observation of behaviour. For example, in a clinical setting memory may be assessed through standardized tests, and although it is not possible to actually “observe” brain function, depending on the results of these tests it may be reasonable to assume that the mental functions of memory are impaired.
4.2 Coding body structures

Definitions

Body structures are anatomical parts of the body such as organs, limbs and their components. Impairments are problems in body function or structure as a significant deviation or loss.

Using qualifiers for coding body structures

Body structures are coded with three qualifiers. The first qualifier describes the extent or magnitude of the impairment, the second qualifier is used to indicate the nature of the change, and the third qualifier denotes the location of the impairment.

![Diagram]

Extent of impairment (first qualifier)
Nature of impairment (second qualifier)
Location of impairment (third qualifier)

s7300. __ __ __

The descriptive schemes used for the three qualifiers are listed in Table 1.
Table 1. Scaling of qualifiers for body structures

<table>
<thead>
<tr>
<th>First qualifier (Extent of impairment)</th>
<th>Second qualifier (Nature of impairment)</th>
<th>Third qualifier (suggested) (Location of impairment)</th>
</tr>
</thead>
<tbody>
<tr>
<td>0  NO impairment</td>
<td>0  no change in structure</td>
<td>0  more than one region</td>
</tr>
<tr>
<td>1  MILD impairment</td>
<td>1  total absence</td>
<td>1  right</td>
</tr>
<tr>
<td>2  MODERATE impairment</td>
<td>2  partial absence</td>
<td>2  left</td>
</tr>
<tr>
<td>3  SEVERE impairment</td>
<td>3  additional part</td>
<td>3  both sides</td>
</tr>
<tr>
<td>4  COMPLETE impairment</td>
<td>4  aberrant dimensions</td>
<td>4  front</td>
</tr>
<tr>
<td>8  not specified</td>
<td>5  discontinuity</td>
<td>5  back</td>
</tr>
<tr>
<td>9  not applicable</td>
<td>6  deviating position</td>
<td>6  proximal</td>
</tr>
<tr>
<td></td>
<td>7  qualitative changes in structure, including accumulation of fluid</td>
<td>7  distal</td>
</tr>
<tr>
<td></td>
<td>8  not specified</td>
<td>8  not specified</td>
</tr>
<tr>
<td></td>
<td>9  not applicable</td>
<td>9  not applicable</td>
</tr>
</tbody>
</table>
4.3 Coding the Activities and Participation component

Definitions

Activity is the execution of a task or action by an individual.

Participation is involvement in a life situation.

Activity limitations are difficulties an individual may have in executing activities.

Participation restrictions are problems an individual may experience in involvement in life situations.

The Activities and Participation classification is a single list of domains.

Using the capacity and performance qualifiers

Activities and Participation is coded with two qualifiers: the performance qualifier, which occupies the first digit position after the point, and the capacity qualifier, which occupies the second digit position after the point. The code that identifies the category from the Activities and Participation list and the two qualifiers form the default information matrix.

```
Performance qualifier (first qualifier)
```

```
Capacity (without assistance)
(second qualifier)
```

```
d4500. __ __
```

Information matrix

(default)
The performance qualifier describes what an individual does in his or her current environment. Because the current environment brings in a societal context, performance as recorded by this qualifier can also be understood as "involvement in a life situation" or "the lived experience" of people in the actual context in which they live. This context includes the environmental factors – i.e. all aspects of the physical, social and attitudinal world. This features of the current environment can be coded using the Environmental Factors classification.

The capacity qualifier describes an individual's ability to execute a task or an action. This construct aims to indicate the highest probable level of functioning that a person may reach in a given domain at a given moment. To assess the full ability of the individual, one would need to have a "standardized" environment to neutralize the varying impact of different environments on the ability of the individual. This standardized environment may be: (a) an actual environment commonly used for capacity assessment in test settings; (b) in cases where this is not possible, an assumed environment which can be thought to have an uniform impact. This environment can be called the "uniform" or "standard" environment. Thus, the capacity construct reflects the environmentally adjusted ability of the individual. This adjustment has to be the same for all persons in all countries to allow international comparisons. To be precise, the features of the uniform or standard environment can be coded using the Environmental Factors component. The gap between capacity and performance reflects the difference between the impacts of the current and uniform environments and thus provides a useful guide as to what can be done to the environment of the individual to improve performance.

Typically, the capacity qualifier without assistance is used in order to describe the individual's true ability which is not enhanced by an assistance device or personal assistance. Since
the performance qualifier addresses the individual's current environment, the presence of assistive devices or personal assistance or barriers can be directly observed. The nature of the facilitator or barrier can be described using the Environmental Factors classification.

**Optional qualifiers**

The third and fourth (optional) qualifiers provide users with the possibility of coding capacity with assistance and performance without assistance.

---

**Diagram:**

- Performance qualifier (first qualifier)
  - Capacity qualifier without assistance (second qualifier)
    - Capacity qualifier with assistance (third qualifier)
      - Performance qualifier without assistance (fourth qualifier)

---

**d4500. ______ ______ ______**

Information Matrix (default)  Optional
Additional qualifiers

The fifth digit position is reserved for qualifiers that may be developed in the future, such as a qualifier for involvement or subjective satisfaction.

Performance qualifier (first qualifier)

Capacity qualifier without assistance (second qualifier)

Capacity qualifier with assistance (third qualifier)

Performance qualifier without assistance (fourth qualifier)

Additional qualifier (fifth qualifier)

d4500. ___ ___ ___ ___

Information Matrix Optional Additional (in development)
(default)

Both capacity and performance qualifiers can further be used both with and without assistive devices or personal assistance, and in accordance with the following scale (where xxx stands for the second-level domain number):

xxx.0 NO difficulty
xxx.1 MILD difficulty
xxx.2 MODERATE difficulty
xxx.3 SEVERE difficulty
xxx.4 COMPLETE difficulty
xxx.8 not specified
xxx.9 not applicable
When to use the performance qualifier and the capacity qualifier

Either qualifier may be used for each of the categories listed. But the information conveyed in each case is different. When both qualifiers are used, the result is an aggregation of two constructs, i.e.:

\[ d4500.2_1 \rightarrow d4500.2_1 \]

If only one qualifier is used, then the unused space should not be filled with .8 or .9, but left blank, since both of these are true assessment values and would imply that the qualifier is being used.

Examples of the application of the two qualifiers

\[ d4500 \hspace{1em} \text{Walking short distances} \]

For the performance qualifier, this domain refers to getting around on foot, in the person’s current environment, such as on different surfaces and conditions, with the use of a cane, walker, or other assistive technology, for distances less than 1 km. For example, the performance of a person who lost his leg in a work-related accident and since then has used a cane but faces moderate difficulties in walking around because the sidewalks in the neighbourhood are very steep and have a very slippery surface can be coded:

\[ d4500.2_1 \hspace{1em} \text{moderate restriction in performance of walking short distances} \]
For the capacity qualifier, this domain refers to the an individual’s ability to walk around without assistance. In order to neutralize the varying impact of different environments, the ability may be assessed in a "standardized" environment. This standardized environment may be: (a) an actual environment commonly used for capacity assessment in test settings; or (b) in cases where this is not possible, an assumed environment which can be thought to have an uniform impact. For example, the true ability of the above-mentioned person to walk without a cane in a standardized environment (such as one with flat and non-slippery surfaces) will be very limited. Therefore the person’s capacity may be coded as follows:

\[ \text{d4500} \_\_ 3 \quad \text{severe capacity limitation in walking short distances} \]

Users who wish to specify the current or standardized environment while using the performance or capacity qualifier should use the Environmental Factors classification (see coding convention 3 for Environmental Factors in section 3 above).

### 4.4 Coding environmental factors

**Definitions**

*Environmental Factors* make up the physical, social and attitudinal environment in which people live and conduct their lives.

**Use of Environmental Factors**

Environmental Factors is a component of Part 2 (Contextual Factors) of the classification. Environmental factors must be considered for each component of functioning and coded according to one of the three conventions described in section 3 above.
Environmental factors are to be coded from the perspective of the person whose situation is being described. For example, kerb cuts without textured paving may be coded as a facilitator for a wheelchair user but as a barrier for a blind person.

The qualifier indicates the extent to which a factor is a facilitator or a barrier. There are several reasons why an environmental factor may be a facilitator or a barrier, and to what extent. For facilitators, the coder should keep in mind issues such as the accessibility of a resource, and whether access is dependable or variable, of good or poor quality and so on. In the case of barriers, it might be relevant how often a factor hinders the person, whether the hindrance is great or small, or avoidable or not. It should also be kept in mind that an environmental factor can be a barrier either because of its presence (for example, negative attitudes towards people with disabilities) or its absence (for example, the unavailability of a needed service). The effects that environmental factors have on the lives of people with health conditions are varied and complex, and it is hoped that future research will lead to a better understanding of this interaction and, possibly, show the usefulness of a second qualifier for these factors.

In some instances, a diverse collection of environmental factors is summarized with a single term, such as poverty, development, rural or urban setting, or social capital. These summary terms are not themselves found in the classification. Rather, the coder should separate the constituent factors and code these. Once again, further research is required to determine whether there are clear and consistent sets of environmental factors that make up each of these summary terms.

*First qualifier*

The following is the negative and positive scale that denotes the extent to which an environmental factor acts as a barrier or a
facilitator. Using a point alone denotes a barrier, whereas using the + sign instead denotes a facilitator, as indicated below:

<table>
<thead>
<tr>
<th>xxx.0</th>
<th>NO barrier</th>
<th>xxx+0</th>
<th>NO facilitator</th>
</tr>
</thead>
<tbody>
<tr>
<td>xxx.1</td>
<td>MILD barrier</td>
<td>xxx+1</td>
<td>MILD facilitator</td>
</tr>
<tr>
<td>xxx.2</td>
<td>MODERATE barrier</td>
<td>xxx+2</td>
<td>MODERATE facilitator</td>
</tr>
<tr>
<td>xxx.3</td>
<td>SEVERE barrier</td>
<td>xxx+3</td>
<td>SUBSTANTIAL facilitator</td>
</tr>
<tr>
<td>xxx.4</td>
<td>COMPLETE barrier</td>
<td>xxx+4</td>
<td>COMPLETE facilitator</td>
</tr>
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<td>xxx.8</td>
<td>barrier, not specified</td>
<td>xxx+8</td>
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</tr>
<tr>
<td>xxx.9</td>
<td>not applicable</td>
<td>xxx.9</td>
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</tr>
</tbody>
</table>
Annex 3

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Over 1800 individuals in 65 WHO member states participated actively in the revision process. A detailed list of the participants can be found in the Annex 10 in the ICF Full Version.

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