

Disability prevalence and trends

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Disability prevalence and trends

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Abbreviations

AAMR	American Association on Mental Retardation
ABI	Acquired brain injury
ABS	Australian Bureau of Statistics
ADHD	Attention deficit hyperactivity disorder
ADL	Activities of daily living, also Activities of Daily Living (scale)
AIHW	Australian Institute of Health and Welfare
AMD	Age-related maculopathy
ARBI	Alcohol-related brain injury
BDQ	Brief disability questionnaire
CSDA	Commonwealth/State-Territory Disability Agreement
DSM	The Diagnostic and Statistical Manual of Mental Disorders
DSP	Disability Support Pension
IADL	Instrumental Activities of Daily Living (scale)
ICD	International Classification of Diseases and Related Health Problems
ICF	International Classification of Functioning, Disability and Health
ICIDH	International Classification of Impairments, Disabilities and Handicaps
ICO	International Council of Ophthalmologists
IQ	Intellectual quotient (tests)
nes	Not elsewhere specified
nfd	Not further defined
NHPC	National Health Performance Committee
OECD	Organisation for Economic Co-operation and Development
RSE	Relative standard error
SF-12	12-item Short form scale
SMHWB	Survey of Mental Health and Wellbeing
TBI	Traumatic brain injury
WHO	World Health Organization

Glossary

Anxiety disorder	A group of mental disorders marked by excessive feelings of apprehension, worry, nervousness and stress.
Asthma	A chronic, inflammatory disease of the lung's air passages that causes widespread narrowing of the passages, obstruction to airflow, episodes of shortness of breath and chest tightness.
Autism	A pervasive developmental disorder involving disturbances in cognition, interpersonal communication, social interactions and behaviours (in particular obsessional, ritualistic, stereotyped and rigid behaviours).
Attention deficit hyperactivity disorder (ADHD)	A common childhood mental disorder showing markedly low attention and very high levels of activity. It is one of the most common forms of learning problems.
Age-related maculopathy (AMD)	The most common cause of blindness in the elderly, involving changes to the macula, the part of the eye responsible for clear, sharp vision.
Aphasia (speech)	A language disorder that results from damage to one or more of the language areas of the brain, impairing the generation and understanding of language.
Apraxia (of speech)	Apraxia (also referred to as apraxia of speech, verbal apraxia, or dyspraxia) is a speech disorder arising from damage to the relevant area of the brain's cortex involved in skilled movement. It may be developmental, or acquired from stroke, head injury, brain tumours or infections.
Bipolar disorder	A mental disorder where the person may experience depression at one time and mania at another. Formerly known as manic depression.
Cared accommodation	Hospitals, homes for the aged such as nursing homes and aged care hostels, cared components of retirement villages, and other 'homes' such as children's homes.
Cataract	A cloudiness or opacity of the lens of the eye which may cause vision problems. Cataracts are typically associated with ageing but may occur at birth.
Cerebral palsy	A non-progressive movement disorder, resulting from an injury to the immature brain in a foetus or infant.
Conduct disorder	A repetitive and persistent pattern of aggressive or otherwise antisocial behaviour, usually recognised in childhood or adolescence.

Delusion	A fixed, false, irrationally held belief that cannot be altered by rational argument. Often found in serious mental disorders such as schizophrenia. Common delusions in mental illness include beliefs that one is being persecuted or controlled by others, is very powerful or is a victim of a physical disease.
Dementia	A general and worsening loss of brain power such as memory, understanding and reasoning. Main types of dementia include Alzheimer's disease, Pick's disease, Huntington's disease and Parkinson's disease.
Depression	A common mental disorder marked by persistent sadness, loss of interest or pleasure in activities, and by decreased energy. Often involves suicidal thoughts or self-blame. It is differentiated from normal mood changes by the extent of its severity, the symptoms and the duration of the disorder.
Diabetic retinopathy	A complication of diabetes, caused by changes in the blood vessels of the retina and leading to partial or complete blindness.
Dysarthria	A speech disorder due to a weakness or incoordination of the speech muscles (but not to language problems). Dysarthria may be developmental, acquired, or a symptom of conditions such as cerebral palsy and muscular dystrophy.
Epilepsy	A tendency to have recurrent seizures (fits) indicating a disorder that arises in the brain or affects it secondarily, through a wide range of causes.
Glaucoma	An eye condition in which vision is impaired by raised pressure within the eye, resulting in damage to the optic nerve.
Hypertension	Long-term high blood pressure, which may damage the heart, brain or kidneys.
Mania	A mental disorder where the person is overexcited, overactive, and excessively and unrealistically happy and expansive, that is, the opposite of depression.
Ménière's disease	A disorder of the inner ear, involving episodes of vertigo, hearing loss and tinnitus, often with nausea and vomiting.
Migraine	A recurrent throbbing headache that typically affects one side of the head, often accompanied by nausea, vomiting and other symptoms. It is a condition resulting from spasm and subsequent overdilatation of certain arteries in the brain.
Mood disorders	Disorders in which the fundamental disturbance is a change in affect or mood to depression (with or without associated anxiety) or to elation. The mood change is usually accompanied by a change in the overall level of activity. Also known as 'affective disorders'.

Osteoporosis	Reduction in bone tissue caused by the loss of calcium from the bones, making them thinner and weaker, and thus more prone to fractures.
Otitis media	An inflammation of the middle ear usually from infection and resulting in temporary hearing loss, particularly in children.
Otosclerosis	A cause of deafness in adults affecting certain bones in the ear so they cannot conduct sound normally.
Parkinson's disease	A brain disease characterised by hand tremors, rigid limbs, difficulty in starting and stopping movements, and often mental effects.
Personality disorders	Long-term abnormal patterns of behaviour indicating personality problems, usually apparent by adolescence. They are not usually considered to represent major mental disorders but can be very maladaptive, causing problems or suffering for the person or those around them.
Refractive error	Inability of images to focus properly on the retina of the eye due to problems in how the eye bends light rays as they enter it.
Schizophrenia	A severe disorder typically beginning in late adolescence or early adulthood. It is characterised by profound disruptions in thinking, affecting language, perception, mood, behaviour, motivation and sense of self. It often includes psychotic experiences such as hearing voices or delusions.
Stroke	When an artery supplying blood to the brain suddenly becomes blocked or bleeds, often causing paralysis of parts of the body or speech problems.
Tinnitus	A continual noise in the ears or head, such as ringing, buzzing or clicking.

Summary

This report provides Australian prevalence estimates of five main disability groups: intellectual, psychiatric, sensory/speech, acquired brain injury and physical/diverse. The groups are explained and defined in terms of Australian and international definitions of disability, and of available Australian data. The report updates and expands on three previous reports (on intellectual disability, physical disability and acquired brain injury) to provide a complete picture in terms of the five groups.

The report also reviews recent trends (1981 to 1998) in the prevalence of disability and chronic conditions, and analyses changes in population patterns of disability prevalence in Australia.

Definition and classification of disability

The International Classification of Functioning, Disability and Health (ICF) (WHO 2001a) was endorsed by the World Health Assembly in May 2001 for international use to conceptualise and classify disability. In ICF, 'disability' is an umbrella term for any or all of the components: impairment, activity limitation and participation restriction, as influenced by environmental factors. Impairments are 'problems in body function or structure such as significant deviation or loss'. Activity limitations are 'difficulties an individual may have in executing activities'. Participation restrictions are 'problems an individual may experience in involvement in life situations' (WHO 2001a: 7-10). Environmental factors 'make up the physical, social and attitudinal environment in which people live and conduct their lives' (WHO 2001a: 16-17).

All the ICF components are distinct but interrelated. On the one hand, an individual's negative experience relating to any one domain of a component may be considered to constitute disability. On the other hand, the experience of disability is often complex and multidimensional. A person's functioning or disability is considered as a dynamic interaction between the health condition and environmental and personal factors (WHO 2001a: 18-19).

Disability does not include situations that are not health-related, such as participation restrictions due to socioeconomic factors. This therefore distinguishes disability from disadvantage or exclusion unrelated to health.

Disability group

In Australia, disabilities are often classified into disability groups that provide a broad categorisation of disabilities based not only on underlying health conditions and impairments but also on activity limitations and participation restrictions. These groups are generally recognised in the disability field and in legislative and administrative contexts in Australia.

This report draws on the *Australian National Community Services Data Dictionary, version 3*, the frameworks of the ICF and *International Statistical Classification of Diseases and Related*

Health Problems, 10th revision to define and classify disability (Chapter 2). The report uses four approaches to provide estimates that may suit different purposes. Prevalence estimates vary with the scope of information and severity of disabilities under consideration, and the purpose to which the estimates may be put (boxes S1 and S2).

Box S1: Approaches to the prevalence estimates of disability groups in Australia

The four approaches used to obtain the estimates in Table S1 provide a spectrum of estimates that may suit different purposes. For instance, estimates based on only the main disabling condition or all disabling conditions may be useful for epidemiological studies and studies on morbidity and disability. Estimates based on information combining disabling conditions and certain levels/severities of activity limitation or participation restriction may be used as broad summary measures in planning generic services or disability-specific support services for people with a disability.

All the estimates start with the base 'disability' population defined by the Australian Bureau of Statistics 1998 Survey of Disability, Ageing and Carers (Box 2.1). The four approaches differ in terms of their use of the survey information about impairment, main disabling condition, all disabling conditions, activity limitations and participation restrictions, as well as need for assistance with core activities (Box S2; Table 2.2).

The first three approaches range from very broad to quite specific, corresponding to an increasingly restrictive definition of the group according to severity, need for assistance or activity limitation.

The estimates based on all disabling conditions are the most inclusive of the four types of estimation. These estimates include all reported disabling conditions, whether or not these were main disabling conditions. Disability experience of people with multiple disabling conditions may be classified into more than one different disability group. The prevalence estimates of different disability groups are not mutually exclusive; that is, one person may be included in more than one group.

The approach using data on all disabling conditions and activity limitations and participation restrictions relies on multidimensional survey information. The disability groups from the previous approach are now narrowed down by applying a 'filter' – only people who have reported activity limitations or participation restrictions in one or more activities of daily or social life are retained in the group.

The approach using data on all disabling conditions and a severe or profound core activity restriction is similar to the previous approach except that a more exclusive 'filter' is used to select only people who reported a severe or profound restriction.

Estimates based on reported main disabling condition relate to conditions that were identified by the survey respondents as causing the most problems, compared with any other disabling conditions they may also have had. Using this method, the estimates of different disability groups are mutually exclusive and the numbers in each disability group total the number of people with a disability defined by the 1998 disability survey. As people may experience more than one type of impairment or disabling condition, the prevalence of a particular disability group will be underestimated if main disabling conditions only are considered.

Table S1 also provides estimates using data on main disabling conditions plus a severe or profound core activity restriction.

Prevalence estimates of disability groups in Australia

The main data source used for the estimates is the Australian Bureau of Statistics (ABS) 1998 Survey of Disability, Ageing and Carers, key terms of which are set on in Box S2. The main estimates are summarised in Table S1.

Physical/diverse disabilities were the most commonly reported disabilities. Considering all reported disabling conditions, around 3,028,500 (16.2%) of Australians of all ages reported

one or more physical/ diverse disabilities in 1998. Of these, 2,853,400 (15.3% of the total population) also reported one or more activity limitations or participation restrictions and, using the most narrow scope, 975,400 (5.2%) had a severe or profound core activity restriction (Table S1; Chapter 7).

Box S2: ABS 1998 Survey of Disability, Ageing and Carers: activity restrictions and their severity

Specific restrictions are:

- Core activity restrictions
- Schooling or employment restrictions.

Core activities are:

- Self-care – bathing or showering, dressing, eating, using the toilet and managing incontinence
- Mobility – moving around at home and away from home, getting into or out of a bed or chair, and using public transport
- Communication – understanding and being understood by others: strangers, family and friends.

A core activity restriction may be:

- Profound – unable to perform a core activity or always needing assistance
- Severe – sometimes needing assistance to perform a core activity
- Moderate – not needing assistance, but having difficulty performing a core activity
- Mild – having no difficulty performing a core activity but using aids or equipment because of disability.

Source: ABS 1999a.

One or more intellectual disabilities were reported by an estimated 503,000 people, or 2.7% of Australians of all ages, based on consideration of all reported conditions. Of these, 496,500 people (2.7% of the total Australians) also reported one or more activity limitations or participation restrictions, and of them 301,900 (1.6% of the total population) had a severe or profound core activity restriction (Chapter 3).

Again, focusing on estimates based on ‘all disabling conditions’:

- psychiatric disability was reported by 768,900 people (4.1%), of whom 757,100 (4.1%) had activity limitations or participation restrictions, and 398,300 (2.1%) had a severe or profound core activity restriction (Chapter 4)
- sensory/ speech disability was reported by 1,404,600 people (7.5%), of whom 1,286,900 (6.9%) had activity limitations or participation restrictions, and 524,200 (2.8%) had a severe or profound core activity restriction (Chapter 5)
- disabilities associated with an acquired brain injury were reported by 211,100 people (1.1%), of whom 201,600 (1.1%) had activity limitations or participation restrictions, and 113,300 (0.6%) had a severe or profound core activity restriction (Chapter 6).

Table S1: Estimates of main disability groups in Australia, 1998

Disability group	Age under 65		Age 65+		All ages	
	Number ('000)	% of people aged under 65	Number ('000)	% of people aged 65+	Number ('000)	% of total population
All disabling conditions						
Intellectual	376.9	2.3	126.1	5.6	503.0	2.7
Psychiatric	504.1	3.1	264.8	11.7	768.9	4.1
Sensory/speech	685.7	4.2	718.9	31.7	1,404.6	7.5
Acquired brain injury	159.0	1.0	52.0	2.3	211.1	1.1
Physical/diverse	1,903.9	11.6	1,124.6	49.6	3,028.5	16.2
<i>All disabling conditions and activity limitations and participation restrictions</i>						
Intellectual	370.4	2.3	126.1	5.6	496.5	2.7
Psychiatric	493.5	3.0	263.6	11.6	757.1	4.1
Sensory/speech	597.9	3.6	689.0	30.4	1,286.9	6.9
Acquired brain injury	150.8	0.9	50.8	2.2	201.6	1.1
Physical/diverse	1,771.2	10.8	1,082.2	47.7	2,853.4	15.3
<i>All disabling conditions and severe or profound core activity restrictions</i>						
Intellectual	184.8	1.1	117.1	5.2	301.9	1.6
Psychiatric	209.9	1.3	188.4	8.3	398.3	2.1
Sensory/speech	218.7	1.3	305.5	13.5	524.2	2.8
Acquired brain injury	75.2	0.5	38.2	1.7	113.3	0.6
Physical/diverse	517.2	3.2	458.3	20.2	975.4	5.2
Main disabling condition						
Intellectual	209.0	1.3	*3.7	*0.2	212.7	1.1
Psychiatric	197.2	1.2	87.3	3.8	284.5	1.5
Sensory/speech	235.8	1.4	193.8	8.5	429.6	2.3
Acquired brain injury	35.7	0.2	*3.5	*0.2	39.2	0.2
Physical/diverse	1,709.7	10.4	934.4	41.2	2,644.1	14.2
Total with a disability	2,387.4	14.5	1,222.7	53.9	3,610.1	19.3
<i>Main disabling conditions and a severe or profound core activity restriction</i>						
Intellectual	101.3	0.6	**1.6	**0.1	103.0	0.6
Psychiatric	57.9	0.4	73.4	3.2	131.3	0.7
Sensory/speech	38.2	0.2	46.8	2.1	84.9	0.5
Acquired brain injury	10.8	0.1	**2.1	**0.1	12.9	0.1
Physical/diverse	447.9	2.7	356.5	15.7	804.4	4.3
Total with a severe/profound core activity restriction	656.1	4.0	480.4	21.2	1,136.5	6.1

Note: Estimates marked with * have an associated relative standard error (RSE) of between 25% and 50%. Estimates marked with ** have an associated RSE of 50% or more. These estimates should be interpreted accordingly.

Sources: Tables 3.2, 4.4, 5.15, 6.1 and 7.3.

Trends and population patterns of disability prevalence in Australia

Trends in disability prevalence are affected by various factors, including changes in population survey methods, different patterns of change in subgroups of the population and changes in the prevalence of long-term health conditions (Chapter 8).

The age-standardised rates of severe or profound restrictions were relatively stable during the 1980s and early 1990s, remaining at around 4% of the Australian population. However, between 1993 and 1998 the rate increased from 4.3% to 5.5%. This marked increase was largely the result of changes in the 1998 survey methods, which brought more people with a disability into the scope of the survey (Chapter 8).

To understand the difference in trends among various population age groups, the age-specific prevalence rates of severe or profound core activity restrictions for the four ABS disability surveys (1981, 1988, 1993 and 1998) have been compared. These comparisons indicate that the rates for 1998 were higher in most age groups than those for the previous surveys. The increases were particularly marked among children aged 5–14, the older working-age population, and people aged 75 and over.

Exploring the changes in the prevalence and patterns of long-term health conditions can shed light on changes in reported disability prevalence. The overall prevalence of most disabling conditions increased during the period 1981–1998. There were noticeable increases in the reported rates of diseases of the ear, respiratory diseases and musculoskeletal conditions, and marked increases in intellectual and psychiatric conditions over the period 1993–1998.

Analyses of trends in three broad age groups (under 15, 15–64, and 65 and over) indicate that each of these age groups has distinct patterns of prevalence, related factors and features of policy relevance.

Changes in disability prevalence among children aged under 15 years

There has been a substantial increase in the rates of severe or profound core activity restriction among children, in particular boys. Between 1993 and 1998, the rates for males aged 5–14 increased from 2.7% to 4.9%, more than twice the average increase for males aged 15–64 (Chapter 8).

A number of factors may have contributed to this trend. The high rates for children of school age may partly reflect the effect of the educational system on the identification of disability. Some disabling conditions such as intellectual/learning may have a particular impact on school performance. Between 1993 and 1998, the main area of increase in the prevalence of disabling conditions among children of school age was intellectual/learning disabling conditions, in particular attention deficit hyperactivity disorder (ADHD). Both higher levels of diagnosis and heightened awareness among parents, educators and health professionals may have contributed to the increase in reporting of ADHD.

The change of wording in the disability survey screening question from 'slow at learning or understanding' (1993 survey) to 'difficulty learning or understanding' (1998 survey) may have increased reporting of intellectual disability, in particular among males.

Changes in disability prevalence among the population of working-age (15–64)

Among the working-age population, the age-standardised rate of severe or profound restrictions increased from 2.4% in 1993 to 3.3% in 1998, while the rates had been relatively

stable at about 2.2% to 2.4% between 1981 and 1993 (Chapter 8). The increase in 1998 was particularly evident in the older working-age population, especially in the 55–59 age group. Apart from changes in age-specific prevalence rates, population growth also resulted in an increase in the number of people with a disability through changes in population size and age structure. The ‘bulge’ of the baby-boom generation is currently affecting the age profile of the working-age population, as it moves progressively up the age pyramid. This demographic trend is expected to affect future disability prevalence, especially in the 55–64 year age group in the next ten years.

The age-standardised rate of musculoskeletal conditions for people aged 15–64 with a disability increased from 5.5% in 1993 to 7.5% in 1998. An additional screening question in the 1998 survey about chronic pain could have contributed substantially to the increase in the reporting of these conditions.

Changes in disability prevalence among the population aged 65+

The ageing of the population 65 years and over has had a strong impact on the prevalence of severe or profound restriction among this group. Compared with the 1981 disability survey, the three later surveys reported substantially higher rates of disability for the older population. The age-standardised rate of severe or profound restrictions for people aged 65 and over increased markedly between 1993 and 1998, from 17.1% to 19.6%. The estimated number of people with a severe or profound restriction increased considerably among those aged 75 or over (Chapter 8).

It has been suggested that about half of the increase in the rate of severe or profound restriction is due to changes in survey design and the other half is attributable to population ageing and probably an actual increase in the prevalence among the oldest age groups of the population (ABS: Davis et al. 2001; Chapter 8).

Changes in the 1998 survey screening question on learning and understanding things may have increased the number of people reporting conditions associated with dementia. The separate identification of head injury, stroke and other brain damage may have led to increased reporting of these conditions, especially stroke among the older population. Comparative analysis indicated a large increase in the rate of psychiatric disabling conditions between 1993 and 1998, and sharp increases in the rate of circulatory diseases in both the 1993 and 1998 surveys.

Trends in the prevalence of disability and chronic conditions among OECD countries

Recently reported declines in disability prevalence among the older population in some OECD countries have been a subject of vigorous debate due to the high relevance to social and economic policies. However, trends have not been consistently reported across all OECD countries. Declines in disability prevalence have been reported for the United States, Germany, France and Japan. A moderate decline in disability was reported for Sweden. Mixed age patterns of trends in prevalence were reported for Canada. No consistent decline in disability prevalence was reported in the United Kingdom and the Netherlands. In Australia, the latest population survey data indicated no decrease overall and a possible increase in disability prevalence among people aged 75 or older (Chapter 8).

The reported falling disability rates among the older population in some OECD countries have been accompanied by increases in the reported prevalence of chronic diseases or conditions. Increases were also reported in countries where no consistent decline in disability was reported, such as Australia. Thus, the reported decline in disability prevalence rates of the older population in some OECD countries cannot be attributed to a fall in the reported prevalence of chronic diseases. Hence two unsolved questions from these international comparisons are:

- Why has a decline in reported disability prevalence occurred at the same time as an increase in the reported prevalence of chronic diseases in some developed countries?
- Why have different trends (increases and decreases) in disability prevalence been reported among the OECD countries?

The most common explanations for the increase in the reported prevalence of chronic diseases are improvements in medical knowledge and diagnosis of those diseases. Other reasons may include increased propensity to report disease and illness, and a decline in mortality from some major diseases such as heart disease, stroke, vascular disease and cancer.

Little empirical evidence has been presented to explain the reported declines in disability. Some proposed factors that may be associated with this decline are education and socioeconomic status, improvements in medical care, increased use of aids and equipment, health-related behaviour changes, environmental supports, and reduction in disease and risk exposure.

It has been suggested that the increases in chronic conditions are largely limited to conditions that are less severe or less debilitating. Furthermore, advances in medicine and health care services may have contributed to a slowing down in the rate of progression of chronic diseases or to a reduction in serious consequences of those diseases. Therefore, even if the prevalence of chronic diseases increases, the prevalence of functional limitations and need for help with daily activities may not necessarily increase at the same rate.

Nevertheless, the explanations of recent trends in disability are far from adequate. As studies on disability trends among older Americans have indicated, the reported decline has generally occurred in less severe disabilities and there is no consistent evidence suggesting a decline in more severe disabilities (Schoeni et al. 2001).

Variations in survey measures and their effect on international comparison of trends in disability prevalence are important issues in identifying causes affecting the reported disability trends in different countries. A comparison of differences in survey methods and definitions of disability between the United States and Australia indicates that the reported disability prevalence may be affected by whether the presence of any impairments and chronic conditions restricting everyday activities is included as part of the survey definition of disability (Section 8.2). An increase in the reported prevalence of chronic conditions could have more impact on estimates of disability when the surveys include limiting impairments and chronic conditions in the operational definition of disability. This may affect the reported trends in disability prevalence. Focusing on long-term and severe disability may increase the comparability of disability estimates from different countries, including estimates from time-series data.

A comparison of Australian and other estimates of prevalence

Variations in operational definitions, methods and other factors resulted in great differences in the prevalence estimates of different types of disability. Table S2 presents overseas and Australian prevalence estimate ranges as detailed in chapters 3 to 7.

Table S2: Summary of overseas and Australian prevalence estimate ranges for various disability groups

	Prevalence estimate ranges	Data source	Reference
Intellectual disability	0.4%–0.5%	Administrative data from Australian states	Table 3.1
	0.3%–0.4%	Administrative data from overseas	Table 3.1
	0.4%–1.9%	Population survey data (Australian and overseas)	Table 3.1
Psychiatric disability			
Psychiatric disability	3%–8% (adults and children)	Overseas population survey data	Table 4.2
	5%–12% (adults)	Australian population survey data	Table 4.3
Mental disorders	8%–29% (adults)	Overseas population survey data	Table 4.2
	10%–18% (children)	Overseas population survey data	Table 4.2
	10%–26% (adults)	Australian population survey data	Table 4.3
	14%–18% (children)	Australian population survey data	Table 4.3
Sensory/speech disability			
Visual impairment (including blindness)	2%–18%	Self-report (overseas estimates)	Table 5.7
	1%–5%	Optometric examination (overseas estimates)	Table 5.7
	0.7%–1.0%	Self-report (Australian estimates)	Table 5.9
	4%–5%	Optometric examination (Australian estimates)	Table 5.9
Hearing impairment (including deafness)	11%–49%	Self-report (overseas estimates)	Table 5.11
	6%–16%	Audiological examination (overseas estimates)	Table 5.10
	3%–15%	Self-report (Australian estimates)	Table 5.12
	17%–39%	Audiological examination (Australian estimates)	Table 5.12
Speech impairment	1%–38% (children)	Overseas estimates	Table 5.13
	1%–2% (adults)	Self-report (overseas estimates)	Table 5.13
	1%–2% (all ages)	Self-report (Australian estimates)	Table 5.14
Acquired brain injury	91–372 per 100,000 (incidence)	Overseas estimates	Section 6.1
	57–377 per 100,000 (incidence)	Australian estimates	Section 6.1
Physical/diverse disability	10%–16%	ABS 1988, 1993 and 1998 estimates	Table 7.2