

The Measurement of Disability Recommendations for the 2010 Round of Censuses

Washington Group on Disability Statistics (WG)

A new set of questions on disability for use on national Censuses has been developed, tested and adopted by the Washington Group on Disability Statistics (WG). The questions reflect advances in the measurement of disability and use the World Health Organization's International Classification of Functioning, Disability, and Health (ICF) as a conceptual framework.

In 2008 the United Nations Statistical Division (UNSD) presented Principles and Recommendations for Population and Housing Censuses (2nd Revision). Among the recommendations outlined in the document are several that pertain specifically to the measurement of disability. (See: Section VI-8: Disability Characteristics pages 178-183, and Tabulations on Disability Characteristics pages 292-294; available online at: http://unstats.un.org/unsd/demographic/sources/census/docs/P&R_Rev2.pdf). The UNSD Principles and Recommendations also provides suggested tabulations for Population Censuses based on the recommendations for disability measurement. Table shells from the Principles and Recommendations pertaining to reporting disability status by age and sex, educational attainment and employment status are appended to this paper.

Recommended Short Set of Questions on Disability for Censuses:

The WG developed a short set of questions for use in censuses and surveys according to the Fundamental Principles of Official Statistics¹ and which is consistent with the ICF. Cognitive and field testing has shown that the 6 questions produce internationally comparable data.

The questions ask about health-related difficulties in six core functional domains: seeing, hearing, walking, cognition, self care, and communication. The recommended text follows: The next questions ask about difficulties you may have doing certain activities because of a HEALTH PROBLEM.

1. Do you have difficulty seeing, even if wearing glasses?²
2. Do you have difficulty hearing, even if using a hearing aid?²
3. Do you have difficulty walking or climbing steps?
4. Do you have difficulty remembering or concentrating?
5. Do you have difficulty (with self-care such as) washing all over or dressing?
6. Using your usual (customary) language, do you have difficulty communicating, (for example understanding or being understood by others)?

¹ See *Statistical Commission, Report on the Special Session (11-15 April 1994)*, Economic and Social Council, Official Records, 1994, Supplement No.9, Series No. E/CN.3/1994/18, United Nations, New York, 1994, para.59.

² The inclusion of assistive devices was considered for two domains only, seeing and hearing, as limitations in these domains can often be overcome with the use of glasses or hearing aids.

Each question has four response categories: (1) No, no difficulty, (2) Yes, some difficulty, (3) Yes, a lot of difficulty and (4) Cannot do it at all. The severity scale is used in the response categories in order to capture the full spectrum of functioning from mild to severe.

Determination of disability:

The WG has identified the assessment of equalization of opportunity as the purpose for measuring disability that can best be achieved in a Census. Over the course of time, the Census allows for assessment of equalization of opportunity by monitoring and evaluating outcomes of anti-discrimination laws and policies, and service and rehabilitation programmes designed to improve and equalize the participation of persons with disabilities in all aspects of life.

For the purpose of determining disability status using census data, persons with disabilities are defined as those who are at greater risk than the general population of experiencing limitations in performing specific tasks (activities) or restrictions of participation in society. This group would include persons who experience difficulties in one or more of the six core domains, such as walking or hearing, even if the difficulties they experienced were alleviated by the use of assistive devices, living in a supportive environment or having plentiful resources. Some of these individuals may not experience restrictions in participation such as in shopping, doing household chores, working or going to school, because the necessary adaptations have been made at the level of the person (technical aids, assistive devices or personal assistance) or their environment (physical, social or civic accommodations). They would still, however, be considered to be at greater risk than the general population for participation restrictions because of the presence of difficulties in the six core domains and because, in the absence of their accommodations, their levels of participation would be jeopardized.

The six WG questions cover many but not all areas of functioning. Furthermore, the response categories capture a range of severity of the difficulty experienced. Multiple disability scenarios can be described depending on the domain(s) of interest and the choice of severity cut-off. There is more than one way to capture disability through the application of this set of core questions; resulting in not one but several possible population prevalence estimates that will vary in both size and composition.

The WG recommends that the following cutoff be used to define the populations with and without disabilities for the purpose of computing values for the appended tables.

The sub-population *disabled* includes everyone with at least **one** domain that is coded as *a lot of difficulty* or *cannot do it at all*.

A Note on the Use of Census Questions to Screen for Disability:

Countries planning specialized surveys on disability may want to use the census to develop a sampling frame for these surveys and include a screening instrument to identify persons who will subsequently be interviewed. The definitions and the instruments used for the purpose of *screening* are very different from those used to assess *equal opportunities* as was outlined above.

While the six questions developed by the Washington Group for measuring the equalization of opportunities identify the majority of those with disability, they do not identify *all* persons who would fit the conceptual definition. The questions will not, for example, identify all persons with intellectual or psychological functioning difficulties.

The main purpose of a screening instrument, on the other hand, is to be as inclusive as possible in order to identify the largest eligible group of people for further study. This broad approach will allow for the fielding of a follow-up survey that would include questions that would identify false positives. The different aspects of disability could then be studied on the identified population. Given the nature of disability, it has proven very difficult to develop screening questions that are appropriate for the constraints of a Census questionnaire. The limited time allotted to questions on disability usually results in screening questions that fail to identify the complete population of interest.

For these reasons, the recommended short set of questions on disability for censuses as described in this document are not intended as disability screening questions unless it is clearly understood that some persons of interest, such as those with learning or psychological disabilities, will not be appropriately included in the identified population. Work is underway to more clearly describe the population that might not be identified using the short set of questions.

The Washington Group on Disability Statistics:

The Washington Group on Disability Statistics (WG) was organized in 2001 following the United Nations International Seminar on Measurement of Disability to address the need for statistical and methodological initiatives at an international level to facilitate the measurement of disability and the comparison of data on disability cross-nationally. To date, the WG has met ten times, in: Washington DC, USA (2002); Ottawa, Canada (2003); Brussels, Belgium (2004); Bangkok, Thailand (2004); Rio de Janeiro, Brazil (2005); Kampala, Uganda (2006); Dublin, Ireland (2007); Manila, Philippines (2008); Dar es Salaam, Tanzania (2009); and most recently in Luxembourg (2010). All National Statistical Offices are eligible for membership in the WG. Currently, 109 National Statistical Offices are represented, as well as 7 international organizations, 6 organizations that represent persons with disabilities (DPOs), the UNSD, and 3 other UN affiliates. The Secretariat for the WG is located at the National Center for Health Statistics (NCHS), USA. The main objective of the WG is the promotion and coordination of international cooperation in the area of health statistics by focusing on disability measures suitable for censuses and national surveys.

Details of the WG organization, history and accomplishments are available online at: (http://www.cdc.gov/nchs/washington_group.htm). In addition the site provides access to lists of participants, proceedings from the meetings (presentations and papers), reports to the UN Statistical Commission and information on upcoming meetings.

Appendix: Tabulations on disability characteristics

Population with and without disabilities by age and sex

Geographical division, sex and age (in years)	Total	With disabilities	Without disabilities	Not stated
Total country	Population included: total population			
Both sexes	Classifications:			
All ages	(a) Geographical divisions: (i) total country; (ii) each major civil division; (iii) each principal locality.			
Under 1 year	Distinguish between urban and rural for (i), (ii) and (iii)			
1-4	(b) Disability status: total; without disabilities; with disabilities; not stated			
5-9	(c) Age: all ages; under 1 year; 1-4 years; 5-9 years; 10-14 years; 15-19 years; 20-24 years; 25-29 years; 30-34 years; 35-39 years; 40-44 years; 45-49 years; 50-54 years; 55-59 years; 60-64 years; 65-69 years; 70-74 years; 75-79 years; 80-84 years; 90-94 years; 95-99 years; 100 years and over; not stated.			
10-14	(d) Sex: both sexes; male; female			
15-19	Metadata for this tabulation:			
20-24	(a) Source of statistics:			
25-29	<ul style="list-style-type: none"> • Traditional population census • Register-based population census • Registers/Surveys systems • Rolling surveys • Civil registration 			
30-34	(b) De jure or de facto population or a combination with detailed description			
35-39	(c) Definition of urban and rural areas			
40-44	(d) Exact question wording			
45-49	Core topics:			
50-54	<ul style="list-style-type: none"> • Place of usual residence or Place where present at time of census • Sex • Age • Disability status 			
55-59				
60-64				
65-69				
70-74				
75-79				
80-84				
85-89				
90-94				
95-99				
100 years and over				
Not stated				
Male (age groups as above)	Note:			
Female (age groups as above)	There is widespread interest in the prevalence of disability by age and sex in the population. This tabulation provides information for the calculation of prevalence rates distributed by geographical division, urban/rural residence and the living arrangements of persons with disabilities.			

* Estimates of the population with and without disability are a function of the exact methods and question wording used in the data collection. Consult the metadata for information on the methods (include the specific questions) used.

Population 5 years of age and over, by disability status*, educational attainment, age and sex

Geographical division, sex and age (in years)	Educational attainment					
	No schooling	Primary schooling	Secondary education, first cycle	Secondary education second cycle	Post-secondary education	Not classified by level and grade of education
<p>Both sexes</p> <p>Without disabilities All ages 0-4 5-9 ... 95-99 100+ Not stated</p> <p>With disabilities (age groups as above)</p> <p>Disability status not stated (age groups as above)</p> <p>Male (as for "Both sexes")</p> <p>Female (as for "Both sexes")</p>	<p>Population included: all persons at or above the usual age for entrance into school</p> <p>Classifications:</p> <p>(a) Geographical divisions: (i) total country; (ii) each major civil division; (iii) each principal locality. Distinguish between urban and rural for (i), (ii) and (iii)</p> <p>(b) Disability status: without disabilities; with disabilities; disability status not stated</p> <p>(c) Educational attainment: no schooling; primary education: by single grades and grade not stated; secondary education, first cycle: by single grades and grade not stated; secondary education, second cycle: by single grades and grade not stated; post-secondary education: by single grades/ years and grade not stated; not classifiable by level and grade of education; level of education not stated</p> <p>(d) Age: all ages; 5-9 years; 10-14 years; 15-19 years; 20-24 years; 25-29 years; 30-34 years; 35-39 years; 40-44 years; 45-49 years; 50-54 years; 55-59 years; 60-64 years; 65-69 years; 70-74 years; 75-79 years; 80-84 years; 85-89 years; 90-94 years; 95-99 years; and 100 years over; not stated</p> <p>(e) Sex : both sexes; male; female</p> <p>Metadata for this tabulation:</p> <p>(a) Source of statistics:</p> <ul style="list-style-type: none"> • Traditional population census • Register-based population census • Registers/Surveys systems • Rolling surveys • Civil registration <p>(b) De jure or de facto population or a combination with detailed description</p> <p>(c) Definition of urban and rural areas</p> <p>(d) Exact question wording</p> <p>Core topics:</p> <ul style="list-style-type: none"> • Place of usual residence or Place where present at time of census • Sex • Age • Disability status • Educational attainment <p>Note: The tabulation provides data for the comparison of the educational attainment of persons with and without disabilities. The percentage of people with disabilities who have no schooling can be compared with that of persons without disabilities. This gives information on the status of integration of persons with disabilities and on the opportunity that persons with disabilities have to participate in the economic, social and cultural development of the country.</p>					

* Estimates of the population with and without disability are a function of the exact methods and question wording used in the data collection. Consult the metadata for information on the methods (include the specific questions) used.

Population ... * years of age and over, by disability status, current (or usual) activity status, age and sex**

Geographical division, sex and age (in years)	Total...* years of age and over	Current (or usual) activity status							
		Economically active				Not economically active			
		Employed	Unemployed			Home-maker	Student	Income recipient	Other
Total	Worked before		Never worked before						
Both sexes Without disabilities All ages Under 15*** 15-19 ... 95-99 100 and over Not stated With disabilities (age groups as above) Disability status not stated (age groups as above) Male (as for "Both sexes") Female (as for "Both sexes")	<p>Population included: population at or above the minimum age adapted for enumerating the economically active population</p> <p>Classifications:</p> <p>(a) Geographical division: (i) total country; (ii) each major civil division; (iii) each minor civil division; (iv) each principal locality. Distinguish between urban and rural for (i), (ii) and (iii)</p> <p>(b) Disability status: without disabilities; with disabilities; disability status not stated</p> <p>(c) Activity status: economically active: (i) employed; (ii) unemployed (distinguishing persons who ever and never worked before); not economically active: (i) homemaker; (ii) student; (iii) income recipient; (iv) other; not stated</p> <p>(d) Age: all ages, 15 years and over; 15-19 years; 20-24 years; 25-29 years; 30-34 years; 35-39 years; 40-44 years; 45-49 years; 50-54 years; 55-59 years; 60-64 years; 65-69 years; 70-74 years; 75-79 years; 80-84 years; 85-89 years; 90-94 years; 95-99 years; and 100 years over; not stated. (The category "under 15 years" should include all ages between the minimum age-limit adopted by the country for census questions on economic activity and 14 years, if the minimum is under 15 years.)</p> <p>(e) Sex: both sexes; male; female</p> <p>Metadata for this tabulation:</p> <p>(a) Source of statistics:</p> <ul style="list-style-type: none"> • Traditional population census • Register-based population census • Registers/Surveys systems • Rolling surveys • Civil registration <p>(b) De jure or de facto population or a combination with detailed description</p> <p>(c) Definition of urban and rural areas</p> <p>(d) Exact question wording</p> <p>Core topics:</p> <ul style="list-style-type: none"> • Place of usual residence or Place where present at time of census • Sex • Age • Disability status • Activity status <p>Note: Access to paid work is crucial to achieving self-reliance and ensuring the well-being of the adult population, both of persons with disabilities as well as of those without disabilities. Tabulations by economic activity status provide a basic measure of the social and economic integration of the population with disabilities as compared with those without disabilities. Tabulations by urban/rural residence, age and sex are essential to identifying groups of the population that may be most disadvantaged.</p>								

* The minimum age adopted by the country for enumerating the economically active population.

** Estimates of the population with and without disability are a function of the exact methods and question wording used in the data collection. Consult the metadata for information on the methods (include the specific questions) used.

*** The category "Under 15 years" should include all ages between the minimum age limit adopted by the country for census questions on economic activity and 14 years, if the minimum is below 15 years.