
Disability Statistics Abstract

Number 16

Health Conditions and Impairments Causing Disability

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Approximately 38 million Americans with disabilities report a total of 61 million disabling conditions -- any chronic health disorder, injury, or impairment that contributes to a person's being limited in social or other activities. This figure comprises 42 million chronic conditions classified as physical health disorders, 16 million as impairments (such as orthopedic and sensory impairments, paralysis, learning disabilities, and mental retardation), 2 million as mental health disorders, and about 1 million injuries that are not classified as impairments.

This abstract presents data on the prevalence of disabling conditions among the civilian, non-institutionalized population

of the United States. The data are obtained from the National Health Interview Survey (NHIS), a continuing national household survey consisting of 49,401 household interviews with 128,412 people in 1992. In the NHIS, disability is defined as a limitation in social or other activity that is caused by a chronic mental or physical disorder, injury, or impairment.

Impairments are deficits of bodily structure or function, either congenital in origin or acquired from a past or ongoing disorder or injury. Impairments include deficits of senses (vision, hearing, and sensation) or speech, absence of limbs or other anatomy, learning disabilities, deformities, paralysis, and other orthopedic impairments. In the NHIS, impairments are coded according to a classification scheme developed by the National Center for Health Statistics. Health disorders (including diseases) and injuries, however, are coded to the

World Health Organization's International Classification of Diseases, Ninth Revision (ICD-9).

The classification method presents several complications. First, since many impairments are caused by ongoing disorders, both the impairment and the disorder may be coded as disabling conditions. For example, for a person who has had a leg amputated due to a bone cancer still active at the time of the interview, both the impairment (absence of limb) and the disorder (cancer) will be coded separately. A further complication results from a somewhat arbitrary distinction, in certain instances, between disorders and impairments, depending on how the condition is described. If a respondent reports "back

Heart disease and back problems are the two most common causes of disability.

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Published by U.S. Department of Education, National Institute on Disability and Rehabilitation Research (NIDRR).

Number 16, May 1996.

Table 1: Conditions Causing Disability by Broad ICD and Impairment Categories

ICD Chapter		Number (1,000s)	Percent of all Conditions
	ALL CONDITIONS	61,047	100
	DISORDERS AND INJURIES	44,721	73.3
13	Diseases of the musculoskeletal system and connective tissue (710-739)	10,530	17.2
7	Disease of the circulatory system (390-459)	10,170	16.7
8	Disease of the respiratory system (460-519)	4,774	7.8
6	Disease of the nervous system and sense organs (320-389)	4,373	7.2
3	Endocrine, nutritional and metabolic diseases and immunity disorders (240-279)	3,409	5.6
15-16	Certain conditions originating in the perinatal period (760-799) and symptoms, signs, ill-defined conditions (780-779)	2,843	4.7
5	Mental disorders (290-316), excluding mental retardation	2,035	3.3
9	Diseases of the digestive system (520-579)	1,728	2.8
2	Neoplasms (140-239)	1,628	2.7
17	Injury and poisoning (800-999), not involving impairment	1,205	2
10	Diseases of the genitourinary system (580-629)	778	1.3
1	Infectious and parasitic diseases (001-139)	378	0.6
12	Diseases of the skin and subcutaneous tissue (680-709)	362	0.6
14	Congenital anomalies (740-759)	287	0.5
4	Diseases of the blood and blood-forming organs (280-289)	217	0.4
	IMPAIRMENTS	16,326	26.7
	Orthopedic impairments	8,608	14.1
	Learning disability and mental retardation	1,575	2.6
	Visual impairments	1,294	2.1
	Hearing impairments	1,175	1.9
	Paralysis	1,07	1.8
	Deformities	900	1.5
	Absence or loss of limb/other body part	788	1.3
	Speech impairments	545	0.9
	Other and ill-defined impairments	371	0.6

Note: Conditions in ICD Chapter 11, complications of pregnancy, childbirth, and the puerperium (630-676), are not used.

Source: United States National Health Interview Survey, 1992

trouble," it will be coded as an impairment, while an answer of "slipped disc" will be classified as a disorder. Thus, only by combining back-related impairments and disorders can the true number of disabling back problems be estimated.

Finally, injuries are handled

in a special way. When an injury has caused an impairment, only the impairment is coded. Injuries that have not caused impairments are coded to the injuries chapter of the ICD. For example,

Injuries cause 13.4 percent of all disabling conditions.

if a person mentions last year's automobile accident as a cause of activity limitation, without specifying a particular impairment, the person's condition is coded as an injury, not an impairment.

The 37.7 million people with activity limitations report an

average of 1.6 conditions per person, for a total of 61 million limiting conditions (see table 1). Some 73.3 percent of these are classified as disorders and injuries, with the remainder as impairments. Among the disorders and injuries, the most prevalent are musculoskeletal disorders, which represent 17.2 percent of all limiting conditions, followed by circulatory disorders, at 16.7 percent. Respiratory conditions rank third at 7.8 percent, with nervous and sensory disorders at 7.2 percent and endocrine, nutritional, metabolic, and immunity disorders at 5.6 percent of all disabling conditions. These top five categories, each representing a chapter of the ICD, account for three-quarters (74.4 percent) of all diseases and disorders reported as causing limitation in activity, or more than half (54.3 percent) of all activity-limiting conditions.

The 16.3 million impairments reported to cause activity limitation constitute about one-quarter (26.7 percent) of all disabling conditions. More than half of these are orthopedic impairments, representing 14.1 percent of disabling conditions. A distant second is the category of learning disabilities and mental retardation, accounting for 2.6 percent. Visual impairments rank third, at 2.1 percent, followed by hearing impairments, at 1.9 percent, and paralysis, at 1.8 percent of all disabling conditions reported. The re-

Table 2: Most Common Conditions Causing Activity Limitation

Rank		Number (1,000s)	Percent of all Conditions
	ALL CONDITIONS	61,047	100.0
1	Heart disease (390-429)	7,932	13.0
2	Deformities, orthopedic impairments and disorders of the spine or back	7,672	12.6
3	Osteoarthritis and allied disorders (715-716)	5,048	8.3
4	Orthopedic impairment of lower extremity	2,817	4.6
5	Asthma (493)	2,592	4.2
6	Diabetes (250)	2,569	4.2
7	Mental disorders (290-316) excluding learning disability and mental retardation	2,035	3.3
8	Disorders of the eye (360-379)	1,577	2.6
9	Learning disability and mental retardation	1,575	2.6
10	Cancer (140-208)	1,342	2.2
11	Visual impairments	1,294	2.1
12	Orthopedic impairment of shoulder and/or upper extremities	1,196	2.0
13	Other unknown and unspecified causes	1,188	1.9
14	Hearing impairments	1,175	1.9
15	Cerebrovascular disease (430-438)	1,174	1.9

Source: United States National Health Interview Survey, 1992

maining impairments -- 4.3 percent of all conditions causing activity limitation -- include deformities, absence or loss (e.g., of a limb), and speech impairments.

Table 2 lists the most common specific health conditions and impairments that cause activity limitation in the U.S. Heart disease is the most prevalent, at 7.9 million cases -- 13 percent of all conditions mentioned. Back problems (including those classified as impairments or disorders) are a close second at 7.7 million conditions, or 12.6 percent of all disabling conditions. Arthritis (rheumatoid arthritis plus osteoarthritis and allied disorders) ranks third at 5.7 million, followed by

orthopedic impairments of lower extremity (2.8 million), asthma (2.6 million), and diabetes (2.6 million). Mental disorders, which are mainly the mental illnesses (since learning disability and mental retardation are classified separately), rank seventh at 2.0 million conditions, followed by disorders of the eye (1.6 million, not including visual impairments), and then by learning disability and mental retardation (1.6 million). If the latter is combined with mental illnesses, the total for all mental disorders is 3.6 million, placing the category fourth overall.

Cancer ranks in tenth place (1.3 million), followed by visual impairments (1.3 million), and

then orthopedic impairments of shoulder and/or upper extremity (1.2 million). The residual category of unknown and unspecified causes ranks thirteenth (1.2 million) at 1.9 percent of all conditions, followed by hearing impairments (1.2 million), also at 1.9 percent of all conditions. Cerebrovascular disease completes the list at fifteenth with slightly under 1.2 million conditions.

These data also highlight the substantial role that injury plays in causing disability. In addition to the 1.2 million injuries (occurring more than 3 months ago) that limit activity but are not classified as impairments, another 7.2 million impairments

have injury coded as a cause. Thus, injuries make up 13.4 percent of all disabling conditions. However, disorders clearly play the largest role as causes of disability.

Notes

This abstract is based on an analysis contained in: M.P. LaPlante and D. Carlson (1996). Disability in the United States: Prevalence and Causes, 1992. Disability Statistics Report No. 6. Washington, D.C.: National Institute on Disability and Rehabilitation Research.

Usage Note

These data can be used to describe the number of people with limitations in major life activities due to a specific condition or group. For example, the number of people limited in activity by hearing impairments is 1.2 million. However, because a single respondent can report more than one condition as a cause of disability, combining groups of conditions may lead to double counting of persons.

Credits

The Disability Statistics Abstract Series is produced by the Disability Statistics Rehabilitation Research and Training Center, Institute for Health & Aging, School of Nursing, University of California, Box 0646, Laurel Heights, 3333 California St., San Francisco, CA 94143-0646, with funding from NIDRR. Layout by Barbara L. Wenger. Single copies may be requested without charge from the above address.

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