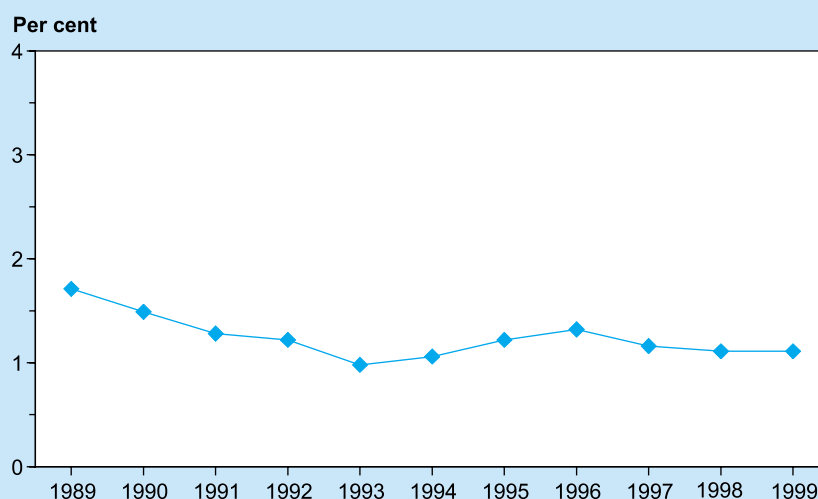


# 3 The health of Australians

- Annual growth rate of the Australian population
- Life expectancy at birth
- Total death rate
- Major causes of death
- Potential years of life lost before age 75
- Self-reported prevalence of disability
- Self-reported prevalence of core activity restriction
- Expected years of life with disability and core activity restriction

## Annual growth rate of the Australian population



	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
<b>Population size ('000)</b>											
Males	8,388	8,511	8,615	8,716	8,798	8,888	8,994	9,108	9,214	9,320	9,425
Females	8,427	8,554	8,669	8,779	8,869	8,967	9,078	9,203	9,310	9,410	9,512
Total	16,814	17,065	17,284	17,495	17,667	17,855	18,072	18,311	18,524	18,730	18,937
<b>Annual rate of increase (%)</b>		1.5	1.3	1.2	1.0	1.1	1.2	1.3	1.2	1.1	1.1

Note: Population estimates as at 30 June each year.

Source: ABS Cat. No. 3201.0 (various years).

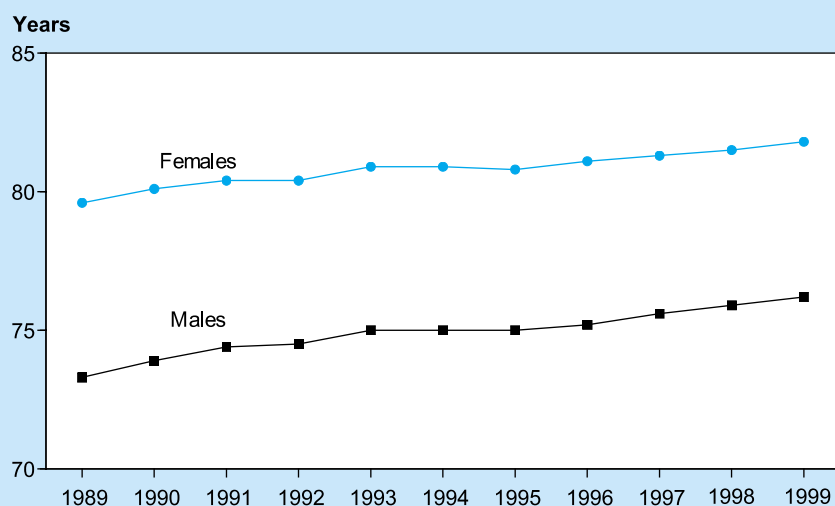
- The Australian population has grown steadily from 16.8 million people in 1989 to 18.9 million in 1999, with an average annual increase of 1.2%. Factors influencing population growth are the difference between fertility and death rates, and net overseas migration.
- The higher increases in the annual growth of the population observed in the mid to late 1980s were due primarily to increases in the number of immigrants. Natural increase—the excess of births over deaths—contributed more to population growth during the 1990s (see *Net overseas migration rate* on page 28).
- However, Australia's birth rate continues to decline; the 1999 rate was 10% lower than the rate 5 years before that (see *Crude birth rate* on page 30). The death rate also declined during this period, and was 12% lower than that 5 years previously (see *Total death rate* on page 16).
- One set of projections of the population by the Australian Bureau of Statistics indicates that the total population will reach 21.1 million by the year 2010, and 22.8 million by the year 2020. This is based on an average annual growth rate of 1.0%, similar to the trend noted in recent years. These projections assume a high rate of fertility and low overseas migration.

**For more information, see:**

ABS. Population by age and sex. ABS Cat. No. 3201.0. Canberra: ABS.

ABS 2000b. Projections of the populations of Australia, States and Territories, 1999–2101. ABS Cat. No. 3222.0. Canberra: ABS.

### Life expectancy at birth



	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
Males	73.3	73.9	74.4	74.5	75.0	75.0	75.0	75.2	75.6	75.9	76.2
Females	79.6	80.1	80.4	80.4	80.9	80.9	80.8	81.1	81.3	81.5	81.8

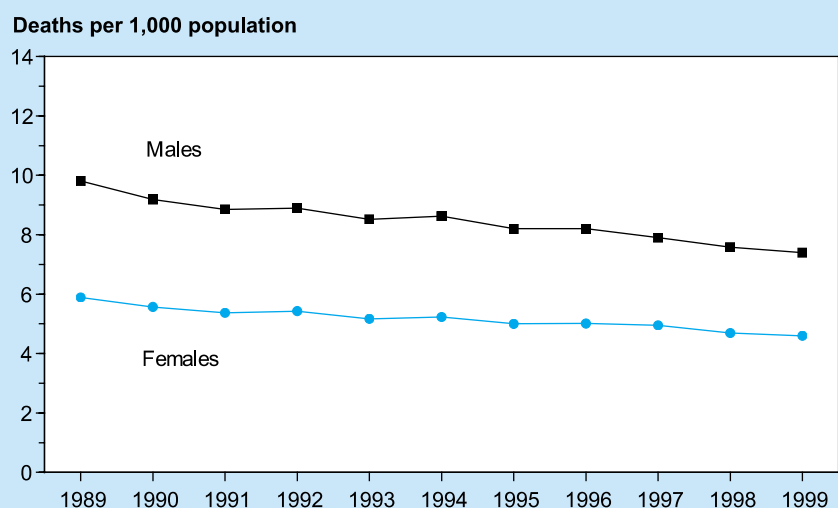
Source: ABS Cat. No. 3302.0 (various years).

- Life expectancy at birth is the average number of years that newborns can expect to live if current mortality conditions persist for the rest of their lives.
- At the beginning of the twentieth century, male life expectancy in Australia at birth was 55.2 years, and female life expectancy was 58.8 years. It has continued to rise steadily since then.
- Between 1989 and 1999, life expectancy at birth increased for both males and females, from 73.3 to 76.2 years for males, a rise of 2.9 years, and from 79.6 to 81.8 years for females, a rise of 2.2 years.
- The sex differential in life expectancy appears to be decreasing. In 1999, the difference was 5.6 years compared with 6.3 years in 1989. The narrowing of this gap reflects the faster downward trend of the male death rate compared with the female death rate (see *Total death rate* on page 16).
- The calculation of life expectancy is strongly influenced by the proportion of deaths in the younger age groups. Rapid declines in infant mortality made a significant contribution to increasing life expectancy during the first 70 years of the twentieth century. Reductions in cardiovascular mortality among middle-aged and older Australians since the late 1960s have also contributed significantly to these increases.
- Despite these favourable trends, life expectancy at birth is much lower for Indigenous people—currently some 15–20 years shorter than the life expectancy for other Australians.

#### For more information, see:

ABS. Deaths, Australia. ABS Cat. No. 3302.0. Canberra: ABS.

### Total death rate



	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
Males	9.8	9.2	8.9	8.9	8.5	8.6	8.2	8.2	7.9	7.6	7.4
Females	5.9	5.6	5.4	5.4	5.2	5.2	5.0	5.0	4.9	4.7	4.6
<b>Total</b>	<b>7.6</b>	<b>7.1</b>	<b>6.9</b>	<b>7.0</b>	<b>6.7</b>	<b>6.7</b>	<b>6.4</b>	<b>6.4</b>	<b>6.3</b>	<b>6.0</b>	<b>5.9</b>

Note: The death rates were age-adjusted using the total Australian population as at 30 June 1991.

Source: Estimates based on data derived from AIHW National Mortality Database.

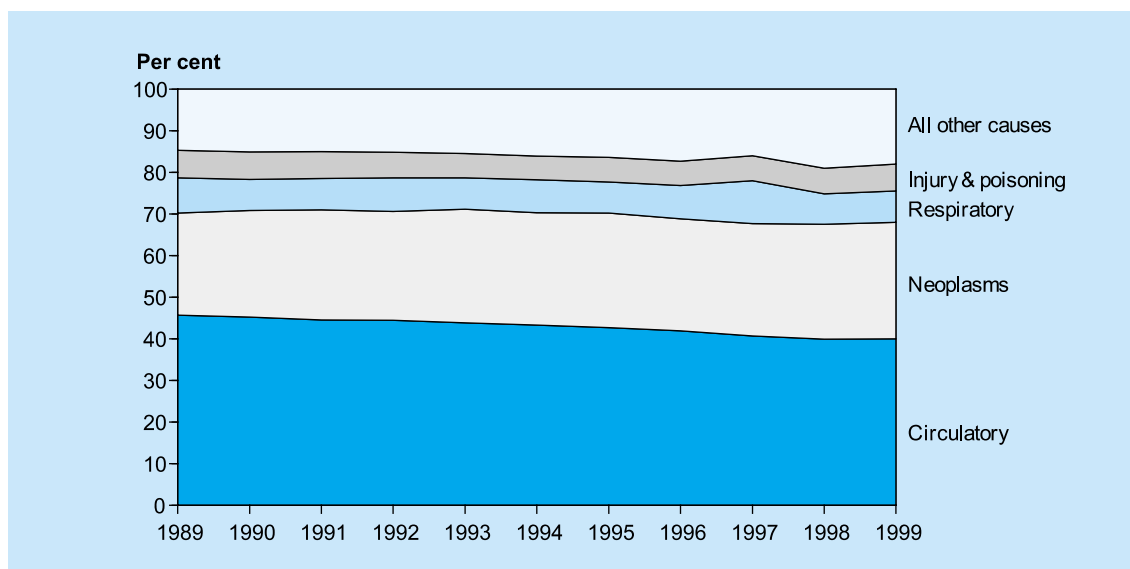
- The number of persons dying in any one year divided by the corresponding population provides a crude estimate of the death rate. This rate can be age-adjusted for comparisons of populations with different age distributions over time.
- In 1999, there were 128,102 deaths registered in Australia—a rate of 5.9 deaths per 1,000 population. Over the period 1989 to 1999, there has been a steady decline in the total death rate in Australia. During that time, the male age-adjusted death rate declined by 24% and the female rate by 22%.
- The continuing falls in death rates for cardiovascular diseases (mostly heart disease and stroke), most injuries and respiratory diseases have been the major contributors to this decline. Death rates for cancers as a group have not fallen substantially.
- Although much of the reduction in death rates in the early part of the twentieth century was among younger people, in recent decades death rates among older Australians have also declined substantially, largely due to reductions in cardiovascular disease mortality.
- Death rates for Aboriginal and Torres Strait Islander peoples have not declined significantly in recent years and remain more than double those for other Australians (see *Indigenous death rate for all causes* on page 25).

#### For more information, see:

AIHW 2000a. Australia's health 2000: the seventh biennial health report of the Australian Institute of Health and Welfare. Canberra: AIHW.

ABS. Deaths, Australia. ABS Cat. No. 3302.0. Canberra: ABS.

## Major causes of death



	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
Circulatory	45.7	45.2	44.5	44.4	43.8	43.3	42.7	41.9	40.7	39.9	40.0
Neoplasms	24.5	25.6	26.5	26.2	27.3	27.0	27.5	26.9	27.0	27.8	28.0
Respiratory	8.5	7.5	7.5	8.1	7.6	7.9	7.5	8.0	10.3	7.3	7.5
Injury & poisoning	6.6	6.6	6.5	6.1	5.8	5.7	5.9	5.9	6.0	6.2	6.5
All other causes	14.7	15.1	15.0	15.2	15.5	16.1	16.4	17.3	16.0	19.0	18.0
<b>Total deaths ('000)</b>	<b>124.2</b>	<b>120.0</b>	<b>119.1</b>	<b>123.7</b>	<b>121.6</b>	<b>126.7</b>	<b>125.1</b>	<b>128.7</b>	<b>129.4</b>	<b>127.2</b>	<b>128.1</b>

*Note:* Causes of death are classified to the following ICD-10 chapter codes: Neoplasms C00–D48, Circulatory I00–I99, Respiratory J00–J99, Injury & poisoning V01–Y98.

*Source:* Estimates based on data derived from AIHW National Mortality Database.

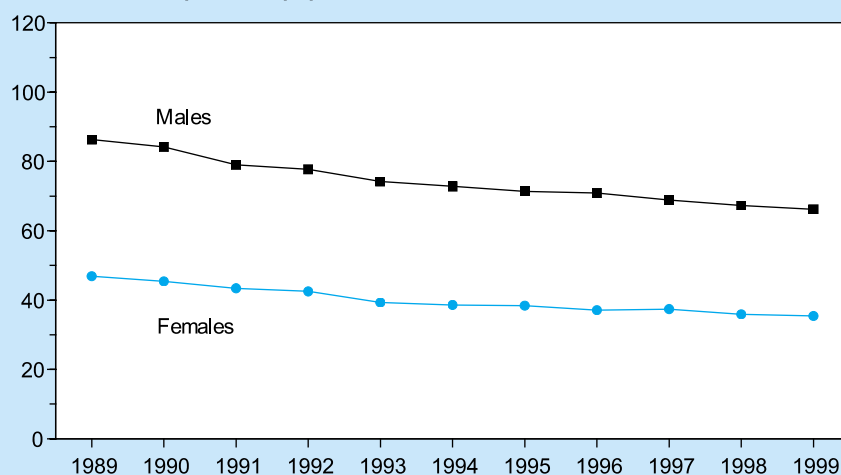
- The four major causes of death in Australia are diseases of the circulatory system such as heart attack or stroke; neoplasms (cancers) such as lung, colorectal, breast and prostate cancer; diseases of the respiratory system such as asthma, emphysema and bronchitis; and injury and poisoning including motor vehicle accidents, falls and suicide.
- Diseases of the circulatory system and neoplasms are responsible for approximately 68% of all deaths in Australia. Although the proportion of deaths due to diseases of the circulatory system has been declining, deaths from neoplasms have increased slightly.
- The proportion of deaths due to neoplasms and respiratory diseases increased slightly over the past decade. Deaths due to injury and poisoning have shown little change. The introduction of automatic cause of death coding by the ABS in 1997 has resulted in a rise in the number of deaths attributed to pneumonia.

**For more information, see:**

ABS. Causes of death, Australia. ABS Cat. No. 3303.0. Canberra: ABS.

## Potential years of life lost before age 75

Years of life lost per 1,000 population



	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
Males	86.3	84.2	79.0	77.7	74.2	72.8	71.4	70.9	68.9	67.3	66.2
Females	46.9	45.4	43.4	42.5	39.3	38.6	38.4	37.1	37.4	35.9	35.4
<b>Total</b>	<b>66.8</b>	<b>65.0</b>	<b>61.3</b>	<b>60.2</b>	<b>56.7</b>	<b>55.6</b>	<b>54.8</b>	<b>53.9</b>	<b>53.1</b>	<b>51.5</b>	<b>50.7</b>

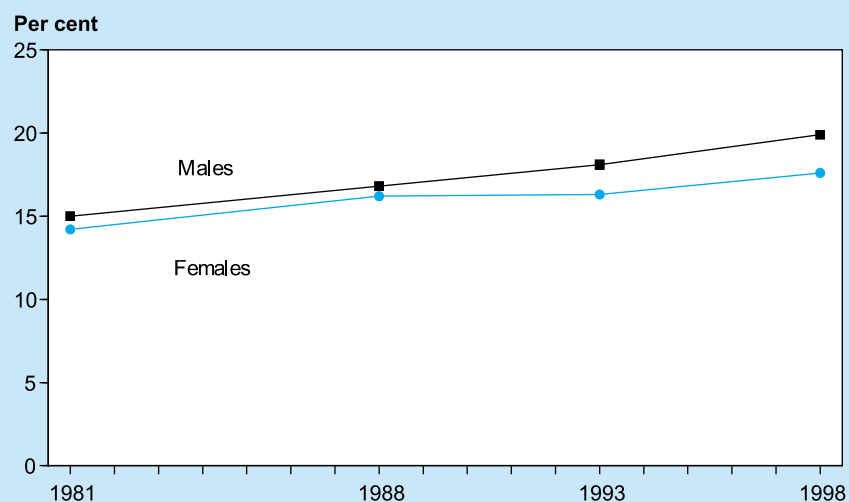
Source: Estimates based on data derived from AIHW National Mortality Database.

- Potential years of life lost (PYLL) is a measure of premature or untimely death. If dying before the age of 75 is considered premature, then a person dying at age 55 would have lost 20 years of potential life.
- The PYLL indicator focuses more on deaths among younger members of the population, since death at a young age contributes more to PYLL than death at an older age. This is in contrast to death rate, which takes into account the burden of disease among all age groups.
- Conditions such as birth defects, injuries and AIDS are significant contributors to PYLL. Chronic diseases causing death among the elderly, on the other hand, have less effect on these values, although more persons die of these diseases.
- Although PYLL values are declining steadily, males continue to have a higher rate, reflecting a higher proportion of male deaths in the younger age groups. The gap between males and females is, however, closing.
- Many factors have contributed to these steady declines. Advances in medical technologies, disease prevention and control strategies, and appropriate treatment have all prevented premature mortality, in particular infant deaths and injury deaths among young adults.

**For more information, see:**

Mathers C, Vos T & Stevenson C 1999. The burden of disease and injury in Australia. Canberra: AIHW.

## Self-reported prevalence of disability



	1981	1988	1993	1998
Males	15.0	16.8	18.1	19.9
Females	14.2	16.2	16.3	17.6
<b>Total</b>	<b>14.6</b>	<b>16.5</b>	<b>17.2</b>	<b>18.8</b>

*Notes*

1. The prevalence rates were age-adjusted using the estimated resident Australian population as at March 1998.
2. Only criteria common to the four surveys have been used.

Source: ABS 1999.

- Disabilities and core activity restrictions are long-term consequences of a health condition, impairment, disease or accident that can have a severe impact on the quality of life of the affected person.
- The 1998 ABS Survey of Disability, Ageing and Carers defines 'disability' as the presence of one or more of 17 'limitations, restrictions, or impairments' identified by survey respondents. According to this definition, more than 3.6 million people in Australia reported a disability in 1998.
- Disability is strongly related to age and sex. The rates are higher among males and increase rapidly after the age of 45. More than one out of two persons aged 65 years and over reported at least one disabling condition in 1998.
- Arthritis and musculoskeletal disorders are the most commonly reported disabling conditions. Many other chronic

diseases such as coronary heart disease, stroke and diabetes are also large contributors to disability.

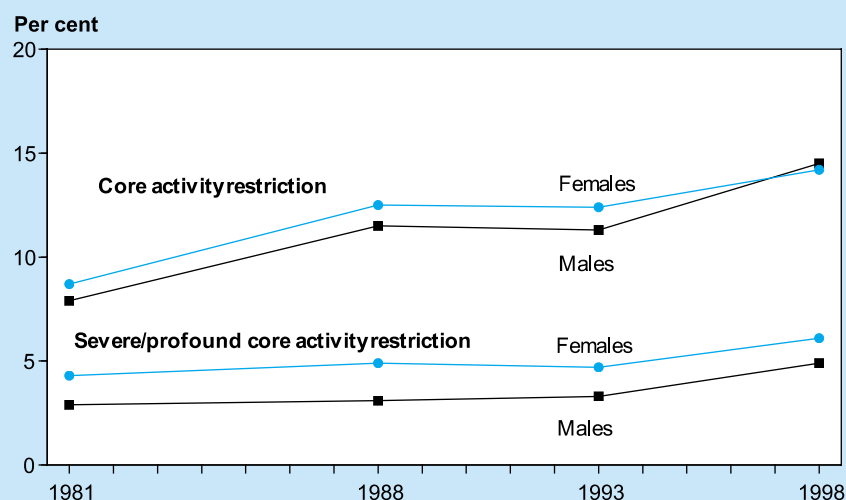
- The proportion of people with a disability appears to be rising. However, the majority of the apparent increase in disability rates is a result of increased identification of people with disabilities, rather than a substantial increase in the prevalence of people with disabilities.

**For more information, see:**

ABS 1999. Disability, ageing and carers: summary of findings. ABS Cat. No. 4430.0. Canberra: ABS.

Davis E, Beer J, Gligora C & Thorn A 2001. Accounting for change in disability and severe restriction, 1981-1998. ABS Working Paper 2001/1. Canberra: ABS.

## Self-reported prevalence of core activity restriction



	Core activity restriction				Severe/profound core activity restriction			
	1981	1988	1993	1998	1981	1988	1993	1998
Males	7.9	11.5	11.3	14.5	2.9	3.1	3.3	4.9
Females	8.7	12.5	12.4	14.2	4.3	4.9	4.7	6.1
<b>Total</b>	<b>8.2</b>	<b>12.0</b>	<b>11.9</b>	<b>14.4</b>	<b>3.6</b>	<b>4.0</b>	<b>4.0</b>	<b>5.5</b>

**Notes**

1. The prevalence rates were age-adjusted using the estimated resident Australian population as at March 1998.

2. Only criteria common to the four surveys have been used.

Source: ABS 1999.

- Core activity restriction is identified when a person, because of disability, needs assistance, has difficulty or uses aids with the core activities of self care, mobility or communication. Depending on the level of assistance needed or difficulty experienced, restriction in core activities can be mild, moderate, severe or profound.
- Almost 80% of persons with a disability, or over 2.8 million persons, were reported as restricted in their core activities in 1998. Almost one-third, more than 1.1 million, reported severe or profound restrictions. The prevalence of severe or profound core activity restriction was greater among females than males.
- The severity of core activity restriction increases with age. More than one in five (21%) of persons aged 65 years and over

reported severe or profound restriction in 1998. This is greater than the one in 25 (4.0%) prevalence among those aged less than 65 years.

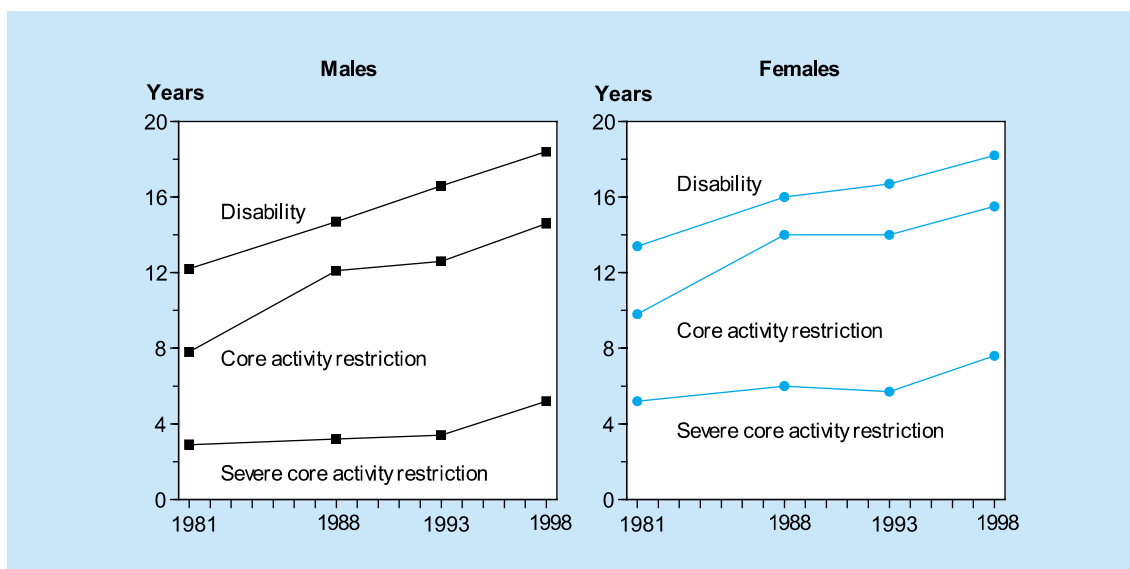
- The majority of the apparent rise in core activity restriction is as a result of increased identification of people with these restrictions, rather than an actual increase in the prevalence of people with core activity restriction.

**For more information, see:**

ABS 1999. Disability, ageing and carers: summary of findings. ABS Cat. No. 4430.0. Canberra: ABS.

Davis E, Beer J, Gligora C & Thorn A 2001. Accounting for change in disability and severe restriction, 1981-1998. ABS Working Paper 2001/1. Canberra: ABS.

## Expected years of life with disability and core activity restriction



	Males				Females			
	1981	1988	1993	1998	1981	1988	1993	1998
<b>Expected years of life:</b>								
With severe core activity restriction	2.9	3.2	3.4	5.2	5.2	6.0	5.7	7.6
With core activity restriction	7.8	12.1	12.6	14.6	9.8	14.0	14.0	15.5
With disability	12.2	14.7	16.6	18.4	13.4	16.0	16.7	18.2
Free of disability	59.2	58.4	58.4	57.5	65.0	63.4	64.2	63.3
<b>Total life expectancy</b>	<b>71.4</b>	<b>73.1</b>	<b>75.0</b>	<b>75.9</b>	<b>78.4</b>	<b>79.5</b>	<b>80.9</b>	<b>81.5</b>

**Notes**

1. The data were age-adjusted using the total Australian population as at 30 June 1991.
2. Only criteria common to the four surveys have been used.

Sources: Mathers 1991; Mathers 1996; ABS 1998 Survey of Disability, Ageing and Carers, unpublished data.

- A large proportion of the Australian population can now expect to live into their seventies and beyond. However, it is expected that some of those years will be spent with some form of disability restricting the performance of a normal range of activities.
- Based on 1998 mortality data, life expectancy is 75.9 years for Australian males and 81.5 years for Australian females. Only 57.5 (76%) and 63.3 (78%) of those years, respectively, are expected to be disability-free.
- The apparent increase over time of the number of years lived with disability is affected by a number of factors. These

include the increased identification of people with disabilities, and increasing overall life expectancy.

- Disability is not an inevitable consequence of ageing. For example, not only is the life expectancy of Australian females greater than that for Australian males, but also the proportion of years lived disability-free is higher.

**For more information, see:**

AIHW 1999a. Australia's welfare 1999: services and assistance. Canberra: AIHW.

