

4 Estimates of the prevalence of physical disability in Australia

This chapter discusses the method developed by the AIHW for estimating the prevalence of physical disability using the ABS 1993 Survey of Disability, Ageing and Carers. Estimates of the prevalence of physical disability, at national and state or territory level, are presented.

4.1 The AIHW method of estimating prevalence of physical disability

Our main purpose in estimating prevalence rates for particular disability groups is to provide statistical measures that may be used as broad indicators of need for services – disability support, rehabilitation, prevention and mainstream services. It is desirable that the estimates should also provide information that can be used to facilitate the removal of social and economic barriers that can affect a person’s full participation in community life.

As prevalence estimates will be derived using the ABS 1993 Survey of Disability, Ageing and Carers, the method used to delineate disability groups must be applicable to the survey data. The method must also be in line with the ICIDH conceptual framework and reflect the common understanding of disability groups – both in Australia and in the international literature previously discussed – and the use of disability information, in the field.

As outlined in Section 3.3, the AIHW method for estimating the prevalence of physical disability (the ‘AIHW method’) uses a classification approach – a listing of physical impairments and disabling conditions – to delimit the physical disability group. The ABS survey has extensive information on impairment and disabling condition. Limited information on ‘physical’ activity limitations (i.e. activities clearly associated with physical abilities) obtained through the screening questions will also be used.

In line with a multidimensional approach to disability, only people who report an activity limitation or participation restriction as well as a physical impairment or disabling condition are retained in the physical disability group. In the sense that it incorporates these different aspects of the disability experience, the AIHW method reflects the common understanding of the disability group concept (see discussion in Section 1.6).

The AIHW method uses a list of physical impairments and disabling conditions that is quite broad in scope, in line with a number of internationally significant definitions and classifications (Table 1.2). Sensory impairments have not been included in the physical category, as they are in some classifications (e.g. UN 1988a). However, this is in line with the CSDA ‘target’ impairment groups, in which sensory impairments are identified as a separate group (AIHW 1998). The physical category includes the subcategories circulatory, respiratory, arthritis, other musculoskeletal, neurological, and ‘other physical’. Speech impairments and disabling conditions are included in the sensory disability group (for the full list of codes of physical impairments and disabling conditions see Appendix A; for detailed AIHW classification of other disability groups see AIHW 1997).

The AIHW method and ABS disability survey data

As the 1993 ABS disability survey is to be used as the basis for calculating prevalence estimates it is necessary to discuss some important features of the survey data before we describe the AIHW method in detail.

As outlined in Section 2.2, the survey used a list of 15 screening questions about disabling conditions, impairments, activity limitations and participation restrictions, to identify people with a disability (Box 2.1). One of the screening questions asked people about 'any other condition' resulting in restriction, with a prompt card listing five conditions including arthritis, asthma and heart disease. Particular conditions reported in response to this question were coded using ICD-9 codes and recorded under the data item 'all disabling conditions'.

The screening questions were designed to capture a broad spectrum of people potentially experiencing some level of disability. Thus, the operational definition of disability used in the survey was relatively broad and inclusive. People who responded positively to one or more of the screening questions were then asked further questions about activity limitations, participation restrictions and need for help.

The screening questions provide only limited information about physical impairments and disabling conditions, and omit specific mention of some significant impairments and disabling conditions, such as cardiovascular and respiratory disorders. There are only two items relating to physical impairment – 'lacking full use of arms or fingers' and 'lacking full use of feet or legs' (Table 2.2). Because of the limited information the screening questions provide, the AIHW method also draws on information on disabling conditions from other parts of the survey to delineate the physical disability group.

The screening questions include two items that, arguably, relate to physical activity limitation – 'difficulty gripping or holding small objects' and 'restriction in physical activities or doing physical work'. 'Difficulty gripping or holding small objects' suggests limitation in performing simple activities, likely to be caused by a physical impairment. Information from this screening question is therefore used in the delimitation of the physical disability group. The question about 'restriction in physical activities or doing physical work' is much broader, and is likely to have been designed to 'catch' a broad range of people who might have a disability rather than to identify people with 'physical' disability particularly. Restrictions in physical activity and physical work could be caused by a wide range of physical and non-physical impairments. Therefore, information from this question is used in a more limited way in the delimitation of the physical disability group (see 'step one' in the following section).

Information on activity limitations and participation restrictions from other parts of the survey is also used in the estimation of physical disability prevalence.

In summary, the AIHW method uses the ABS survey broad definition of disability (based on response to screening questions) as a starting point. People with a physical disability are then identified using combined information from the screening questions, reported disabling conditions, and questions about activity limitations, participation restrictions and the need for assistance. The ABS has published estimates of the proportion of people with a disability identified as having a physical impairment, via their response to the screening questions, and the proportion of people with a disability who reported a physical 'main disabling condition' (Table 2.2; ABS 1993b, 1996). However, the ABS has not specifically produced prevalence estimates for different disability groups based on the survey data.

The AIHW method of prevalence estimation in detail

The AIHW method of estimating prevalence consists of two steps. Step one selects people who reported one or more physical impairments, disorders or disabling conditions, either in response to the screening questions or through subsequent questions on disabling conditions. This step defines a fairly broad group of people that is then narrowed down in step two by applying a 'filter' – only people who have reported limitations or restrictions in one or more activities of daily or social life are retained in the group.

Step one: identifies 'physical' impairments, disabling conditions and/or activity limitations

This step uses information about physical impairments, physical disabling conditions and/or 'physical' activity limitations from responses to the screening questions and from responses to survey questions about disabling conditions.

A person is initially included in the physical disability group if:

- a positive response was made by or for them to one or more of the following screening questions: 'incomplete use of arms or fingers', 'incomplete use of feet or legs', 'difficulty gripping or holding things'; and/or
- a positive response was made by or for them to one or more of the 15 screening questions **and** one or more physical impairments or disabling conditions was reported (for detailed codes for physical impairments and disabling conditions see Appendix A); or
- a positive response was made by or for them to one of the following screening questions: 'blackouts, fits, or loss of consciousness', 'disfigurement or deformity', 'restriction in physical activities or doing physical work', **and** the person's disability could not be assigned to any disability group on the basis of answers to other screening questions or reported disabling conditions (for detailed AIHW classification of other disability groups see AIHW 1997).

Step two: focuses on people with some activity limitations

After step one, an activity limitation 'filter' is applied. Only people who have reported any one or more of a list of activity limitations and participation restrictions (via their response to certain survey questions) remain in the physical disability group (for the full list of questions see Appendix B). Step two is used to produce estimates of prevalence that can be related to two or three dimensions of the draft ICIDH-2 framework – impairment, plus activity limitation and/or participation restriction. The same list of activity limitations and participation restrictions will be used consistently in the estimation of other disability groups. Thus step two is a means of standardising the definition of disability across disability groups, so that prevalence estimates are readily comparable.

The prevalence of severe or profound handicap among people who reported one or more physical impairments or disabling conditions is also presented for comparison with estimates previously calculated for intellectual disability (Wen 1997).

Limitations of the 1993 ABS disability survey data

It should be noted, however, that there are some limitations in the disability survey data concerning the questions used as a basis for the activity limitation 'filter'.

The survey questions on limitations and restrictions are not exhaustive. Also, they focus more heavily on activities that have a strong component of physical functioning, rather than activities associated with other types of functioning and ability (e.g. intellectual, psychiatric). This issue may need to be considered when comparing estimates of physical disability with estimates of other disability groups based on the ABS survey data.

People in establishments were asked fewer questions than were people in households. Therefore, it is possible that some people in establishments are excluded by the activity limitation 'filter' because of the less extensive set of questions. Similarly, questions about activity limitations and participation restrictions were not asked in respect of children aged 0–4, so many children who satisfied the criteria of step one may have been excluded by the 'filter' in step two. Only children for whom a positive answer was given to the screening question about 'receiving treatment or medication for a long-term condition or ailment and still restricted' would pass through the activity limitation 'filter', as this question forms part of the 'filter' (Appendix B).

Measures of prevalence

The measures of prevalence used in this chapter include survey estimates of prevalence rate (unstandardised estimates), standardised prevalence ratios (SPR) and standardised prevalence rates. Unstandardised estimates based on main disabling condition, all disabling conditions and the AIHW method (as described above) will all be presented in tables but the discussion will focus on estimates obtained using the AIHW method.

The unstandardised overall prevalence rate is effectively the weighted mean of the rate at each age. The weights used are the numbers of people at each age in the population being studied. If the prevalence rates of two populations with quite different age structures are compared, the weights used will be quite different and this may give misleading results. If a standardised measure is not used, differences in prevalence rate may largely reflect different population age structures.

The SPR is used to compare prevalence rates between populations with different age structures. In the following sections, SPR is used to compare prevalence rates in different States and Territories, and between sub-populations defined by country of birth and Indigenous status.

The SPR, adapted from the standardised mortality ratio (e.g. Pollard 1983), is an indirectly age-standardised measure of relative prevalence. Because there are relatively few people with physical disability in small jurisdictions and in some population groups, and even fewer in each five-year age group within those sub-populations, calculation of reliable age-specific prevalence rates is not usually possible. Hence, a direct age-standardised measure that applies the age-specific prevalence rates of the study populations to a standard population is not appropriate.

The SPR overcomes this problem to some extent. It can be used as a single index of overall prevalence that permits meaningful comparison between relatively small population groups, adjusting for the different age structures of the subgroups being considered. Nevertheless, caution should be exercised in interpreting estimates containing high relative standard errors.

The SPR was calculated separately for males and females though some estimates are presented in terms of persons. In general terms, $SPR = O/E$, where O is the observed number of cases in a study population group (in this case, a population subgroup), and E is the expected number of cases, obtained by applying the age-specific prevalence rates in the

standard population (in this case the total Australian population) to the actual age structure of the study population group*. A ratio of 1 indicates no difference between the population subgroup and the total Australian population. A ratio of less than 1 indicates a lower level of prevalence, and a ratio of more than one indicates a higher level of prevalence than the total Australian population.

The SPR can be used to calculate indirectly standardised prevalence rates, by multiplying the SPR for the study population by the prevalence rate of the standard population. In this report, indirectly standardised rates are calculated by multiplying the SPR for a particular sub-population by the national prevalence rate.

For the comparison of prevalence rates between different population groups 95% confidence intervals were calculated. If the confidence intervals of two rates overlapped, the rates were deemed not to be significantly different from each other.

It is worth noting that SPR is used only for comparison of relative prevalence of different populations. The ratio and the indirectly age-adjusted rate do not reflect the actual prevalence within a given population. Unstandardised survey estimates should be used for estimating need or demand for disability services.

4.2 Estimates at national level

Main disabling condition

Tables 4.1 and 4.2 present estimates based on reported physical ‘main disabling condition’. Main disabling condition is the condition identified by the survey respondent with multiple conditions as the one causing the most problems. Where only one condition is reported, this is coded as the main disabling condition (ABS 1993b). The estimates include people who answered positively to any one or more of the screening questions and had a physical main disabling condition. (For the full list of codes for physical impairments/ disabling conditions see Appendix A.)

In 1993, there were 1,726,200 people, 9.8% of the Australian population, with a disability who reported a physical main disabling condition. Of these, 423,100 people, or 2.6% of the total Australian population aged 5 years and over, also had a severe or profound handicap, meaning that they always or sometimes needed personal assistance or supervision with activities of daily living (self-care, mobility or verbal communication). Arthritis was the most commonly reported physical main disabling condition, followed by other musculoskeletal disorders (Tables 4.1 and 4.2).

For people aged under 65 years, there were 1,045,600 people with a disability, or 6.7% of Australians in that age group, reporting a physical main disabling condition. Of these, 210,300 people, or 6.7% of Australians aged 5 to 64 years, had a severe or profound handicap (Tables 4.1 and 4.2).

* The SPR was calculated as follows:

$$SPR = \frac{\sum D_{ai}}{\sum (R_{si} \times P_{ai})}$$

- Where D_{ai} = the number of disabilities in age group i for the study population
 R_{si} = the age-specific prevalence rate in age group i for the appropriate total Australian population
 P_{ai} = the study population in age group i .

Table 4.1: People with a disability: physical 'main disabling condition' by disability status, by sex and age, Australia 1993 ('000)^(a)

	Circulatory	Respiratory	Arthritis	Other musculo-skeletal	Neuro-logical	Other physical	Total physical
Main disabling condition plus severe or profound handicap							
Males							
5-64 ^(b)	8.4	11.4	17.2	30.2	10.7	20.9	98.9
65+	15.4	8.5	14.5	*7.7	*5.1	14.4	65.7
<i>Total</i>	23.9	20.0	31.7	37.9	15.7	35.4	164.5
Females							
5-64 ^(b)	*6.5	15.3	29.1	26.1	13.6	20.7	111.4
65+	26.6	12.3	57.3	19.6	12.5	19.0	147.2
<i>Total</i>	33.1	27.7	86.4	45.7	26.0	39.7	258.6
Persons							
5-64 ^(b)	14.9	26.8	46.3	56.4	24.2	41.7	210.3
65+	42.0	20.8	71.8	27.3	17.5	33.4	212.9
Total	56.9	47.6	118.1	83.6	41.8	75.1	423.1
Main disabling condition							
Males							
0-64	69.9	106.5	102.1	155.0	41.4	70.0	544.9
65+	80.7	41.8	89.8	35.3	*8.0	33.4	288.9
<i>Total</i>	150.6	148.3	191.9	190.3	49.3	103.4	833.8
Females							
0-64	42.0	111.7	126.0	126.3	43.8	50.9	500.7
65+	84.0	30.4	186.4	42.4	17.9	30.6	391.7
<i>Total</i>	126.1	142.1	312.4	168.7	61.7	81.5	892.4
Persons							
0-64	112.0	218.2	228.1	281.3	85.1	120.9	1,045.6
65+	164.7	72.2	276.2	77.6	25.9	64.0	680.6
Total	276.7	290.4	504.3	359.0	111.0	184.9	1,726.2

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

(b) Severity of handicap was not determined for children aged 0-4 years with a disability.

Source: AIHW analysis of ABS 1993 Survey of Disability, Ageing and Carers data.

Table 4.2: People with a disability: physical 'main disabling condition' by disability status, by sex and age, as a percentage of the Australian population of that sex and age, Australia 1993^(a)

	Circulatory	Respiratory	Arthritis	Other musculo-skeletal	Neuro-logical	Other physical	Total physical
Main disabling condition plus severe or profound handicap							
Males							
5-64 ^(b)	0.1	0.2	0.2	0.4	0.1	0.3	1.4
65+	1.7	1.0	1.6	*0.9	*0.6	1.6	7.4
<i>Total</i>	<i>0.3</i>	<i>0.2</i>	<i>0.4</i>	<i>0.5</i>	<i>0.2</i>	<i>0.4</i>	<i>2.0</i>
Females							
5-64 ^(b)	*0.1	0.2	0.4	0.4	0.2	0.3	1.6
65+	2.3	1.1	4.9	1.7	1.1	1.6	12.6
<i>Total</i>	<i>0.4</i>	<i>0.3</i>	<i>1.1</i>	<i>0.6</i>	<i>0.3</i>	<i>0.5</i>	<i>3.1</i>
Persons							
5-64 ^(b)	0.1	0.2	0.3	0.4	0.2	0.3	1.5
65+	2.1	1.0	3.5	1.3	0.9	1.6	10.4
Total	0.3	0.3	0.7	0.5	0.3	0.5	2.6
Main disabling condition							
Males							
0-64	0.9	1.3	1.3	2.0	0.5	0.9	6.9
65+	9.1	4.7	10.2	4.0	*0.9	3.8	32.7
<i>Total</i>	<i>1.7</i>	<i>1.7</i>	<i>2.2</i>	<i>2.2</i>	<i>0.6</i>	<i>1.2</i>	<i>9.5</i>
Females							
0-64	0.5	1.5	1.6	1.6	0.6	0.7	6.5
65+	7.2	2.6	16.0	3.6	1.5	2.6	33.7
<i>Total</i>	<i>1.4</i>	<i>1.6</i>	<i>3.5</i>	<i>1.9</i>	<i>0.7</i>	<i>0.9</i>	<i>10.1</i>
Persons							
0-64	0.7	1.4	1.5	1.8	0.5	0.8	6.7
65+	8.0	3.5	13.5	3.8	1.3	3.1	33.3
Total	1.6	1.6	2.9	2.0	0.6	1.0	9.8

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

(b) Severity of handicap was not determined for children aged 0-4 years with a disability.

Source: AIHW analysis of ABS 1993 Survey of Disability, Ageing and Carers data.

All disabling conditions

The prevalence of a particular disability group will be underestimated if only main disabling conditions are considered. The 1993 disability survey shows that 61.4% of people with a disability reported more than one disabling condition, and about 30% reported conditions related to two or more disability groups, such as intellectual, psychological, physical and sensory (ABS 1996:28, Table 20).

A comparison of the prevalence of various conditions reported by people in the 1993 survey showed that prevalence estimates based on all reported conditions were substantially higher than estimates based on main disabling conditions only (AIHW 1995). Therefore, estimates of the prevalence of physical disability presented in the remainder of this chapter have been derived on the basis of all disabling conditions, or using the AIHW method described in Section 4.1 (except in Section 4.3, where estimates based on main disabling condition are presented for different jurisdictions).

Tables 4.3 and 4.4 show estimates of prevalence based on all reported disabling conditions. The estimates include people who answered positively to any of the selected 'physical' screening questions, and/or reported a physical disabling condition, whether or not this was their main disabling condition. As people could report more than one physical disabling condition, a person can be counted in more than one of the categories of physical disabling conditions. Therefore, the sum of the six categories may be greater than the total number. (In Tables 4.1 and 4.2 the total number of people reporting a physical main disabling condition is the sum of the six categories, since each person can have only one main disabling condition).

About 2,350,300 people, or 13.3% of Australians, reported one or more physical impairments or disabling conditions in 1993. Of these, about 620,400 people, or 3.8% of Australians, also had a severe or profound handicap (Figure 4.1, Tables 4.3 and 4.4). The figure of 3.8% (620,400 people) is comparable with the AIHW estimate of intellectual disability prevalence – 178,000 or 1.0% of the Australian population – which included only those people with a severe or profound handicap (Wen 1997).

Using the AIHW method (i.e., selecting people who reported one or more physical impairments or disabling conditions and one or more activity limitations), the prevalence of physical disability in 1993 was 11.9%, or 2,099,600 people. Arthritis was the most frequently reported condition (5.1% of the total population) (Figure 4.1, Tables 4.3 and 4.4). The prevalence of physical disability for Australians aged under 65 years was 7.6%, or 1,190,000 people.

Table 4.3: People with a disability: physical 'all disabling conditions' by disability status, by sex and age, Australia 1993 ('000)^(a)

	Circulatory	Respiratory	Arthritis	Other musculo-skeletal	Neuro-logical	Other physical	Total physical
All disabling conditions plus severe or profound handicap							
Males							
5–64 ^(b)	25.9	33.6	37.0	42.5	24.9	79.9	140.9
65+	49.7	18.8	42.9	17.5	10.4	65.8	103.7
<i>Total</i>	75.6	52.4	79.9	60.0	35.3	145.7	244.6
Females							
5–64 ^(b)	27.8	37.8	54.9	38.4	32.2	84.6	153.3
65+	122.3	31.7	125.0	45.2	23.2	156.8	222.5
<i>Total</i>	150.0	69.5	179.9	83.6	55.3	241.3	375.9
Persons							
5–64 ^(b)	53.7	71.5	91.8	80.8	57.1	164.5	294.2
65+	172.0	50.4	167.9	62.7	33.6	222.6	326.2
Total	225.6	121.9	259.8	143.6	90.7	387.1	620.4
AIHW method (all disabling conditions plus activity limitation)							
Males							
0–64	149.7	156.2	182.5	176.8	61.2	232.1	625.1
65+	209.5	71.6	172.7	67.5	19.0	158.9	384.9
<i>Total</i>	359.2	227.8	355.2	244.3	80.2	391.1	1,010.0
Females							
0–64	111.9	164.2	209.9	143.2	62.4	205.7	564.9
65+	294.4	72.8	326.7	87.3	35.3	267.4	524.7
<i>Total</i>	406.3	237.0	536.6	230.6	97.7	473.0	1,089.5
Persons							
0–64	261.6	320.4	392.4	320.0	123.6	437.8	1,190.0
65+	504.0	144.4	499.4	154.8	54.3	426.3	909.6
Total	765.6	464.8	891.8	474.8	177.9	864.1	2,099.6
All disabling conditions							
Males							
0–64	168.1	183.3	203.7	196.9	73.3	258.7	726.0
65+	221.5	75.8	191.6	70.8	19.7	170.4	417.9
<i>Total</i>	389.6	259.1	395.3	267.6	92.9	429.1	1,143.9
Females							
0–64	125.1	189.5	231.4	159.5	76.8	222.6	649.5
65+	312.0	75.4	347.5	89.3	35.4	273.7	556.9
<i>Total</i>	437.1	264.9	578.9	248.8	112.2	496.3	1,206.4
Persons							
0–64	293.2	372.8	435.2	356.4	150.1	481.3	1,375.5
65+	533.5	151.2	539.1	160.1	55.1	444.1	974.8
Total	826.7	524.1	974.2	516.5	205.2	925.4	2,350.3

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

(b) Severity of handicap was not determined for children aged 0–4 years with a disability.

Source: AIHW analysis of ABS 1993 Survey of Disability, Ageing and Carers data.

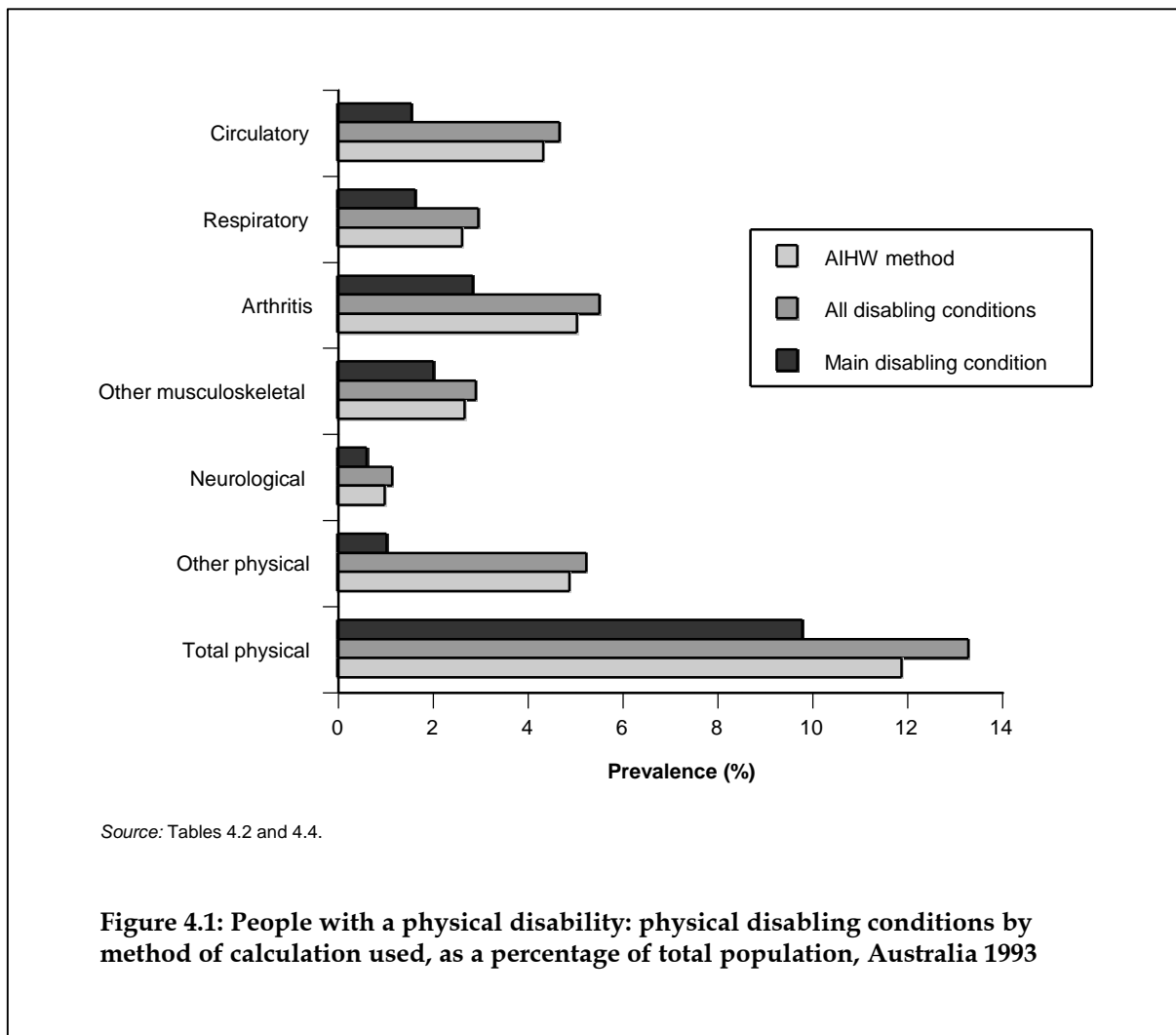
Table 4.4: People with a disability: physical 'all disabling conditions' by disability status, by sex and age, as a percentage of the Australian population of that sex and age, Australia 1993^(a)

	Circulatory	Respiratory	Arthritis	Other musculo-skeletal	Neuro-logical	Other physical	Total physical
All disabling conditions plus severe or profound handicap							
Males							
5-64 ^(b)	0.4	0.5	0.5	0.6	0.3	1.1	1.9
65+	5.6	2.1	4.9	2.0	1.2	7.5	11.7
<i>Total</i>	<i>0.9</i>	<i>0.6</i>	<i>1.0</i>	<i>0.7</i>	<i>0.4</i>	<i>1.8</i>	<i>3.0</i>
Females							
5-64 ^(b)	0.4	0.5	0.8	0.5	0.5	1.2	2.2
65+	10.5	2.7	10.7	3.9	2.0	13.5	19.1
<i>Total</i>	<i>1.8</i>	<i>0.8</i>	<i>2.2</i>	<i>1.0</i>	<i>0.7</i>	<i>2.9</i>	<i>4.6</i>
Persons							
5-64 ^(b)	0.4	0.5	0.6	0.6	0.4	1.2	2.1
65+	8.4	2.5	8.2	3.1	1.6	10.9	15.9
Total	1.4	0.7	1.6	0.9	0.6	2.4	3.8
AIHW method (all disabling conditions plus activity limitation)							
Males							
0-64	1.9	2.0	2.3	2.2	0.8	2.9	7.9
65+	23.7	8.1	19.6	7.6	2.2	18.0	43.6
<i>Total</i>	<i>4.1</i>	<i>2.6</i>	<i>4.0</i>	<i>2.8</i>	<i>0.9</i>	<i>4.5</i>	<i>11.5</i>
Females							
0-64	1.5	2.1	2.7	1.9	0.8	2.7	7.4
65+	25.3	6.3	28.1	7.5	3.0	23.0	45.1
<i>Total</i>	<i>4.6</i>	<i>2.7</i>	<i>6.1</i>	<i>2.6</i>	<i>1.1</i>	<i>5.3</i>	<i>12.3</i>
Persons							
0-64	1.7	2.1	2.5	2.1	0.8	2.8	7.6
65+	24.6	7.1	24.4	7.6	2.7	20.8	44.4
Total	4.3	2.6	5.1	2.7	1.0	4.9	11.9
All disabling conditions							
Males							
0-64	2.1	2.3	2.6	2.5	0.9	3.3	9.2
65+	25.1	8.6	21.7	8.0	2.2	19.3	47.3
<i>Total</i>	<i>4.4</i>	<i>3.0</i>	<i>4.5</i>	<i>3.0</i>	<i>1.1</i>	<i>4.9</i>	<i>13.0</i>
Females							
0-64	1.6	2.5	3.0	2.1	1.0	2.9	8.5
65+	26.8	6.5	29.9	7.7	3.0	23.5	47.8
<i>Total</i>	<i>4.9</i>	<i>3.0</i>	<i>6.5</i>	<i>2.8</i>	<i>1.3</i>	<i>5.6</i>	<i>13.6</i>
Persons							
0-64	1.9	2.4	2.8	2.3	1.0	3.1	8.8
65+	26.1	7.4	26.3	7.8	2.7	21.7	47.6
Total	4.7	3.0	5.5	2.9	1.2	5.3	13.3

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

(b) Severity of handicap was not determined for children aged 0-4 years with a disability.

Source: AIHW analysis of ABS 1993 Survey of Disability, Ageing and Carers data.



Country of birth

Country of birth was grouped into three categories: Australia, other English-speaking countries, and non-English-speaking countries. Other English-speaking countries were the United Kingdom, Ireland, Canada, the United States of America, South Africa and New Zealand, according to the ABS standard classification of countries for social statistics (ABS 1990). About 39,000 people in the general population and 4,300 people with physical disability for whom birthplace was not recorded were excluded from the comparative analysis.

For all people with a physical disability, defined using the AIHW method, the distribution was 74.6% (1,563,400 people) born in Australia, 11.0% (230,800 people) in other English-speaking countries and 14.4% (301,000 people) in non-English-speaking countries (Table 4.5).

Comparing the distribution of physical disability with the distribution of the general population, the proportion of people with a physical disability born in Australia was lower than the expected 77.8%. The proportions of people born in other English-speaking countries and non-English-speaking countries were higher than their representation in the general population (9.0% and 13.2%, respectively). The proportions were calculated using data in Table A4.1 (Appendix C).

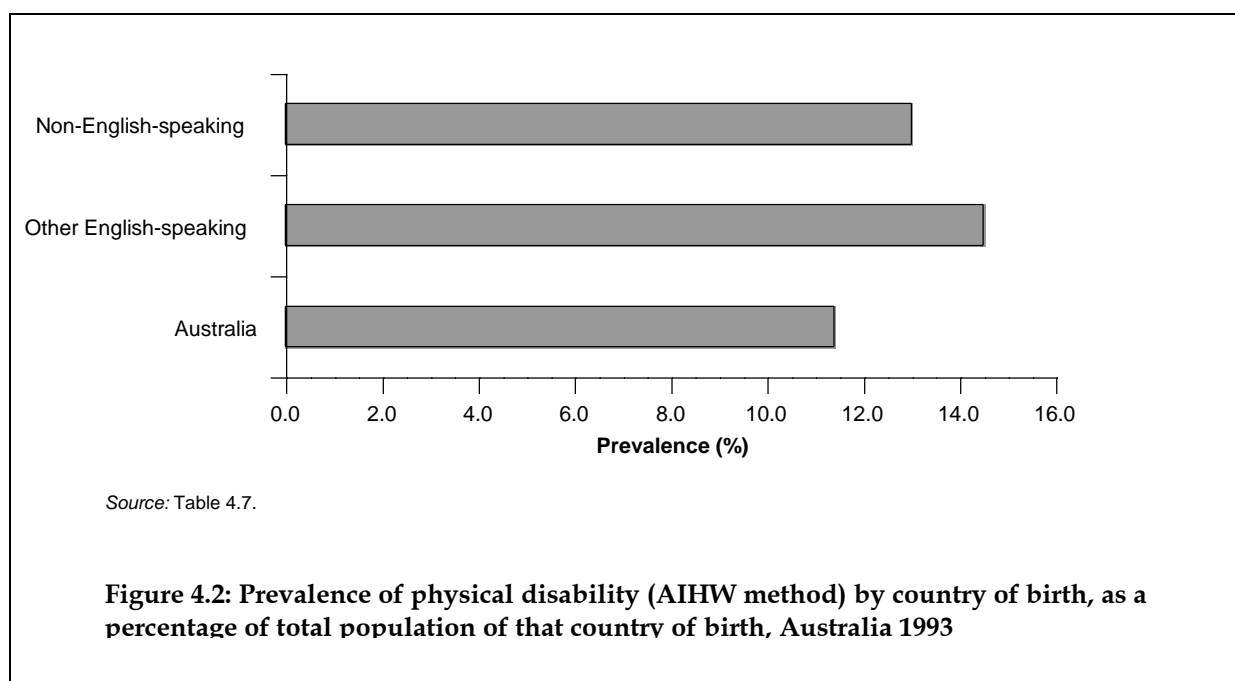
Table 4.5: People with a disability: physical disability calculated using AIHW method, by sex and country of birth, Australia 1993 ('000)^(a)

	Circulatory	Respiratory	Arthritis	Other musculo-skeletal	Neuro-logical	Other physical	Total physical
Males							
Australia	253.7	180.1	258.8	173.2	61.7	280.3	744.6
Other English-speaking	43.1	25.7	40.8	24.6	*7.0	45.7	110.5
Non-English-speaking	61.9	21.7	55.2	46.4	11.3	64.3	153.7
Females							
Australia	304.3	190.2	406.9	166.4	77.9	347.8	818.8
Other English-speaking	48.1	25.3	58.1	23.9	9.1	57.0	120.4
Non-English-speaking	52.5	21.3	70.1	40.1	10.2	66.2	147.3
Persons							
Australia	558.0	370.4	665.7	339.5	139.6	628.1	1,563.4
Other English-speaking	91.2	51.0	98.9	48.4	16.1	102.7	230.8
Non-English-speaking	114.4	43.0	125.2	86.5	21.5	130.5	301.0

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

Source: AIHW analysis of ABS 1993 Survey of Disability, Ageing and Carers data.

Unstandardised estimates using the AIHW method show that the overall prevalence rate for people born in Australia (11.4%) was lower than for people born overseas. The prevalence rates for people born in other English-speaking countries was 14.5%, and for people born in non-English-speaking countries was 13.0% (Figure 4.2, Table 4.6).



Prevalence rates were lowest for people born in Australia in the sub-categories of circulatory and other physical conditions. People from non-English-speaking countries had the lowest rates of respiratory conditions. The three populations had similar rates of neurological conditions (Table 4.6).

Table 4.6: People with a disability: physical disability calculated using AIHW method, by sex and country of birth, as a percentage of the Australian population of that sex and country of birth, Australia 1993^(a)

	Circulatory	Respiratory	Arthritis	Other musculo-skeletal	Neuro-logical	Other physical	Total physical
Males							
Australia	3.7	2.7	3.8	2.6	0.9	4.1	11.0
Other English-speaking	5.4	3.2	5.1	3.1	*0.9	5.7	13.8
Non-English-speaking	5.3	1.8	4.7	3.9	1.0	5.5	13.0
Females							
Australia	4.4	2.8	5.9	2.4	1.1	5.0	11.9
Other English-speaking	6.1	3.2	7.4	3.0	1.2	7.2	15.3
Non-English-speaking	4.6	1.9	6.1	3.5	0.9	5.8	12.9
Persons							
Australia	4.1	2.7	4.9	2.5	1.0	4.6	11.4
Other English-speaking	5.7	3.2	6.2	3.0	1.0	6.5	14.5
Non-English-speaking	4.9	1.9	5.4	3.7	0.9	5.6	13.0

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

Source: AIHW analysis of ABS 1993 Survey of Disability, Ageing and Carers data.

However, standardised prevalence ratios allow a comparison of prevalence rates between the three population groups that takes into account their different age structures.

In contrast to the unstandardised estimates, the SPR shows that people born in Australia were more likely to report physical disability than those born overseas. The ratio for the Australia-born population was 1.04, higher than for people born overseas. The ratios for people born in non-English-speaking countries and people born in other English-speaking countries was 0.90 and 0.92, respectively (Figure 4.3, Table 4.7).

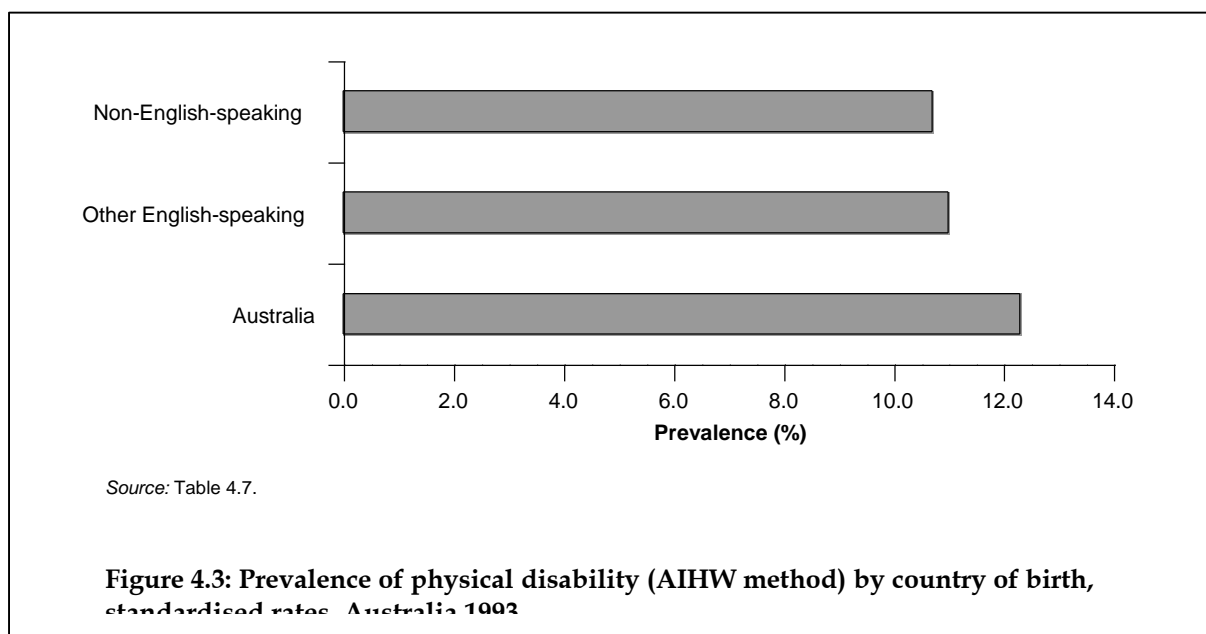


Table 4.7: People with a disability: physical disability calculated using AIHW method, by age and country of birth, standardised prevalence ratio and standardised prevalence rate, Australia 1993^{(a)(b)}

	Circulatory	Respiratory	Arthritis	Other musculo-skeletal	Neuro-logical	Other physical	Total physical
Standardised prevalence ratio							
Under 65 years							
Australia	1.05	1.11	1.06	0.98	1.07	1.03	1.05
Other English-speaking	0.89	0.85	0.98	0.87	*0.77	1.01	0.91
Non-English-speaking	0.90	0.51	0.78	1.14	0.82	0.89	0.87
All ages							
Australia	1.03	1.06	1.06	1.02	1.07	1.01	1.04
Other English-speaking	0.93	1.09	0.88	0.83	0.81	0.97	0.92
Non-English-speaking	0.93	0.65	0.85	1.05	0.79	0.95	0.90
Standardised prevalence rate^(c)							
Aged under 65 years							
Australia	1.8	2.3	2.7	2.0	0.9	2.9	8.0
Other English-speaking	1.5	1.7	2.5	1.8	*0.6	2.8	6.9
Non-English-speaking	1.5	†1.1	2.0	2.3	0.6	2.5	†6.6
<i>Total Australians</i>	<i>1.7</i>	<i>2.1</i>	<i>2.5</i>	<i>2.1</i>	<i>0.8</i>	<i>2.8</i>	<i>7.6</i>
All ages							
Australia	4.5	2.8	5.3	2.7	1.1	5.0	12.3
Other English-speaking	4.0	2.9	4.5	2.2	0.8	4.8	11.0
Non-English-speaking	4.0	†1.7	†4.3	2.8	0.8	4.7	†10.7
<i>Total Australians</i>	<i>4.3</i>	<i>2.6</i>	<i>5.1</i>	<i>2.7</i>	<i>1.0</i>	<i>4.9</i>	<i>11.9</i>

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

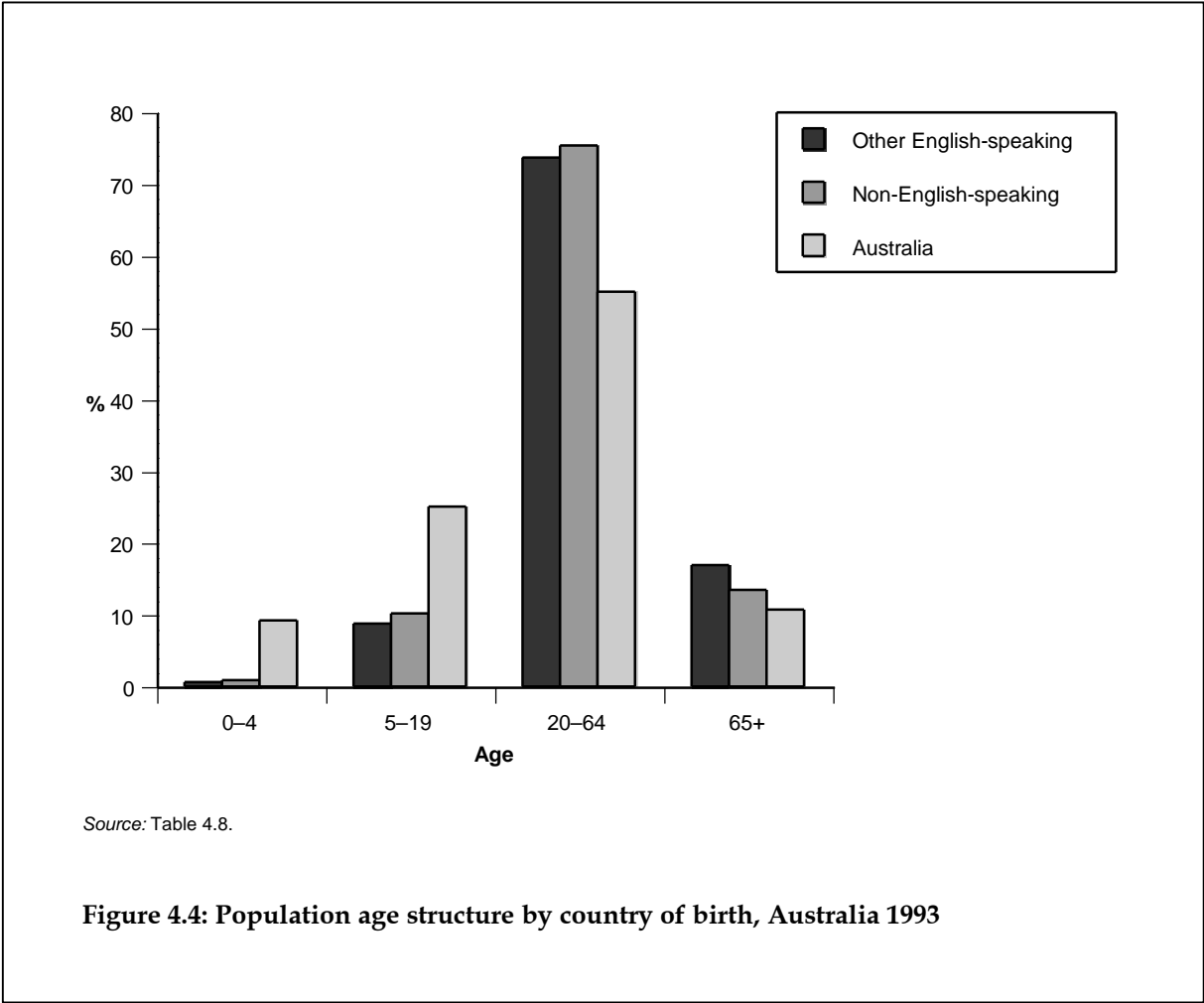
(b) Estimates marked with † indicate that the rates are significantly different from the rates for all Australians.

(c) Standardised prevalence rate was calculated by multiplying the SPR for a particular sub-population group by the national prevalence rate.

Source: AIHW analysis of ABS 1993 Survey of Disability, Ageing and Carers data.

The contrast between the unstandardised estimates and the SPR can be mainly attributed to marked differences in age structure between the three population groups. Overseas-born populations are more concentrated in the later age groups, in which rates of physical disability are higher. Therefore, unstandardised estimates suggest that overall prevalence rates are higher than for the Australian-born population, when age-specific rates are in fact lower.

People aged 65 and over made up much higher proportions of the population for people born in other English-speaking countries (16.9%) and non-English-speaking countries (13.5%) than for people born in Australia (10.7%). The most striking contrasts were in the 20-64 age group. In the two overseas-born populations, the proportion of people in this age group was about 75%, as compared with 55% in the Australia-born population (Figure 4.4, Table 4.8).



Differences in standardised prevalence rates may be partly explained by the routine health screening of applicants for immigration to Australia, which may result in lower prevalence of disability among the overseas-born population (Black et al. 1998; Madden et al. 1996). As screening is likely to pick up some impairments and conditions more easily than others, this might also explain the variation in prevalence rates within individual sub-categories of physical disability. In addition, different cultural groups may have different attitudes towards and perceptions of disability, which could influence levels of reporting.

Table 4.8: Population age structure: country of birth, by sex and age, Australia 1993^(a)

Age	Country of birth				Total Australians
	Not known	Australia	Other English-speaking	Non-English-speaking	
Male					
0–4	0.0	9.5	0.6	1.2	7.5
5–19	84.2	26.0	8.2	10.8	22.5
20–64	3.5	55.7	74.8	74.9	59.9
65+	12.4	8.8	16.4	13.1	10.1
<i>Total</i>	<i>100.0</i>	<i>100.0</i>	<i>100.0</i>	<i>100.0</i>	<i>100.0</i>
Female					
0–4	0.0	8.9	0.7	0.7	7.1
5–19	82.9	24.2	9.4	9.5	21.1
20–64	0.6	54.3	72.6	75.8	58.6
65+	16.5	12.5	17.4	14.0	13.2
<i>Total</i>	<i>100.0</i>	<i>100.0</i>	<i>100.0</i>	<i>100.0</i>	<i>100.0</i>
Persons					
0–4	0.0	9.2	0.6	0.9	7.3
5–19	83.4	25.1	8.8	10.2	21.8
20–64	1.7	55.0	73.7	75.4	59.3
65+	14.9	10.7	16.9	13.5	11.6
Total	100.0	100.0	100.0	100.0	100.0

(a) See Table A4.1 (Appendix C) for population numbers.

Source: AIHW analysis of ABS 1993 Survey of Disability, Ageing and Carers data.

Indigenous origin

This section explores the feasibility of estimating the prevalence of physical disability in the Indigenous population, and comparing prevalence rates between the Indigenous and non-Indigenous populations.

The 1993 ABS disability survey collected information about Indigenous status. However, for about 199,300 people, Indigenous status was not stated or not known. Those people have been excluded from the comparative analysis. There were 250,800 Indigenous people identified in the survey (Table A4.2).

Gething (1995) discussed cultural differences in the understanding of the concept of disability. These differences contribute to the difficulty of collecting meaningful data on levels of disability in the Indigenous population in some regions of Australia. It is also difficult to derive reliable disability statistics for Indigenous people from the survey data because of large sampling errors associated with small estimates.

Unstandardised survey estimates indicate that the overall prevalence of physical disability is much lower in the Indigenous population than the non-Indigenous population. The prevalence rate of 11.4% for non-Indigenous Australians was more than two times higher than that for Indigenous Australians (4.9%) (Table 4.9).

Table 4.9: People with a disability: physical 'all disabling conditions' by Indigenous status, by disability status and age, as a percentage of the Australian population of that Indigenous status and age, Australia 1993^(a)

Age	Number ('000)		Percentage of population	
	Indigenous	Non-Indigenous	Indigenous	Non-Indigenous
AIHW method (all disabling conditions plus activity limitation)				
0–4	**0.9	10.1	**2.3	0.8
5–14	**1.5	96.9	**2.6	3.9
15–19	**0.0	39.6	**0.0	3.1
20–29	**0.6	113.3	**1.2	4.1
30–44	*2.2	276.6	*5.0	6.8
45–64	*6.5	623.9	*28.0	18.0
65+	**0.4	796.2	**14.1	41.8
<i>Total 0–64</i>	<i>11.8</i>	<i>1,160.3</i>	<i>4.7</i>	<i>7.6</i>
<i>Total 15–64</i>	<i>9.3</i>	<i>1,053.3</i>	<i>6.3</i>	<i>9.1</i>
Total	12.2	1,956.5	4.9	11.4
All disabling conditions				
0–4	*2.6	27.3	*6.8	2.2
5–14	*2.0	108.6	*3.2	4.4
15–19	**0.0	47.3	**0.0	3.8
20–29	**0.6	142.0	**1.2	5.1
30–44	*3.1	318.6	*6.8	7.8
45–64	*6.7	698.4	*29.2	20.1
65+	**0.4	856.1	**14.1	44.9
<i>Total 0–64</i>	<i>15.1</i>	<i>1,342.2</i>	<i>6.1</i>	<i>8.8</i>
<i>Total 15–64</i>	<i>10.4</i>	<i>1,206.2</i>	<i>7.0</i>	<i>10.4</i>
Total	15.5	2,198.3	6.2	12.8

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

Source: AIHW analysis of ABS 1993 Survey of Disability, Ageing and Carers data.

By excluding people aged 65 and over, the difference in prevalence rate between the two population groups is greatly reduced (Table 4.9). This may be partly because people aged 65 and over made up only about 1% of the Indigenous population. In contrast, people aged 65 and over accounted for about 11% of the non-Indigenous population (Table 4.10).

The Indigenous population had a much younger age structure than the non-Indigenous population. Over 50% of all Indigenous people were aged under 20 years and about 46% were aged 20 to 64 years. In contrast, 28% of non-Indigenous people were aged under 20 years and about 60% were aged 20 to 64 years (Table 4.10).

Using the SPR for people aged under 65 years there was no difference in the prevalence of physical disability between the Indigenous and non-Indigenous populations (Table 4.11). However, the lack of any significant difference may reflect the fact that estimates for Indigenous people are subject to very high relative standard errors. Furthermore, the prevalence estimates for the Indigenous population could be affected by factors other than age structure and relative standard errors. Therefore, reliable comparison of prevalence rates between Indigenous and non-Indigenous Australians is not possible.

Table 4.10: Population age structure: Indigenous status, by sex and age, Australia 1993^(a)

Age	Indigenous status			Total Australians
	Not stated	Non-Indigenous	Indigenous	
Male				
0–4	0.2	7.5	14.4	7.5
5–19	20.8	22.3	33.6	22.5
20–64	20.2	60.4	51.2	59.9
65+	58.8	9.8	0.8	10.1
<i>Total</i>	<i>100.0</i>	<i>100.0</i>	<i>100.0</i>	<i>100.0</i>
Female				
0–4	0.0	7.1	16.4	7.1
5–19	16.2	21.0	35.9	21.1
20–64	8.4	59.5	46.2	58.6
65+	75.5	12.4	1.5	13.2
<i>Total</i>	<i>100.0</i>	<i>100.0</i>	<i>100.0</i>	<i>100.0</i>
Persons				
0–4	0.1	7.3	15.4	7.3
5–19	17.8	21.7	34.8	21.8
20–64	12.5	60.0	48.7	59.3
65+	69.7	11.1	1.1	11.6
Total	100.0	100.0	100.0	100.0

(a) See Table A4.2 for population numbers.

Source: AIHW analysis of ABS 1993 Survey of Disability, Ageing and Carers data.

Table 4.11: People with a disability aged under 65: physical ‘all disabling conditions’ by disability status, by Indigenous status, standardised prevalence ratio, Australia 1993^(a)

	Indigenous	Non-Indigenous
AIHW method (all disabling conditions plus activity limitation)	0.93	0.99
All disabling conditions	1.00	0.99

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

Source: AIHW analysis of ABS 1993 Survey of Disability, Ageing and Carers data.

Age and sex pattern of prevalence

Total Australians

The overall prevalence of physical disability was higher for females than for males. (Tables 4.2 and 4.4; for detailed estimates see Tables A4.3, A4.4, A4.7, A4.8, A4.11 and A4.12). Among people with severe or profound handicap overall prevalence rates were also higher for females. This pattern was more marked for those aged 65 and over (Tables 4.2 and 4.4; for detailed estimates see Tables A4.5, A4.6, A4.9 and A4.10).

Prevalence estimates for specific categories of disabling condition show that females had higher rates of arthritis than males. This pattern was consistent across all age groups (Tables 4.2 and 4.4). For people with a severe or profound handicap prevalence rates in

circulatory conditions and arthritis were higher for females than for males (Tables 4.2 and 4.4).

Country of birth

Overall prevalence rates of physical disability were higher for females than for males among people born in Australia. There were no significant sex differences in prevalence rates among people born in other English-speaking countries and non-English-speaking countries (Table 4.6).

Australian-born females had higher prevalence rates than Australian-born males in three of the six sub-categories of physical disabling conditions (circulatory, arthritis and other physical). Males had higher rates of other musculoskeletal disorders (Table 4.6).

There were no significant sex differences in prevalence rates of the sub-categories of physical disabling conditions among people born in other English-speaking countries and non-English-speaking countries (Table 4.6).

Associated disabilities

Table 4.12 and Figure 4.5 present data on other disabilities reported by people with physical disabilities, based on reported main disabling condition, all disabling conditions and the AIHW method.

The 'other' category contains all conditions that were not readily classified into a particular disability group (for the detailed groupings of impairments and disabling conditions see AIHW 1997, Table A1.2). Over 60% of people with physical disability aged under 65 years, and more than 70% of those aged 65 years and over, also had an 'other' disability.

Of conditions that were classified into particular disability groups, hearing impairment was the most commonly associated disability for people with physical disability of all ages. Psychiatric disorders and acquired brain injury were the second most commonly reported disabilities, each accounting for about 14% of people with physical disability (Table 4.12).

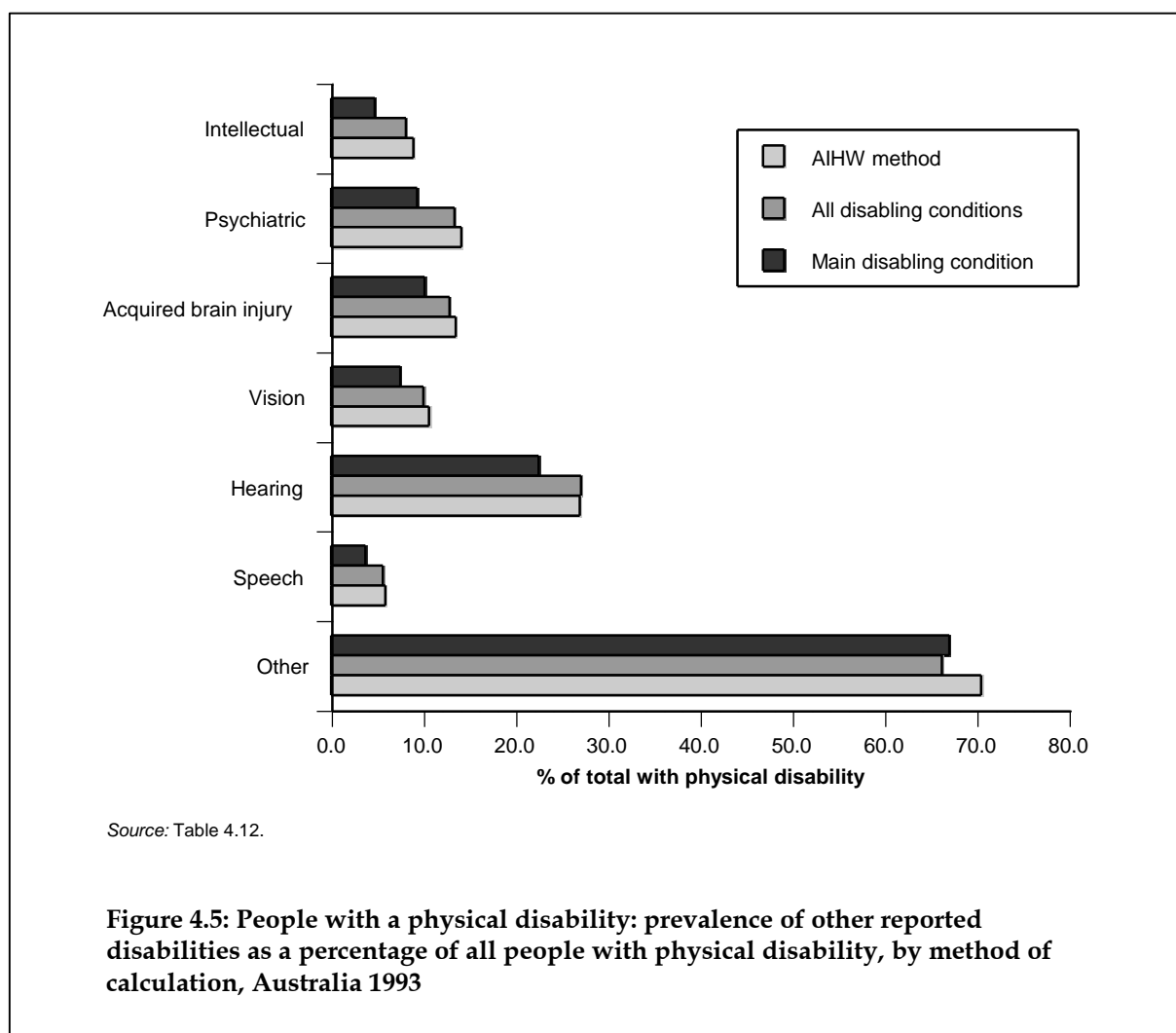
Table 4.12: People with a disability: physical disability by age, by other reported disabilities or impairments, Australia 1993^(a)

Reported other disabilities or impairments	Main disabling condition		All disabling conditions		AIHW method (all disabling conditions plus activity limitation)	
	Number ('000)	% of total	Number ('000)	% of total	Number ('000)	% of total
Under 65 years						
Intellectual	47.1	4.5	113.8	8.3	110.1	9.2
Psychiatric	78.3	7.5	158.8	11.5	144.9	12.2
Acquired brain injury	97.3	9.3	157.6	11.5	142.6	12.0
Vision	35.9	3.4	68.8	5.0	62.4	5.2
Hearing	150.4	14.4	246.5	17.9	206.0	17.3
Speech	36.3	3.5	75.2	5.5	67.4	5.7
Other	661.7	63.3	858.0	62.4	804.2	67.6
<i>Total physical disability group^(b)</i>	<i>1,045.6</i>	<i>100.0</i>	<i>1,375.5</i>	<i>100.0</i>	<i>1,190.0</i>	<i>100.0</i>
65 years and over						
Intellectual	35.4	5.2	77.9	8.0	77.4	8.5
Psychiatric	83.3	12.2	155.9	16.0	151.8	16.7
Acquired brain injury	78.5	11.5	144.7	14.8	141.3	15.5
Vision	93.8	13.8	167.6	17.2	161.5	17.8
Hearing	238.0	35.0	390.9	40.1	360.1	39.6
Speech	28.6	4.2	57.7	5.9	56.7	6.2
Other	495.4	72.8	697.9	71.6	675.7	74.3
<i>Total physical disability group^(b)</i>	<i>680.6</i>	<i>100.0</i>	<i>974.8</i>	<i>100.0</i>	<i>909.6</i>	<i>100.0</i>
All ages						
Intellectual	82.5	4.8	191.7	8.2	187.5	8.9
Psychiatric	161.6	9.4	314.8	13.4	296.6	14.1
Acquired brain injury	175.8	10.2	302.2	12.9	283.9	13.5
Vision	129.7	7.5	236.5	10.1	223.9	10.7
Hearing	388.3	22.5	637.5	27.1	566.1	27.0
Speech	65.0	3.8	132.9	5.7	124.1	5.9
Other	1,157.1	67.0	1,555.9	66.2	1,480.0	70.5
Total physical disability group^(b)	1,726.2	100.0	2,350.3	100.0	2,099.6	100.0

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

(b) This total is less than the sum of all other reported disabilities or impairments since a person may have more than one other disability or impairment

Source: AIHW analysis of ABS 1993 Survey of Disability, Ageing and Carers data.



4.3 Estimates at State and Territory level

Unstandardised estimates

Unstandardised prevalence estimates show that, when only main disabling conditions are considered, two States had higher rates than the national average of 9.8%. South Australia had the highest rate (11.1%), followed by Victoria (10.6%). Rates for the Australian Capital Territory (8.6%) and the Northern Territory (5.1%) were well below the national average. Rates for the other States were similar to the national average (Tables 4.13, A4.13).

The prevalence of physical disability as defined by the AIHW method (physical 'all disabling conditions' plus activity limitation) was again highest in South Australia (13.9%) – two percentage points higher than the national average of 11.9%. The Northern Territory had the lowest rate (7.7%), about four percentage points lower than the national average. The rate for the Australian Capital Territory (10.0%) was well below the national average. New South Wales also had a lower rate (11.2%) than the national average. Rates for the other States were close to the national average (Tables 4.15 and A4.15, Figure 4.6).

Table 4.13: People with a disability: physical 'main disabling condition' by sex, by State or Territory, as a percentage of the population of that sex and State or Territory, Australia 1993^{(a)(b)}

	Circulatory	Respiratory	Arthritis	Other musculo-skeletal	Neuro-logical	Other physical	Total physical
Males							
NSW	1.8	1.6	2.0	2.1	0.5	1.1	9.1
Vic	1.7	1.7	2.3	2.4	0.6	1.1	10.0
Qld	1.9	1.9	2.1	2.0	0.6	1.3	9.8
WA	1.3	1.3	2.0	2.4	*0.5	1.2	8.7
SA	1.8	2.1	3.0	2.3	*0.6	1.6	11.4
Tas	1.4	1.6	2.8	1.8	*0.6	1.2	9.4
ACT	*0.6	1.9	1.1	2.1	*0.5	1.2	7.3
NT	**0.7	**0.8	*1.2	**0.6	**0.6	**0.2	4.2
Females							
NSW	1.5	1.4	3.4	1.9	0.6	0.7	9.6
Vic	1.5	1.5	4.1	2.3	0.8	1.0	11.1
Qld	1.2	2.2	2.9	1.7	0.7	0.7	9.5
WA	1.4	1.5	3.4	1.6	*0.5	1.3	9.7
SA	1.3	1.8	3.9	1.8	0.9	1.2	10.8
Tas	1.7	1.1	5.0	1.5	*0.8	*0.8	10.9
ACT	1.5	1.3	2.9	2.0	0.9	1.3	9.9
NT	**0.8	**0.5	*1.7	*1.8	*0.4	*1.0	6.2
Persons							
NSW	1.7	1.5	2.7	2.0	0.5	0.9	9.3
Vic	1.6	1.6	3.2	2.3	0.7	1.1	10.6
Qld	1.6	2.1	2.5	1.8	0.7	1.0	9.6
WA	1.4	1.4	2.7	2.0	0.5	1.3	9.2
SA	1.6	1.9	3.5	2.0	0.7	1.4	11.1
Tas	1.5	1.3	3.9	1.6	0.7	1.0	10.1
ACT	1.0	1.6	2.0	2.0	0.7	1.2	8.6
NT	*0.8	*0.6	1.5	*1.2	*0.5	*0.6	5.1

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

(b) See Table A4.13 for number estimates.

Source: AIHW analysis of ABS 1993 Survey of Disability, Ageing and Carers data.

Prevalence rates based on physical disability reported among all disabling conditions, regardless of whether activity limitation was reported, were slightly higher than rates estimated using the AIHW method, but show similar patterns between States and Territories (Tables 4.14 and A4.14).

Table 4.14: People with a disability: physical 'all disabling conditions' by sex, by State or Territory, as a percentage of the population of that sex and State or Territory, Australia 1993^{(a)(b)}

	Circulatory	Respiratory	Arthritis	Other musculo-skeletal	Neuro-logical	Other physical	Total physical
Males							
NSW	4.4	2.8	4.0	3.0	1.0	4.8	12.3
Vic	4.5	2.8	4.7	3.3	1.0	4.7	13.2
Qld	4.7	3.4	4.9	2.7	1.2	5.2	13.7
WA	3.7	2.7	4.1	3.0	0.9	4.5	12.7
SA	5.4	3.8	5.7	3.3	1.4	5.9	15.9
Tas	4.4	2.3	5.0	3.0	1.2	5.4	13.0
ACT	2.1	3.1	2.8	2.9	*0.9	3.8	10.3
NT	*1.9	*1.6	3.2	*1.8	*1.3	*2.7	9.3
Females							
NSW	5.2	2.9	6.5	2.8	1.2	5.2	12.9
Vic	5.5	2.9	6.9	3.0	1.2	6.3	14.6
Qld	4.1	3.7	5.9	2.8	1.5	4.8	13.3
WA	4.1	2.6	6.3	2.5	1.2	5.7	13.6
SA	5.5	3.1	7.6	2.9	1.5	7.0	15.1
Tas	4.8	2.3	7.5	2.0	1.3	6.6	14.1
ACT	3.9	2.5	5.3	3.3	1.4	5.7	12.8
NT	*1.9	*1.6	*3.0	*2.1	*1.3	3.3	8.1
Persons							
NSW	4.8	2.9	5.3	2.9	1.1	5.0	12.6
Vic	5.0	2.8	5.8	3.2	1.1	5.5	13.9
Qld	4.4	3.5	5.4	2.8	1.3	5.0	13.5
WA	3.9	2.6	5.2	2.7	1.0	5.1	13.1
SA	5.4	3.4	6.7	3.1	1.5	6.4	15.5
Tas	4.6	2.3	6.3	2.5	1.2	6.0	13.5
ACT	3.0	2.8	4.0	3.1	1.2	4.8	11.5
NT	1.9	1.6	3.1	1.9	*1.3	3.0	8.7

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

(b) See Table A4.14 for number estimates.

Source: AIHW analysis of ABS 1993 Survey of Disability, Ageing and Carers data.

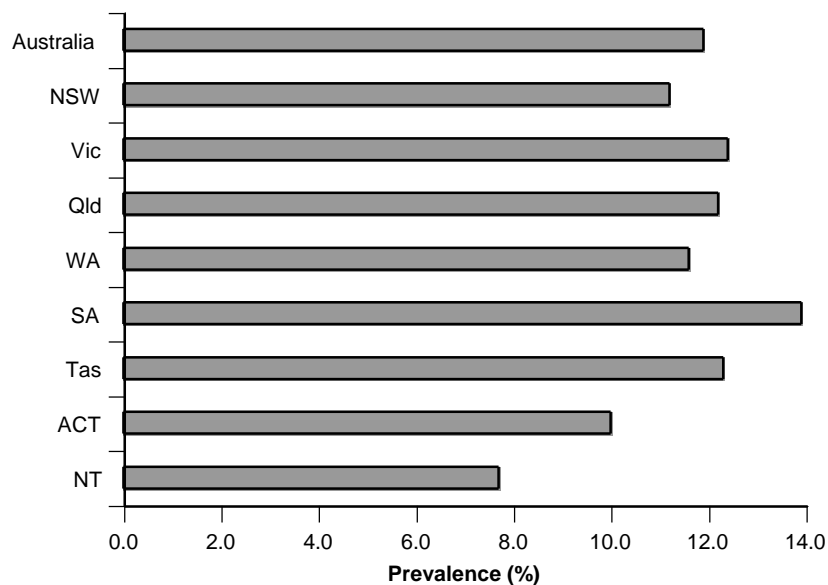
Table 4.15: People with a disability: physical disability calculated using AIHW method, by sex, by State or Territory, as a percentage of the population of that sex and State or Territory, Australia 1993^{(a)(b)}

	Circulatory	Respiratory	Arthritis	Other musculo-skeletal	Neuro-logical	Other physical	Total physical
Males							
NSW	4.0	2.5	3.6	2.7	0.9	4.2	10.7
Vic	4.2	2.3	4.2	3.0	0.9	4.3	11.6
Qld	4.5	2.9	4.5	2.5	1.0	4.9	12.2
WA	3.3	2.4	3.7	2.7	0.7	4.1	10.9
SA	5.0	3.4	5.3	3.1	1.2	5.6	14.3
Tas	4.0	2.0	4.6	2.7	1.1	4.9	12.0
ACT	1.8	2.7	2.5	2.3	0.7	3.4	8.5
NT	*1.7	*1.4	3.0	*1.8	*1.1	2.7	8.6
Females							
NSW	4.8	2.6	5.9	2.6	1.1	5.0	11.6
Vic	5.1	2.6	6.5	2.8	1.0	5.9	13.2
Qld	3.9	3.4	5.6	2.6	1.3	4.6	12.3
WA	3.8	2.2	5.9	2.3	1.0	5.4	12.3
SA	5.2	2.8	7.0	2.7	1.2	6.7	13.5
Tas	4.4	2.3	6.6	1.7	1.2	6.3	12.5
ACT	3.7	2.1	4.9	3.2	1.2	5.5	11.5
NT	*1.7	**0.8	*2.7	*1.6	**0.3	2.8	6.7
Persons							
NSW	4.4	2.6	4.7	2.7	1.0	4.6	11.2
Vic	4.7	2.5	5.3	2.9	1.0	5.1	12.4
Qld	4.2	3.1	5.0	2.6	1.1	4.8	12.2
WA	3.6	2.3	4.8	2.5	0.9	4.7	11.6
SA	5.1	3.1	6.2	2.9	1.2	6.1	13.9
Tas	4.2	2.1	5.6	2.2	1.1	5.6	12.3
ACT	2.7	2.4	3.7	2.7	0.9	4.4	10.0
NT	1.7	*1.1	2.9	1.7	*1.2	2.8	7.7

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

(b) See Table A4.15 for number estimates.

Source: AIHW analysis of ABS 1993 Survey of Disability, Ageing and Carers data.



Source: Table 4.15.

Figure 4.6: Prevalence of physical disability (AIHW method), all ages, by States and Territories, unstandardised estimates, Australia 1993

Unstandardised rates and SPR

The following comparisons focus on prevalence calculated using the AIHW approach.

As mentioned in Section 3.1, the unstandardised overall prevalence rate is the weighted mean of the rates for each age group within the population. A high overall prevalence rate may reflect high age-specific rates, or high representation within the population of particular age groups in which prevalence rates are higher, or a combination of both these factors.

Physical disabilities are more likely to occur among older people. In comparisons of unstandardised rates, States and Territories in which older people make up a relatively larger proportion of the population may have higher overall disability rates, although age-specific rates may be the same as, or even lower than, those in jurisdictions with younger population age structures.

Standardised prevalence ratios (SPRs) allow a more meaningful comparison of prevalence rates, by taking into account the different age structures of the jurisdictions. SPRs can be used to calculate indirectly age-adjusted prevalence rates, by multiplying the SPR for a particular State or Territory by the national prevalence rate of 11.9%.

Unstandardised rates and standardised rates (adjusted for age and sex) give two different pictures of the relative prevalence of physical disability in States and Territories whose population structures differ from the national average (Table 4.16). When unstandardised and standardised prevalence rates are compared, two broad patterns can be recognised.

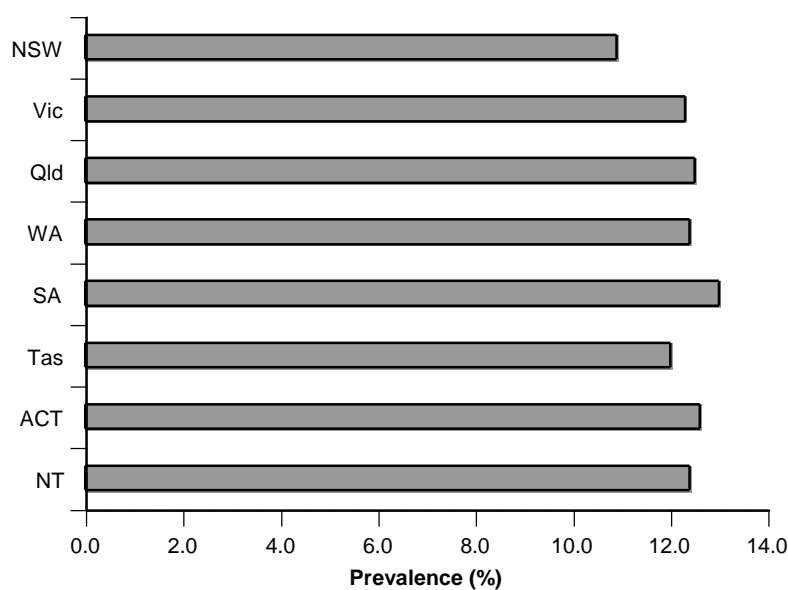
Table 4.16: People with a disability: physical disability calculated using the AIHW method, by State or Territory, by age, unstandardised prevalence rate, standardised prevalence ratio (SPR), and standardised prevalence rate^(a), Australia 1993

	States and Territories								Australia
	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	
Under 65 years									
Unstandardised rate	6.7	7.9	8.4	8.2	8.5	7.4	7.4	6.3	7.6
SPR	0.87	1.03	1.12	1.10	1.08	0.97	1.05	0.98	1.00
Standardised rate	†6.6	7.8	†8.5	8.4	8.2	7.4	8.0	7.4	7.6
All ages									
Unstandardised rate	†11.2	12.4	12.2	11.6	†13.9	12.3	†10.0	†7.7	11.9
SPR	0.92	1.03	1.05	1.04	1.09	1.01	1.06	1.04	1.00
Standardised rate	†10.9	12.3	12.5	12.4	†13.0	12.0	12.6	12.4	11.9

† Rates are significantly different from the national rate.

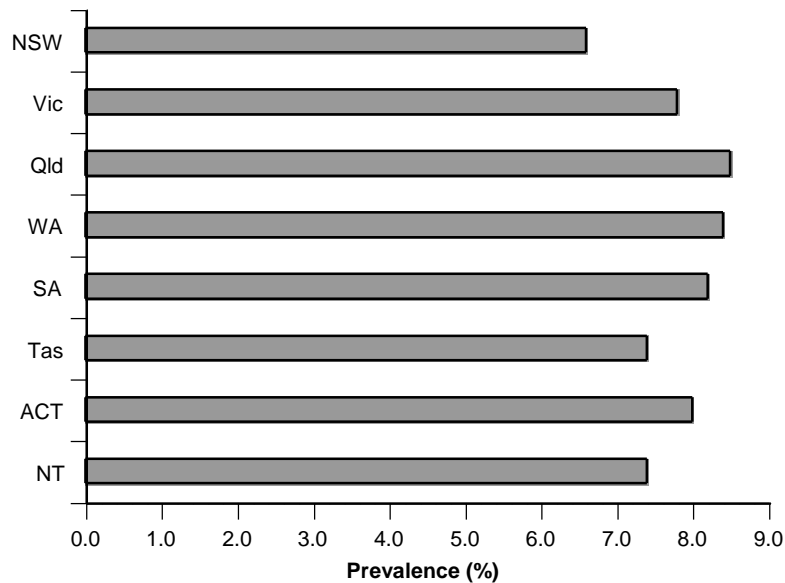
(a) Standardised prevalence rate was calculated by multiplying the SPR for a particular State or Territory by the national prevalence rate.

Source: AIHW analysis of ABS 1993 Survey of Disability, Ageing and Carers data.



Source: Table 4.16.

Figure 4.7: Prevalence of physical disability (AIHW method), all ages, by States and Territories, standardised rates, Australia 1993



Source: Table 4.16.

Figure 4.8: Prevalence of physical disability (AIHW method), people aged under 65, by States and Territories, standardised rates, Australia 1993

First, States and Territories that have younger population age structures (i.e. high representation of younger people) than the national population tend to have unstandardised overall prevalence rates that are lower than the national average. In these jurisdictions, age-adjusted rates are likely to be higher than unstandardised rates.

Second, jurisdictions that have higher proportions of older people than the total population tend to have unstandardised prevalence rates higher than the national average, and age-adjusted rates are likely to be lower than unstandardised rates.

Examples of the first pattern are the Australian Capital Territory and the Northern Territory. These jurisdictions had younger age structures and lower unstandardised prevalence rates than the national average. However, standardised rates for these jurisdictions were similar to the national average. This suggests that the lower unstandardised estimates were largely due to younger population age structure and that, overall, age-specific prevalence rates in these jurisdictions were similar to those for the total Australian population (Table 4.16).

The two Territories provide the most striking illustration of the effect that age structure can have on unstandardised rates. Although the Northern Territory had the lowest unstandardised prevalence rate, its SPR was similar to those of several other jurisdictions. Similarly, the Australian Capital Territory had the second lowest unstandardised rate, but its SPR was significantly higher than that of New South Wales and similar to those of several other jurisdictions (Table 4.16). Both Territories had very low proportions of older people in their populations. At a national level, the proportion of Australians aged 65 and

over was nearly twice and four times as high as in the Australian Capital Territory and the Northern Territory, respectively (Tables 4.17 and A4.16). Queensland had an unstandardised prevalence rate that was similar to the national average, despite its young population age structure. This suggests that high age-specific prevalence rates overrode the effect of young population structure. The high age specific prevalence rates were particularly evident in the younger age group, as indicated by an SPR of 1.12 for people aged under 65 years (Table 4.16).

The second pattern was seen in South Australia, Victoria and Tasmania. The proportions of people aged 65 and over in these three States were higher than that for all Australians. This may partly explain the higher unstandardised prevalence rate in South Australia in particular. When the effect of age structure was removed, the ratios for Victoria and Tasmania were similar to the national average while the ratio for South Australia was higher than the national average. Thus, the higher unstandardised rate of South Australia may reflect a combination of high age-specific prevalence and a high proportion of older people.

Only New South Wales had prevalence rates lower than the national average using both measures, despite the fact that the proportion of people aged 65 and over in New South Wales (12.2%) was slightly higher than the national average (11.6%). This suggests that, overall, the effect of lower age-specific prevalence rates in New South Wales outweighed the effect of an older population age structure. The low prevalence rates were particularly evident among people under the age of 65 years, with an SPR of 0.87 for this age group (Table 4.16).

Standardised prevalence rates for the population aged under 65 provided a slightly different picture for some States and Territories. Queensland had a significantly higher rate (8.5%) than the national average and New South Wales. New South Wales had a very low rate of 6.6%, significantly below the national average and all other States and Territories except for the Northern Territory. In the remaining States and Territories the SPR for people aged under 65 years was similar to that for all ages (Table 4.16).

Table 4.17: Population age structure: States and Territories, by sex and age, Australia 1993^(a)

Age	States and Territories							NT	Australia
	NSW	Vic	Qld	WA	SA	Tas	ACT		
Male									
0–4	7.6	7.5	7.6	7.7	7.0	7.7	7.8	9.8	7.5
5–19	22.0	22.0	23.4	23.4	21.5	23.5	24.2	25.3	22.5
20–64	60.0	60.3	59.3	60.2	60.0	58.2	62.3	62.1	59.9
65+	10.5	10.2	9.7	8.8	11.5	10.6	5.7	2.8	10.1
<i>Total</i>	<i>100.0</i>	<i>100.0</i>	<i>100.0</i>	<i>100.0</i>	<i>100.0</i>	<i>100.0</i>	<i>100.0</i>	<i>100.0</i>	<i>100.0</i>
Female									
0–4	7.1	7.0	7.2	7.4	6.5	7.2	7.5	10.2	7.1
5–19	20.7	20.6	22.2	22.3	20.1	22.1	23.3	25.6	21.1
20–64	58.3	59.0	58.3	59.0	58.3	57.0	61.7	61.2	58.6
65+	13.8	13.5	12.3	11.4	15.1	13.7	7.6	3.0	13.2
<i>Total</i>	<i>100.0</i>	<i>100.0</i>	<i>100.0</i>	<i>100.0</i>	<i>100.0</i>	<i>100.0</i>	<i>100.0</i>	<i>100.0</i>	<i>100.0</i>
Persons									
0–4	7.3	7.2	7.4	7.5	6.8	7.4	7.7	10.0	7.3
5–19	21.4	21.3	22.8	22.8	20.8	22.8	23.7	25.5	21.8
20–64	59.1	59.6	58.8	59.6	59.1	57.6	62.0	61.6	59.3
65+	12.2	11.9	11.0	10.1	13.3	12.2	6.6	2.9	11.6
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

(a) See Table A4.16 for population numbers.

Source: AIHW analysis of ABS 1993 Survey of Disability, Ageing and Carers data.