Australian health trends 1995

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AUSTRALIAN INSTITUTE OF HEALTH AND WELFARE

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Background

The Australian Institute of Health and Welfare has a responsibility to monitor and report on the health of Australians, especially in areas of public health significance. As part of this role, the Institute recognised the need for regular national reporting of health trends.

Towards the end of 1993, the Institute was asked by the Commonwealth Department of Health, Housing, Local Government and Community Services (now the Commonwealth Department of Human Services and Health) to investigate ways of preparing and disseminating information on a wide range of health indicators.

Before undertaking this work, the Institute sought and obtained the endorsement of the Australia's Health Ministers' Advisory Council (AHMAC). To assist it in producing a set of widely acceptable and useful indicators, the Institute established a steering committee with broad expertise in population health and health data. Members of this committee included representatives from Commonwealth and State Health authorities, the Australian Bureau of Statistics and non-Government organisations. The members of the committee were:

- Dr Bruce Armstrong (Australian Institute of Health and Welfare, Chair)
- Dr Michael Frommer (New South Wales Department of Health)
- Dr Indra Gajanayake (Commonwealth Department of Human Services and Health)
- Mr John Glover (South Australian Health Commission)
- Dr Colin Mathers (Australian Institute of Health and Welfare)
- Ms Sue Pickering (Commonwealth Department of Human Services and Health)
- Dr Aileen Plant (National Centre for Epidemiology and Population Health)
- Dr George Preston (Prometheus Information Pty Ltd)
- Dr Eddy Price (E.D. Price and Associates)
- Mr Geoff Sims (Australian Bureau of Statistics)

The Institute identified and developed a set of indicators to monitor national health trends over time and to identify potential areas of concern. The committee provided advice on the validity and usefulness of the proposed indicators. All divisions and external units of the Institute participated in the production of this report.

An objective of the project was to produce a report of health trends in a format that informs and commands the attention of the community. Consequently, much thought was given to ensure the production of a report that could be understood not only by health professionals but also by the wider community.

This work was partly funded by a grant under the National Health Advancement Program of the Commonwealth Department of Human Services and Health, which also provided funding for the collection of some health-related data items through the ABS Population Survey Monitor.

The report is the first in a continuing series which will be produced every two years. The Institute also produces a companion publication, *Australian health indicators,* three times a year.

The need for health indicators

Health indicators are useful in informing the general public, health professionals and policy makers about changes in the health and well-being of Australians and in identifying important differences within and between the various groups making up Australian society. The monitoring of indicators over time will allow for changes to be identified and quantified, and for possible causes of these changes to be examined.

For most of the 20th century, epidemics of chronic disease, especially coronary heart disease and cancers, and epidemics of injury, have been the major foci of public health activity in Australia. Since the early 1980s, other conditions and diseases have added to this burden, in particular, HIV and AIDS, domestic violence, suicide and substance abuse. There is also increasing concern about the need to deal effectively with the physical disabilities and social handicaps that often result from these conditions and prevent individuals from enjoying their life to the fullest.

The recent increase in the elderly population is unprecedented. At the beginning of the 20th century, life expectancy at birth in Australia was 55 years for men and 59 years for women. In 1993, life expectancy at birth had reached 75 years for men and 81 years for women. Yet, while life expectancy has increased, recent studies indicate that much of the increased longevity is spent in a state of ill-health and disability. Consequently, there is now an increasing need to develop appropriate policies and services to accommodate the needs of increasing numbers of elderly people.

The multicultural nature of present-day Australia also poses challenges to many of today's health workers. The provision of services must be geared to the special needs of these groups. There is little doubt that the group most in need is the Aboriginal and Torres Strait Islander peoples whose health status remains markedly worse than that of other Australians.

These demographic shifts are themselves taking place in a changing and evolving society. The fast rate of technological innovations has largely altered the productive and social structure of Australia.

The health problems that accompany both these demographic and structural shifts and changes in lifestyle require public health information systems to remain dynamic and adaptive. The information presented in this report is a first attempt to bring together summary information for a wide range of indicators that affect and reflect changes in the health of the nation.

Defining and measuring health

Health is conceptually difficult to define. For the individual, it is often thought of in positive terms such as a feeling of well-being, an ability to cope with the demands of life, physical and mental fitness, and freedom from disease and disability.

These aspects of health are best captured by the World Health Organisation's 1947 definition of health as 'a state of complete physical, mental and social well-being, and not merely the absence of disease or injury'.

However, although ideal health is often perceived in positive terms, measurement of these positive aspects has proven difficult. Well-being, health and fitness are all subjective concepts that can be interpreted in various ways by different people. Further, since sick people come in contact with health care services more often than do healthy people, health is often measured in an indirect manner. Much of this measurement has focussed on illness, disease, disability and death.

Mortality data are routinely collected, readily available and are therefore the most often used instrument for monitoring health. Causes of death are also widely used for international comparisons of health and disease.

The prevalence of disease in the population is another indirect measure of health. However, compared with mortality data, the collection and availability of morbidity data are incomplete and pose significant measurement and interpretation problems. In addition to routinely collected data such as notifications for communicable diseases and hospital morbidity collections, information on morbidity is also available from specific surveys of the population run by organisations such as the Australian Bureau of Statistics, the National Heart Foundation, the anti-Cancer Councils and other agencies.

An important benefit from these surveys is that they also allow for the measurement of positive health at the population level. Progress is being made in the development of multi-dimensional models of health which involve positive as well as negative health concepts, such as:

- mental health (psychological well-being / psychological distress)
- well-being (energy / fatigue)
- general perception of overall health (eg. excellent / good / fair / poor)

Population surveys provide a direct source of this information, although social and cultural biases can influence interpretation of results from these surveys.

Given that health includes several quite different concepts and that most of these can only be assessed indirectly, the approach taken in this report has been to construct a wide range of health indicators that relate to various dimensions of health.

The set of health indicators which were developed and presented in this report encompass the following broad categories:

- health status

- health determinants and risk factors
- health resources
- health service use

Health status

Health status indicators measure both mortality and morbidity patterns. Indicators included here relate to prevalence and incidence (new cases of a disease or condition) as well as disease-specific death rates. Indicators derived from mortality information, such as life expectancy, are also presented.

Health determinants and risk factors

Risk factor indicators measure population and fertility trends, economic and other determinants of health status, and behavioural patterns identified as risk factors for various diseases. Each of these measures can affect future population health status and future demands for health resources and services.

Health resources

Health resource indicators measure the resources available across the spectrum of health management. These range from resources for the promotion of health and prevention to those available for the treatment of illness and injury. They provide an indication of the policy of government towards primary care (health prevention and health promotion activities at the population level), secondary care (provision of screening-type services for individuals) and tertiary care (the provision of services to manage episodes of illness among individuals).

Health service use

Health service use indicators provide an indication of the demand for services in the community as well as the knowledge and attitudes of the community towards accessing these services.

Aboriginal health

Several indicators for Aboriginal and Torres Strait Islander peoples have been included in a single section in order to highlight the disparities in their health status when compared with the general population. Indicators in this section cover population and mortality trends.

Structure of the report

Each indicator appears on a separate page and consists of:

- a decade of national data for males, females and total persons (where possible), dating back from the latest available number
- a graph of the data
- several paragraphs of commentary identifying what aspect of health or health care the indicator measures and a brief discussion of trends in the data
- a list of one or more references to more detailed publications.

Limitations of the report

The present report is not comprehensive as the set of indicators presented here is constrained by national health information available to the Institute. There are many areas of health that have not been covered adequately. Some of the gaps will be addressed in future issues subject to the availability of sufficient resources. Issues associated with the social and physical environment and their impact on the health of the population are of increasing concern. A comprehensive set of environmental indicators has not been included in this report although it has been identified as an important topic for future editions.

Health status

Mortality and survival

- *Life expectancy at birth (years)*
- *Expected age at death having reached age 65 years*
- *Total death rate per 1,000 population*
- *Potential years of life lost before age 75 per 1,000 population*

Disability and handicap

- *Prevalence of disability (%)*
- *Prevalence of handicap and severe handicap (%)*
- *Expectation of years of life with/without disability and handicap at birth*
- *Expectation of years of life with/without disability and handicap at age 65*

Perinatal and infant health

- *Stillbirth and neonatal mortality rate per 1,000 births*
- *Infant mortality rate: number of infant deaths per 1,000 live births*
- *Proportion of infants weighing less than 2,500 grams at birth*
- *Major birth defect (congenital malformation) rate per 1,000 total births*
- *Sudden infant death syndrome mortality rate per 100,000 live births*

Child health

- *Death rate for accidental drowning per 100,000 children aged 1–4 years*
- *Proportion of 0–6 year olds fully immunised for vaccine preventable diseases (%)*
- *Mean DMFT score and decay free rate in 12-year-old children*

Injury

- *Death rate for all causes of injury per 100,000 population*
- *Death rate for road vehicle accidents per 100,000 population*
- *Hospital separation rate for road vehicle accidents per 1,000 population*
- *Death rate for falls among people aged 65 years and over per 100,000 population*
- *Death rate for accidents due to fire, burns and scalds among people aged 55 years and over per 100,000 population*

Interpersonal violence

- *Death rate for homicide and injury purposely inflicted by other persons per 100,000 population*

Chronic diseases

- *Death rate for coronary heart disease per 100,000 population*
- *Hospital separation rate for coronary heart disease per 1,000 population*
- *Death rate for stroke per 100,000 population*
- *Incidence and death rate for all cancers per 100,000 population*
- *Incidence and death rate for cancer of the trachea, bronchus and lung per 100,000 population*
- *Incidence and death rate for melanoma per 100,000 population*
- *Incidence and death rate for non-melanocytic skin cancers per 100,000 population*
- *Incidence and death rate for breast cancer per 100,000 females*
- *Incidence and death rate for prostate cancer per 100,000 males*

Chronic diseases (continued)

- *Incidence and death rate for colorectal cancer per 100,000 population*
- *Death rate for asthma per 100,000 population*
- *Death rate for diabetes per 100,000 population*

Communicable diseases

- *Incidence rate for HIV per million population*
- *Incidence and death rate for AIDS per million population*
- *Incidence rate for sexually transmitted diseases per million population*
- *Rate of new and reactivated cases of tuberculosis per million population*

Mental health

- *Mental health status of Australian adults (aged 18 years and over) in 1994*
- *Death rate for suicide and self-inflicted injury per 100,000 population*

Dental health

- *Proportion of adults experiencing edentulism*

Aboriginal health

Mortality and survival

- *Death rate for all causes of death per 1,000 Aboriginal population*

Perinatal and infant health

- *Infant mortality rate: number of Aboriginal infant deaths per 1,000 live births*

Chronic diseases

- *Death rate for cardiovascular disease per 100,000 Aboriginal population*

Population trends

- *Size of the Aboriginal and Torres Strait Islander population*

Health determinants and risk factors

Population trends

- *Annual rate of increase in the Australian population*
- *Crude birth rate per 1,000 population*
- *Proportion of the population aged 65 years and over and 75 years and over (%)*
- *Dependency ratio*
- *Net immigration rate per 1,000 population*

Fertility

- *Total fertility rate per woman and median age of mother at confinement*
- *Number of live births to women less than 18 years of age (adolescents)*

Economic environment
- *Unemployment rate*

Anthropometric measures
- *Proportion of 25–64 year olds considered overweight (%)*

Physiological measures
- *Proportion of 25–64 year olds with high blood pressure (%)*
- *Proportion of 25–64 year olds with high total blood cholesterol (%)*

Food and nutrition
- *Apparent consumption of energy and fat*
- *Apparent consumption of fruit and vegetables*
- *Apparent consumption of sugars*
- *Adequacy of the calcium supply*

Physical activity
- *Proportion of 25–64 year olds undertaking any physical exercise for sport or recreation (%)*
- *Proportion of 25–64 year olds walking for recreation or exercise (%)*

Drug use
- *Proportion of 25–64 year olds who drink alcohol at a level hazardous to their health (%)*
- *Proportion of 25–64 year olds who smoke cigarettes (%)*

Health resources

Health expenditure
- *Health expenditure as a proportion of GDP at constant 1989–90 prices*
- *Health expenditure per person at constant 1989–90 prices*
- *Medical service fees per person at constant 1989–90 prices*
- *Acute care hospital expenditure per person at constant 1989–90 prices*
- *Proportion of the population with private health insurance*

Health labour force
- *Proportion of the labour force employed in the health industry*

Hospitals
- *Number of acute care hospital beds per 1,000 population*

Health service use

Medical services
- *Number of medical consultations per person*

Dental services

- *Proportion of adults attending a dentist within the previous 12 months*

Hospital use

- *Acute care hospital separation rate per 1,000 population*
- *Number of acute care hospital bed-days per 1,000 population (days)*
- *Average length of stay in acute care hospitals (days)*

Secondary prevention

- *Proportion of women aged 40 years and over who have participated in the national breast cancer screening program (%)*
- *Pap smear rate for the early detection of cervical cancer per 100 women aged 15 to 69 years*

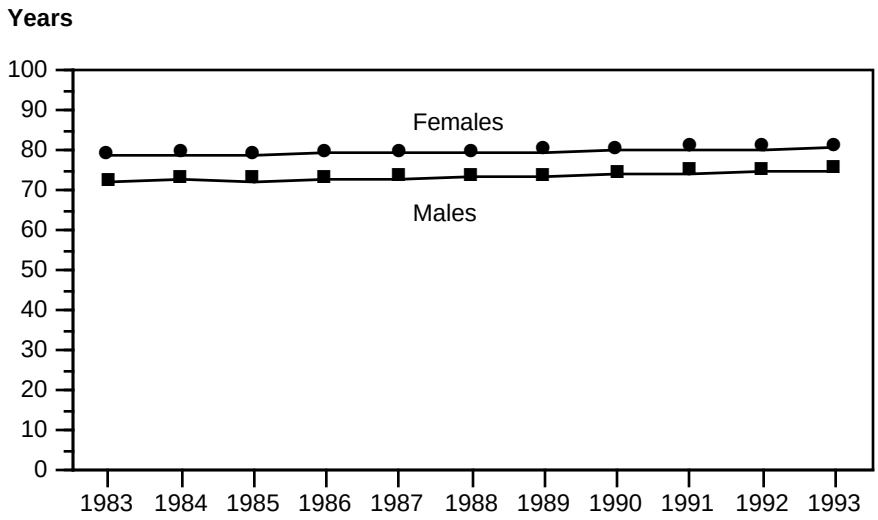
Aged care

- *Nursing home and hostel beds per 1,000 population aged 70 years and over*
- *Home and community care expenditure per person aged 65 years and over at constant 1989–90 prices*

Health status

- *Mortality and survival*
- *Disability and handicap*
- *Perinatal and infant health*
- *Child health*
- *Injury*
- *Interpersonal violence*
- *Chronic diseases*
- *Communicable diseases*
- *Mental health*
- *Dental health*

Life expectancy at birth (years)



	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993
Males	72.1	72.5	72.4	72.9	73.0	73.1	73.3	73.9	74.4	74.5	75.0
Females	78.8	79.0	78.8	79.2	79.5	79.5	79.6	80.1	80.4	80.4	80.9

Source: ABS Cat. No. 3302.0

- Life expectancy is the average length of time that a person can expect to live if they continue to experience current mortality conditions for the rest of their life.
- Between 1983 and 1993, life expectancy at birth increased for both males and females. In 1993, male life expectancy at birth was 75.0 years compared with 72.1 years in 1983. In 1993, female life expectancy at birth was 80.9 years compared with 78.8 years in 1983.
- Females live longer than males, although the gender differential appears to be decreasing. In 1993, the difference was 5.9 years compared with a difference of 6.7 years in 1983. The narrowing of this gap is also reflected in the increased rate of decline in male death rates compared to female rates (see *Total death rate per 1,000 population* on page 15).
- Life expectancy at birth is much lower for the Aboriginal and Torres Strait Islander population than for the non-Aboriginal population. For the period 1990–1992, male Aboriginal life expectancy at birth was estimated to be between 57 and 60 years and for females between 61 and 64 years, or around 15–20 years shorter than the life expectancy of non-Aboriginal Australians (see *Death rate for all causes of death per 1,000 Aboriginal population* on page 57).

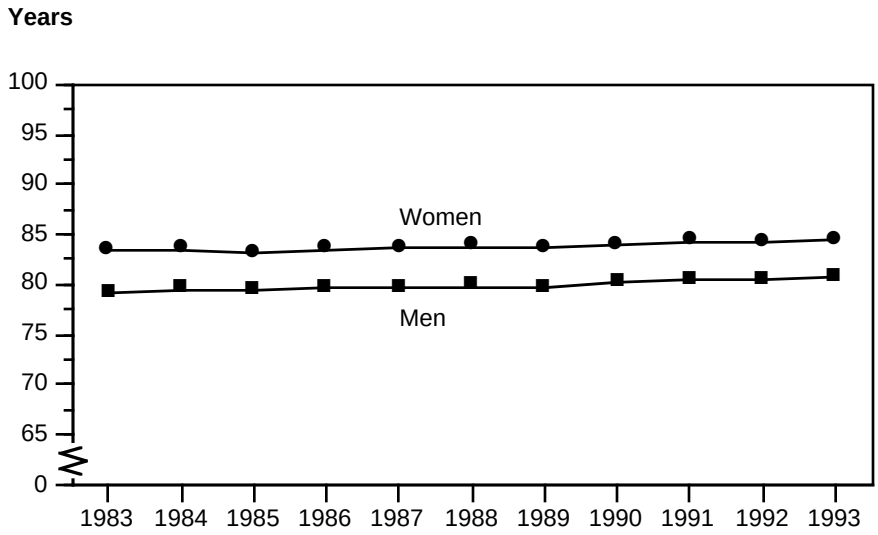
For more information, see:

ABS Deaths, Australia Cat. No. 3302.0.

AIHW (1994) *Australia's health 1994: the fourth biennial report of the Australian Institute of Health and Welfare.* Canberra: AGPS.

Bhatia K & Anderson P (1995) *An overview of Aboriginal and Torres Strait Islander health: present status and future directions.* AIHW Information paper. Canberra: AGPS.

Expected age at death having reached age 65 years



	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993
Men	79.2	79.5	79.3	79.7	79.7	79.8	79.7	80.2	80.5	80.4	80.7
Women	83.3	83.5	83.2	83.5	83.7	83.8	83.7	84.0	84.3	84.2	84.5

Source: AIHW, derived from ABS Cat. No. 3302.0

- Between 1983 and 1993, life expectancy at age 65 years followed similar trends to life expectancy at birth (see *Life expectancy at birth* on page 13).
- For both men and women, life expectancy at age 65 years increased. In 1983, a 65 year old man could have expected to live a further 14.2 years and in 1993 a further 15.7 years. In 1983, a 65 year old woman could have expected to live a further 18.3 years and in 1993 a further 19.5 years.
- The difference in life expectancy between men and women after the age of 65 years decreased during this time; from 4.1 years in 1983 to 3.8 years in 1993.
- Only 40% of Aboriginal and Torres Strait Islander men can expect to live beyond their 65th birthday compared with 75% of non-Aboriginal men. Just over 40% of Aboriginal and Torres Strait Islander women can expect to live to their 65th birthday, compared with 80% of non-Aboriginal women. As death rates among the Aboriginal and Torres Strait Islander population have not changed substantially in recent years, significant improvements in their life expectancy are unlikely in the short term.

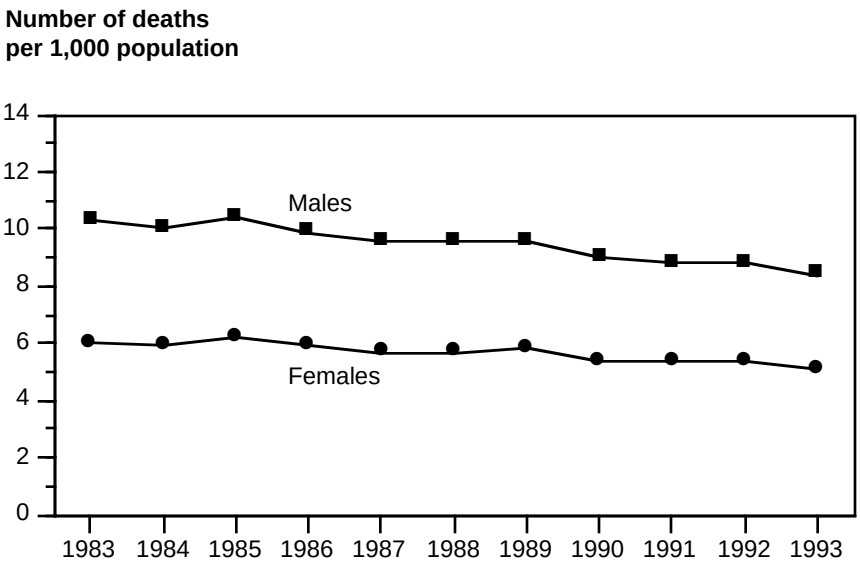
For more information, see:

ABS *Deaths, Australia* Cat. No. 3302.0.

AIHW (1994) *Australia's health 1994: the fourth biennial report of the Australian Institute of Health and Welfare.* Canberra: AGPS.

Bhatia K & Anderson P (1995) *An overview of Aboriginal and Torres Strait Islander health: present status and future directions.* AIHW Information paper. Canberra: AGPS.

Total death rate per 1,000 population



	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993
Males	10.3	10.0	10.4	9.9	9.6	9.6	9.6	9.0	8.8	8.8	8.4
Females	6.0	5.9	6.2	5.9	5.7	5.7	5.8	5.4	5.4	5.4	5.1
Total	7.9	7.7	8.0	7.6	7.4	7.4	7.4	7.0	6.9	6.9	6.5

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 Mortality database.

- Over the period 1983 to 1993, there has been a steady decline in total death rates in Australia. During that time, the male age-adjusted death rate declined by 19% and the female rate by 16%.
- 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 the decline. There has been very little change in the death rates for all cancers combined.
- Although much of the reduction in death rates in the early part of this century was among younger people, in recent decades, death rates among older Australians have also started to decline substantially.
- Death rates for Aboriginal and Torres Strait Islander peoples have not declined significantly in recent years and remain more than double those for non-Aboriginal Australians (see *Death rate for all causes of death per 1,000 Aboriginal population* on page 57).

For more information, see:

AIHW (1994) *Australia's health 1994: the fourth biennial report of the Australian Institute of Health and Welfare.* Canberra: AGPS.

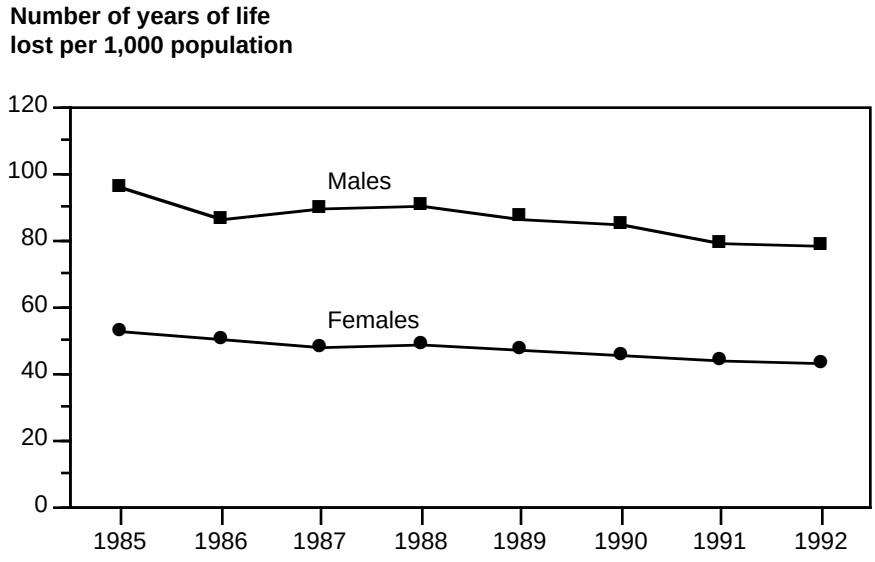
AIHW *Mortality* series.

AIHW *Mortality surveillance* series.

AIHW *Cancer* series.

ABS *Deaths, Australia* and *Causes of death, Australia* Cat. Nos. 3302.0 and 3303.0.

Potential years of life lost before age 75 per 1,000 population



	1985	1986	1987	1988	1989	1990	1991	1992
Males	95.4	86.2	89.0	90.0	86.3	84.2	79.0	77.7
Females	52.1	49.8	47.7	48.6	46.9	45.4	43.4	42.5
Total	74.0	68.1	68.6	69.5	66.8	65.0	61.3	60.2

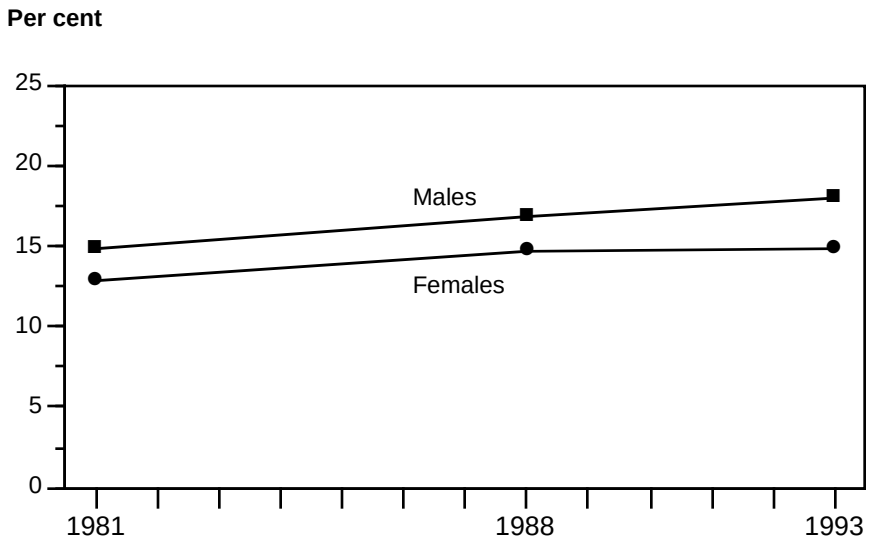
Source: Estimates based on data derived from AIHW Mortality database.

- Potential years of life lost (PYLL) before age 75 is a measure of premature mortality based on the total number of years of life lost before age 75 by all persons who died before their 75th birthday.
- The PYLL indicator gives more emphasis to deaths among younger members of the population, as a death at a young age has a higher contribution to PYLL than a death at an older age. In contrast, death rates highlight the burden of disease among older age groups where the majority of deaths occur.
- The steady fall in PYLL, from 74.0 per 1,000 population in 1985 to 60.2 in 1993 reflects both the fall in total mortality over that period and the fact that death occurs on average at a later age with a consequent reduction in premature mortality.

For more information, see:

AIHW (1994) *Australia's health 1994: the fourth biennial report of the Australian Institute of Health and Welfare.* Canberra: AGPS.

Prevalence of disability (%)



	1981	1988	1993
Males	14.8	16.9	18.0
Females	12.8	14.6	14.8
Total	13.8	15.8	16.4

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

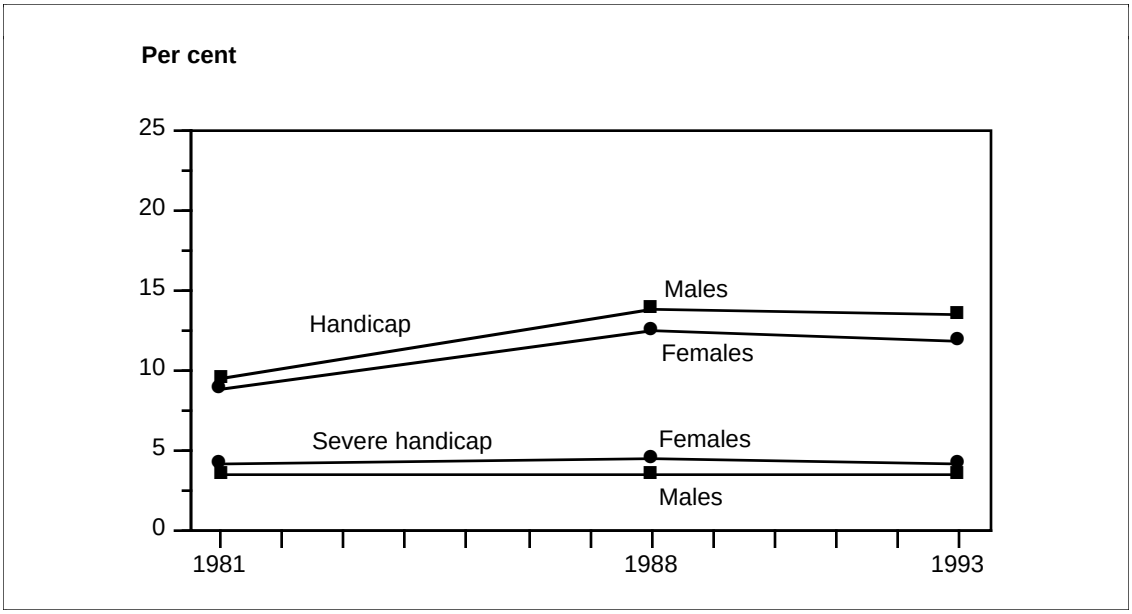
Source: AIHW, derived from ABS Cat. No. 4430.0.

- Disabilities and handicaps are long-term consequences of a health condition, impairment, disease or accident that can severely impact on the quality of life of the affected person.
- In its three surveys on disability and handicap, conducted in 1981, 1988 and 1993, the ABS defined a person with a disability as having one or more of a number of health-related conditions which limited their ability to perform everyday activities and which had lasted, or were likely to last, for six months or more.
- The reported prevalence of disability increased substantially between 1981 and 1993, from 13.8% to 16.4%. The male rates were consistently higher than the female rates. This increase probably reflects changes in societal perceptions of disability, rising expectations of good health, and, to some extent, the successes of secondary prevention in improving the survival rates of people with chronic illnesses.
- Disability is strongly related to age with prevalence rates increasing rapidly after the age of 45. In 1993, two out of every three people over the age of 75 years reported having a disability.

For more information, see:

ABS (1993) *Survey of disability, ageing and carers, Australia: summary of findings.* Cat. No. 4430.0.

Prevalence of handicap and severe handicap (%)



	Handicap			Severe handicap		
	1981	**1988**	**1993**	**1981**	**1988**	**1993**
Males	9.4	13.8	13.5	3.5	3.5	3.5
Females	8.8	12.4	11.8	4.1	4.5	4.1
Total	9.2	13.1	12.7	3.8	4.1	3.9

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

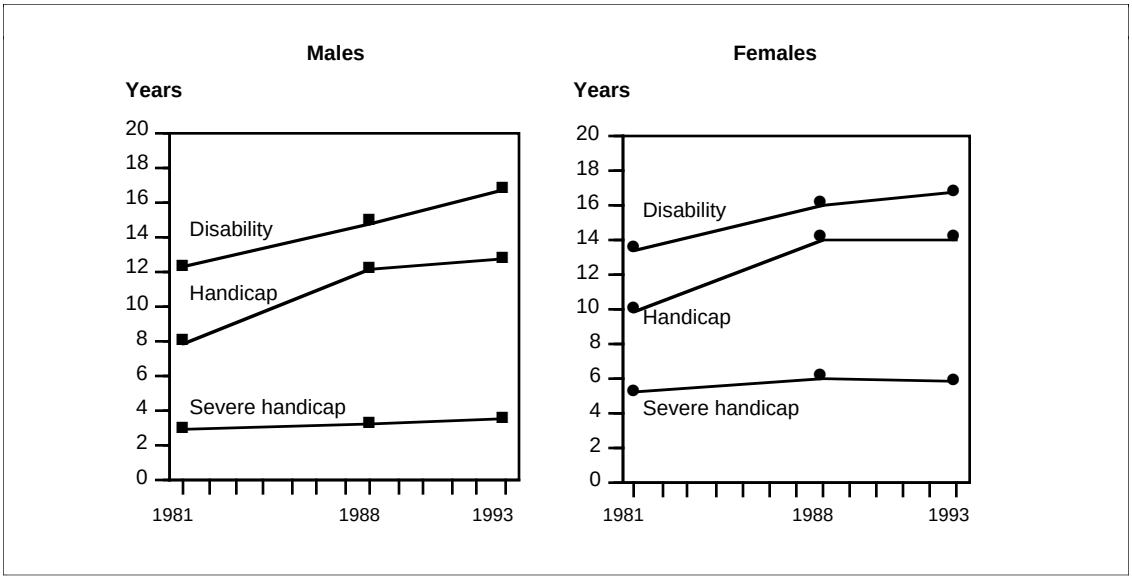
Source: AIHW, derived from ABS Cat. No. 4430.0.

- The ABS defined a person as handicapped if their disability limited them to some degree in their ability to perform tasks in relation to self-care, mobility, verbal communication, schooling and/or employment. Mobility and employment limitations were the most frequently reported forms of handicap.
- Between 1981 and 1988, the proportion of the population reporting a handicap increased substantially. Between 1988 and 1993, this proportion fell slightly.
- Persons aged five years or over were classified as severely handicapped if they needed personal help or supervision or were unable to perform tasks relating to self care, mobility or verbal communication. In 1993, approximately one in three people reporting a handicap were classified as severely handicapped. The prevalence rates of severe handicap remained around 4% between 1981 and 1993. In contrast to the higher male prevalence of handicap, more females than males are severely handicapped.
- As with disability, handicap rates are strongly related to age. By age 60–64 years, the handicap rate is approximately three to four times that for 35–44 year olds. By age 75 years and over, this ratio increases to a sixfold difference.

For more information, see:

ABS (1993) *Survey of disability, ageing and carers, Australia: summary of findings.* Cat. No. 4430.0.

Expectation of years of life with/without disability and handicap at birth



	Males			Females		
	1981	**1988**	**1993**	**1981**	**1988**	**1993**
Expected years of life						
with severe handicap	2.9	3.2	3.4	5.2	6.0	5.7
with handicap	7.8	12.1	12.6	9.8	14.0	14.0
with disability	12.2	14.7	16.6	13.4	16.0	16.7
free of disability	59.2	58.4	58.4	65.0	63.4	64.2
Total life expectancy[(a)]	71.4	73.1	75.0	78.4	79.5	80.9

(a) Total life expectancy = Expected years of life with disability + Expected years of life free of disability.

Sources: Mathers 1991; Mathers 1995.

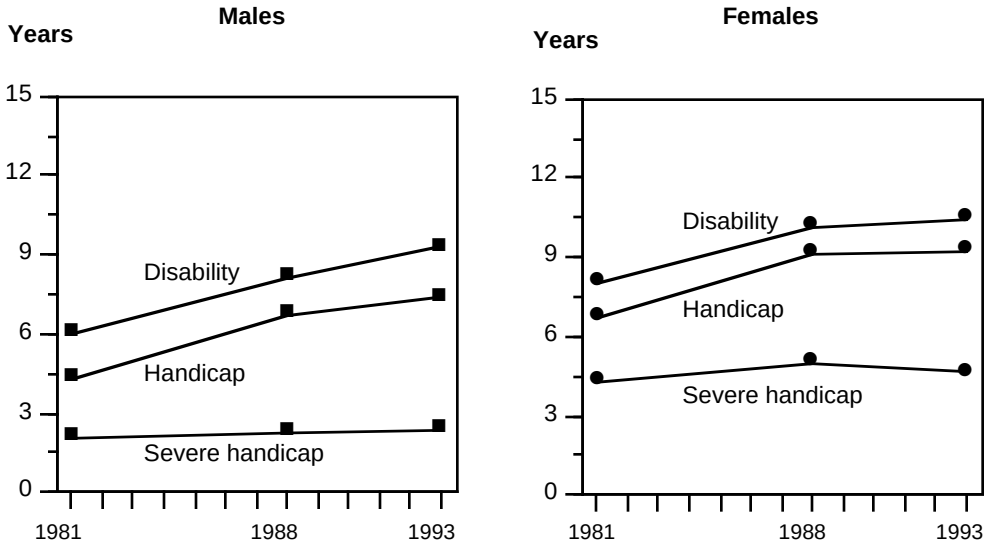
- Health expectancy indices combine information on population mortality and prevalence of disability and handicap into a single composite indicator which divides total life expectancy into the number of years lived with and without the health condition.
- Total life expectancy at birth was 75.0 years for Australian males and 80.9 years for Australian females in 1993. Disability-free life expectancy at birth was 58.4 years for males and 64.2 years for females. Thus, for both men and women, just under 80% of total life expectancy are years without disability on average, if death rates and disability prevalence rates at all ages remain constant at their 1993 levels.
- Whilst total life expectancy is increasing, expected years of life with disability, handicap or severe handicap are also increasing.

For more information, see:

Mathers CD (1991) *Disability-free and handicap-free life expectancy in Australia 1981 and 1988.* AIHW Health differentials series No. 1. Canberra: AGPS.

Mathers CD (1995) *Expectation of disability and handicap in Australia.* Paper prepared for the 3rd National Rehabilitation Conference, Brisbane, May 1995.

Expectation of years of life with/without disability and handicap at age 65



	Males			Females		
	1981	1988	1993	1981	1988	1993
Expected years of life						
with severe handicap	2.0	2.2	2.4	4.3	5.0	4.7
with handicap	4.3	6.7	7.3	6.7	9.1	9.2
with disability	6.0	8.1	9.2	8.0	10.1	10.4
free of disability	7.9	6.7	6.5	10.1	8.6	9.1
Total life expectancy[(a)]	13.9	14.8	15.7	18.1	18.7	19.5

(a) Total life expectancy = Expected years of life with disability + Expected years of life free of disability.

Sources: Mathers 1991; Mathers 1995.

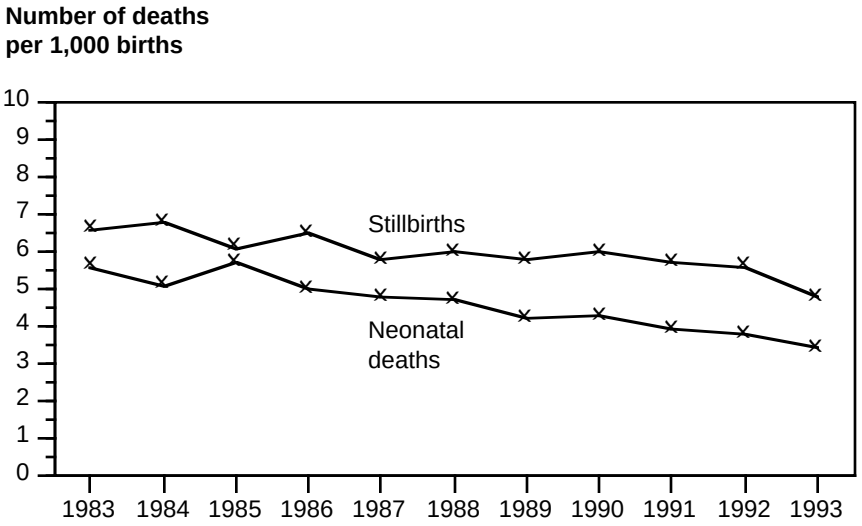
- Expected years of life with disability or handicap for persons aged 65 increased from 1981 to 1993. Expected years of life with severe handicap remained relatively unchanged over this period.
- In 1993, males aged 65 years could expect to live a further 15.7 years, with 6.5 years free of disability. The life expectancy of 65 year old females in 1993, was 19.5 years with 9.1 years disability-free.
- Thus, the proportion of total life expectancy which is free of disability is much lower by age 65, at 41% for men and 47% for women, than the proportion of total life expectancy at birth which is disability-free for just under 80% for both sexes (see *Expectation of years of life with/without disability and handicap at birth* on page 19).

For more information, see:

Mathers CD (1991) *Disability-free and handicap-free life expectancy in Australia 1981 and 1988.* AIHW Health differentials series No. 1. Canberra: AGPS.

Mathers CD (1995) *Expectation of disability and handicap in Australia.* Paper prepared for the 3rd National Rehabilitation Conference, Brisbane, May 1995.

Stillbirth and neonatal mortality rate per 1,000 births



	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993
Stillbirths	6.6	6.8	6.1	6.5	5.8	6.0	5.8	6.0	5.7	5.6	4.8
Neonatal deaths	5.6	5.1	5.7	5.0	4.8	4.7	4.2	4.3	3.9	3.8	3.4
Perinatal mortality rate	12.2	11.9	11.8	11.5	10.6	10.7	9.9	10.3	9.6	9.4	8.2

Source: ABS Cat. No. 3304.0

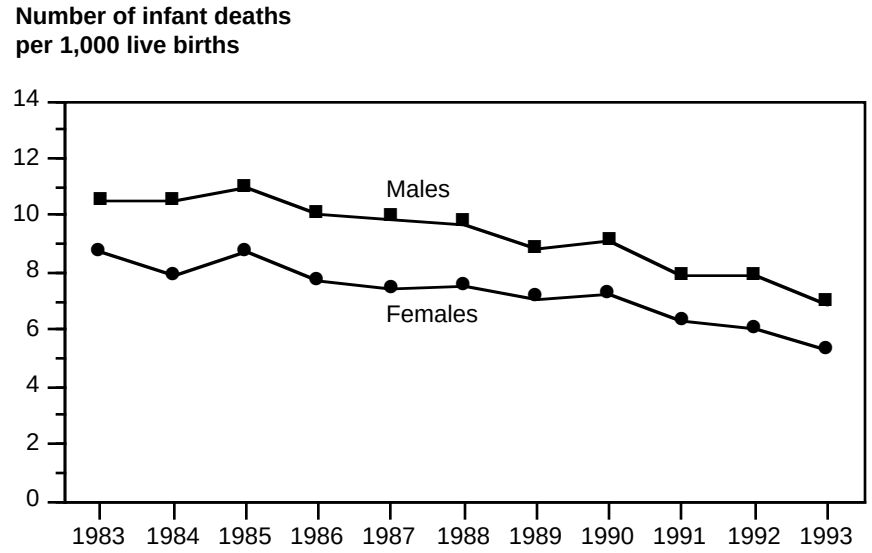
- Foetal death or stillbirth refers to death before delivery among infants of at least 500 grams or 22 weeks gestation. Neonatal death refers to the death before 29 days of age of a liveborn baby. Perinatal mortality is the sum of both of these. The main reason for including the two categories in the one indicator is that the causes of death of both components are related.
- The perinatal mortality rate indicates the risk to viable foetuses of being stillborn or of death before 29 days of age. It is defined as the number of stillbirths and neonatal deaths per 1,000 total births. There has been a steady decline in the total perinatal mortality rate in the past ten years from 12.2 deaths per 1,000 births in 1983 to 8.2 in 1993.
- The main causes of perinatal death in Australia in recent years were hypoxia, birth asphyxia and other respiratory conditions, as well as congenital anomalies including spina bifida and anencephalus.
- The perinatal mortality rate reflects standards of obstetric and paediatric care as well as the effectiveness of social measures and public health actions. These include the use of ultrasonography to detect problems such as anencephalus and promoting the use of folate to prevent the occurrence of spina bifida.

For more information, see:

ABS *Perinatal Deaths, Australia.* Cat. No. 3304.0.

Lancaster P, Huang J & Pedisich E (1994) *Australia's mothers and babies 1991.* AIHW Perinatal statistics series No 1. Sydney: National Perinatal Statistics Unit.

Infant mortality rate: number of infant deaths per 1,000 live births



	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993
Males	10.5	10.5	11.0	10.0	9.9	9.7	8.8	9.1	7.9	7.9	6.9
Females	8.7	7.9	8.7	7.7	7.4	7.5	7.1	7.2	6.3	6.0	5.3
Total	9.6	9.2	10.0	8.8	8.7	8.7	8.0	8.2	7.1	7.0	6.1

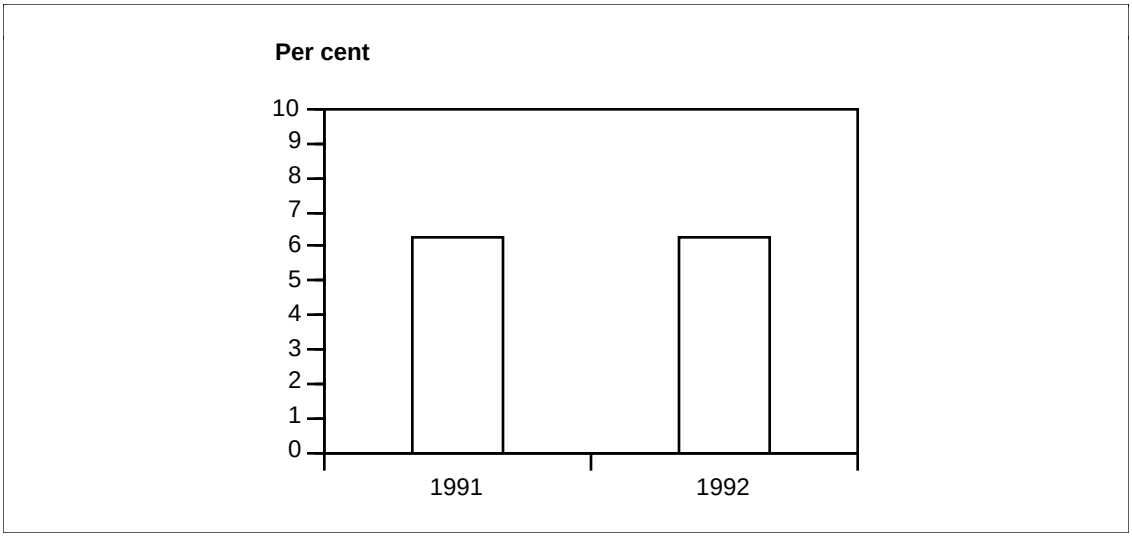
Source: ABS Cat. No. 3302.0

- The infant mortality rate is the number of deaths among infants in the first 12 months of life per 1,000 live births in a given year. It is used internationally as a key indicator of the hygiene and health conditions prevailing in a community.
- In the ten years since 1983, the infant mortality rate declined from 9.6 to 6.1 per 1,000 live births.
- The infant mortality rate is usually divided into two major components: one covering the first four weeks of life (neonatal period) and the other covering the remaining period to the end of the first year of life (postneonatal).
- Neonatal deaths result mainly from maternal and foetal conditions arising prenatally, around the time of birth, or soon after birth, including preterm birth and congenital malformations.
- Postneonatal deaths result mostly from infections, respiratory disorders, accidents and, in the past 30 years, from deaths ascribed to the sudden infant death syndrome (SIDS or cot death).
- Since 1991, reductions in the number of deaths from SIDS have made a major contribution to the recent improvement in infant mortality. Between 1983 and 1990, the SIDS mortality rate was relatively constant at about two deaths per 1,000 live births. Following a community-based campaign to reduce the population risk factors for SIDS, the mortality rate has been halved to one death per 1,000 births in 1993 (see *Sudden infant death syndrome mortality rate per 100,000 live births* on page 25).

For more information, see:

ABS *Deaths, Australia* and *Causes of death, Australia.* Cat. Nos. 3302.0 and 3303.0.

Proportion of infants weighing less than 2,500 grams at birth



	1991	1992
Number of low birthweight infants	16,272	16,489
% of total live births	6.3	6.3

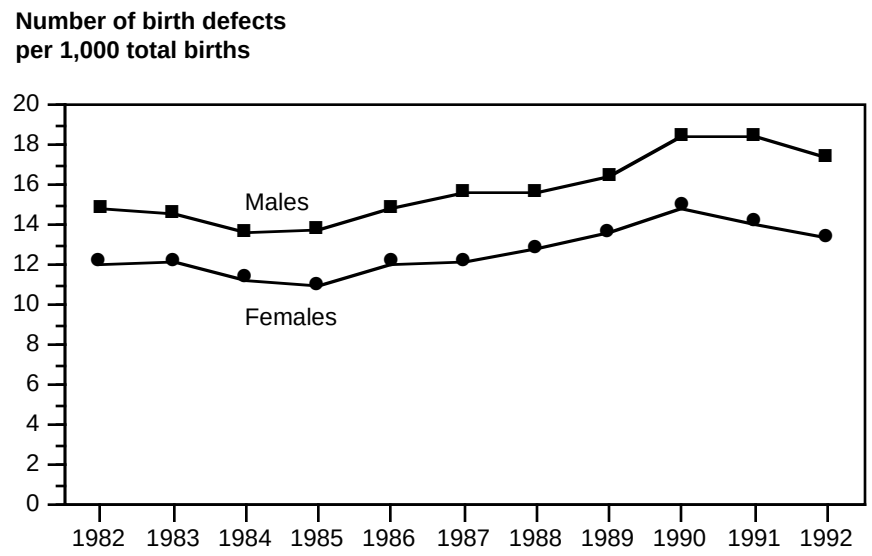
Source: AIHW National Perinatal Statistics Unit.

- Birthweight is an important indicator of the many factors involved in the social and biological processes leading to birth. It is a good indicator of the risk of infant morbidity and mortality.
- Birthweight data have only recently become available at the national level. Infants are classified as low birthweight if they weigh less than 2,500 grams at birth. About 6% of all births in Australia were classified as low birthweight in 1991 and 1992.
- The risk factors for low birthweight are well known and include maternal age and parity, socioeconomic status, multiple births, cigarette smoking, alcohol consumption and the nutritional status of pregnant women. These last three risk factors are all potentially avoidable with appropriate preventive public health programs.
- In 1991, low birthweight was more likely in the babies of the youngest and oldest mothers, those having their first babies, single mothers and those in public accommodation in hospital.
- Low birthweight infants are more likely to suffer from physical and neurological complications than normal weight infants. This disadvantage does not seem to abate as the children get older. These children may have increased health problems at early school age. Such problems include a higher risk of behaviour problems, asthma and lower IQ scores particularly amongst children whose birthweight was less than 1,000 grams.

For more information, see:

Lancaster P, Huang J & Pedisich E (1994) *Australia's mothers and babies 1991.* AIHW Perinatal statistics series No 1. Sydney: National Perinatal Statistics Unit.

Major birth defect (congenital malformation) rate per 1,000 total births



	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
Males	14.8	14.6	13.6	13.8	14.8	15.6	15.6	16.4	18.4	18.4	17.4
Females	12.1	12.2	11.3	11.0	12.1	12.2	12.8	13.6	14.9	14.1	13.4
Total[(a)]	13.5	13.5	12.5	12.5	13.5	14.0	14.3	15.1	16.8	16.4	15.5

(a) Includes cases where sex could not be determined.

Source: AIHW National Perinatal Statistics Unit.

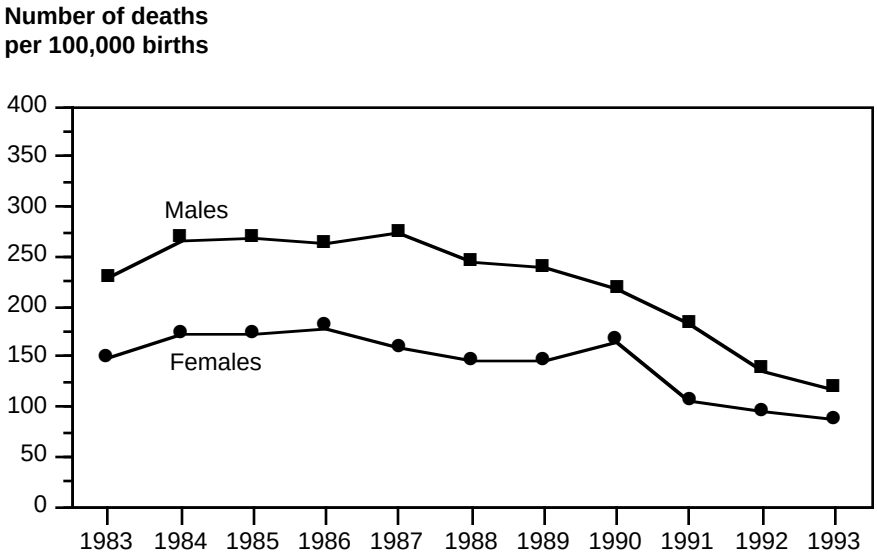
- Congenital malformations are structural or anatomical abnormalities that are present at birth. The figures presented here refer only to major malformations diagnosed soon after birth.
- Congenital malformation rates are expressed per 1,000 total births (stillbirths and live births combined). These births include foetuses and infants who reached at least 20 weeks gestation or had a birthweight of at least 400 grams.
- The reported incidence of congenital malformations has increased since the mid-1980s. Between 1982 and 1986, the rate ranged between 12.5 and 13.5 cases per 1,000 total births. By contrast, in the period from 1987 to 1992 the rate has ranged between 14.0 and 16.8 cases per 1,000 total births.
- The increasing rate of major congenital malformations in the late 1980s reflects improving ascertainment by new birth defect registers in some States and Territories.

For more information, see:

AIHW National Perinatal Statistics Unit. *Congenital malformations monitoring report* and *Congenital malformations, Australia.* Sydney: National Perinatal Statistics Unit.

Lancaster P, Huang J & Pedisich E (1994) *Australia's mothers and babies 1991.* AIHW Perinatal statistics series No. 1. Sydney: National Perinatal Statistics Unit.

Sudden infant death syndrome mortality rate per 100,000 live births



	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993
Males	228.8	267.1	268.9	263.4	273.8	243.2	239.7	218.2	182.2	136.4	117.5
Females	149.1	171.6	172.6	178.9	158.4	145.9	144.7	165.5	106.2	94.9	86.1
Total	190.0	220.5	222.0	222.3	217.7	195.8	193.3	192.7	145.1	116.2	102.2

Note: Sudden infant death syndrome is classified according to the International Classification of Diseases (ICD-9) Code: 798.0.

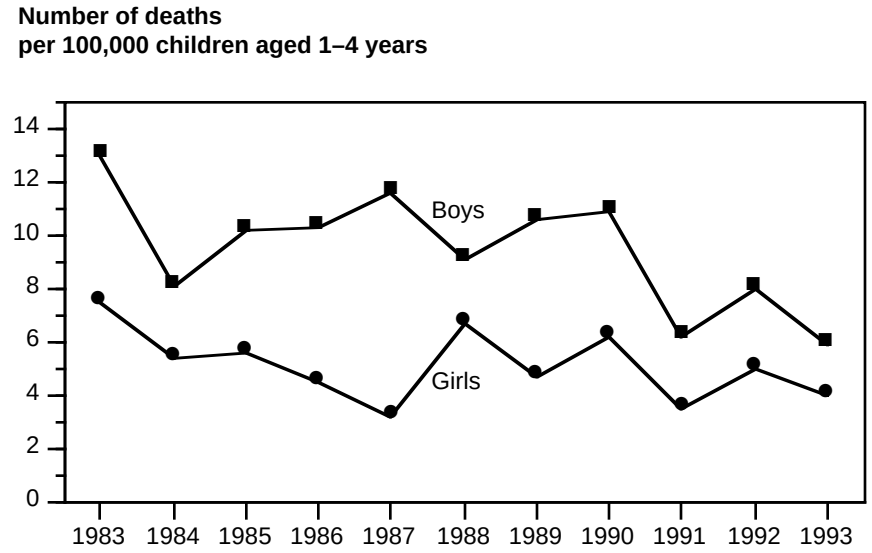
Source: Estimates based on data derived from AIHW Mortality Database.

- Sudden infant death syndrome (SIDS), has been the major cause of infant death in the postneonatal period for the past 25 years in Australia. SIDS is defined as the sudden and unexpected death of an infant where the death remains unexplained despite complete post mortem examination.
- In 1983, the SIDS mortality rate was 229 male deaths and 149 female deaths per 100,000 live births. In 1993, the mortality rate had fallen to 118 male and 86 female deaths per 100,000 live births.
- Although the reasons for the fall cannot be definitely established, most public health workers stress the role played by a national prevention campaign begun in the early 1990s.
- The national campaign aims to reduce the risk of cot death. The campaign targets four factors known to affect the risk of SIDS and encourages parents and carers of newborn infants to
  - — place babies to sleep on their side or back (unless there are medical reasons for placing babies to sleep on their stomach);
  - — breast-feed babies rather than bottle feed them;
  - — ensure that babies are never exposed to cigarette smoke; and
  - — ensure that babies do not get too hot.

For more information, see:

ABS *Deaths, Australia* Cat No. 3302.0

Death rate for accidental drowning per 100,000 children aged 1–4 years



	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993
Boys	13.0	8.1	10.2	10.3	11.6	9.1	10.6	10.9	6.2	8.0	5.9
Girls	7.5	5.4	5.6	4.5	3.2	6.7	4.7	6.2	3.5	5.0	4.0
Total	10.3	6.8	7.9	7.4	7.5	7.9	7.7	8.6	4.8	6.5	5.0

Note: Accidental drowning is classified according to the International Classification of Diseases (ICD-9) External Cause Code: E910.

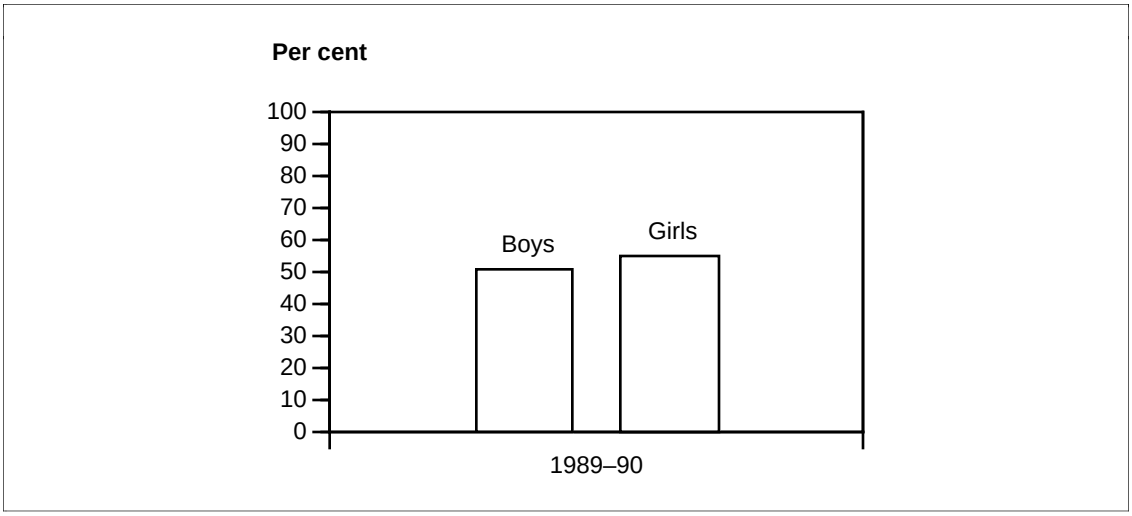
Source: AIHW National Injury Surveillance Unit.

- Accidental drowning is the leading cause of death among children aged 1–4 years. In 1993, there were 51 drownings in this age group. Although still high, the death rate from drowning has declined by an average 7.0% per year since 1983.
- Boys are at higher risk than girls. In 1993, the rate of accidental drowning among 1–4 year old boys was 5.9 per 100,000 compared with 4.0 for girls.
- Accidental drowning is a preventable cause of death. Twenty five of the 51 cases registered in 1993 occurred in a swimming pool. A review of child drowning in children aged 0–15 years in NSW found that almost half of the 61 deaths reported for the period 1987–1990 occurred in domestic swimming pools and that 25 of these were in inadequately fenced pools.
- There has been an increase in the incidence of near-drowning since the 1970s. Most young children surviving a near-drowning are unaffected by the experience. However, it can cause severe disability in a minority of cases. A follow-up study of 39 young children surviving near-drowning found that six of the 39 survivors developed quadriplegia whilst another five later had learning or motor coordination problems although they had appeared normal at discharge.

For more information, see:

Harrison JE & Cripps RA (eds) (1994) *Injury in Australia—An epidemiological review.* Canberra: AGPS.

Proportion of 0–6 year olds fully immunised for vaccine preventable diseases (%)



	1989–90
Boys	51.1
Girls	54.8
Total	52.9

Note: Information provided by respondents in the 1989–90 National Health Survey was obtained from immunisation records or cards in slightly less than 50% of cases. Includes immunisations for diphtheria, tetanus, whooping cough, polio, measles and mumps.

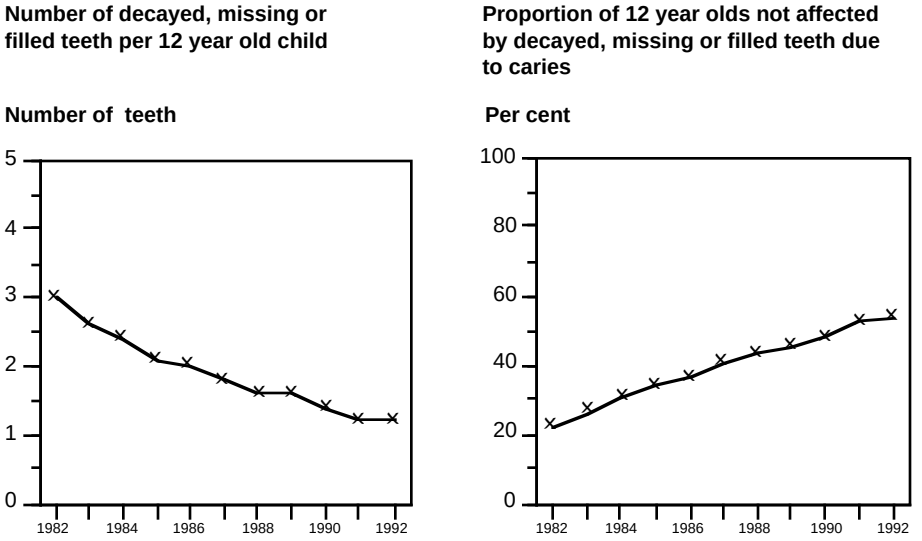
Source: ABS 1989–90 National Health Survey.

- Immunisation against diphtheria, tetanus, whooping cough, polio, rubella, measles and mumps is an effective public health intervention which has significantly reduced the morbidity and mortality arising from these childhood diseases.
- In 1989–90, only 53% of young Australians aged between 0 and 6 years were fully immunised. The true levels of full immunisation may be lower than this as around half the respondents in the survey were not able to produce immunisation records.
- Failure to immunise may result from parental fear of adverse reactions, ignorance about disease risks, transport problems and long clinic waits, or insufficient emphasis placed on the need to immunise by health professionals.
- To be fully immunised, children need to attend a clinic or visit a doctor for immunisation purposes on at least six occasions at 2, 4, 6, 12, 18 and 60 months of age. In Australia, immunisation of children up to 12 months is probably good but may be poor after that age.
- To encourage immunisation uptake and to reduce associated risk of illness, the NHMRC has recommended a system requiring evidence of immunisation prior to entry in child care and school. Although non-immunised children would not be excluded, they could be identified and excused from attending during an outbreak.

For more information, see:

NHMRC (1994) *The Australian immunisation procedures handbook.* 5th ed. Canberra: AGPS.

Mean DMFT score and decay free rate in 12 year old children



	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
Mean DMFT scores	3.0	2.6	2.4	2.1	2.0	1.8	1.6	1.6	1.4	1.2	1.2
Decay free rates (%)	22.2	26.3	30.5	34.6	36.5	40.6	43.2	45.1	48.0	52.5	53.8

Notes: 1. DMFT score refers to the number of teeth affected by decay, missing due to decay, or filled due to decay.

2. Decay free rate refers to the proportion of 12 year old children with a DMFT score of zero.

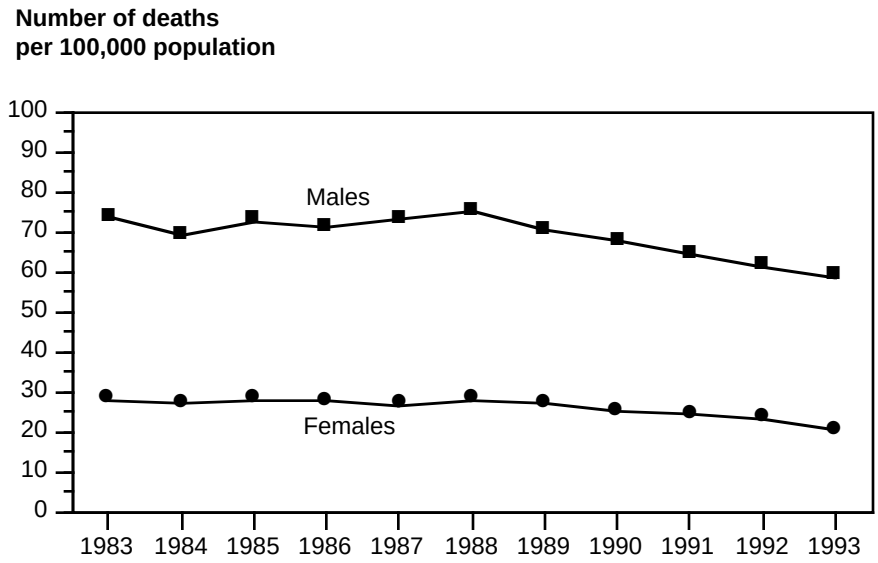
Source: AIHW Dental Statistics Research Unit.

- Oral health in children is most commonly assessed by their dental caries (decay) experience. The DMFT score is the sum of the number of teeth affected by decay including teeth which are either filled or missing due to decay. It provides an index for comparison of tooth decay experience over time and allows for both national and international comparisons of dental disease.
- The rapid decline in mean DMFT scores for 12 year olds reflects the dramatic improvements in the dental health of Australian children over the last 15 years. In 1992, twelve year old children experienced an average of one decayed tooth compared with three in 1982.
- The corresponding increase in the proportion of children with no decay experience indicates that the majority of children now enjoy good dental health. In 1992, 54% of 12 year olds experienced no tooth decay compared with 22% in 1982.
- The decrease in tooth decay in children is partly attributable to increased use of preventive practices and treatment strategies within both community dental practice and school dental services, and to the increasing use of fluoridation in various forms.

For more information, see:

AIHW (1994) *Australia's health 1994: the fourth biennial report of the Australian Institute of Health and Welfare.* Canberra: AGPS.

Death rate for all causes of injury per 100,000 population



	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993
Males	73.8	68.9	72.6	71.2	73.2	75.0	70.4	67.7	64.1	61.3	58.6
Females	28.0	27.1	27.9	27.6	26.6	28.0	26.9	25.2	24.4	23.3	20.2
Total	50.4	47.6	50.0	49.2	49.6	51.1	48.3	46.1	43.9	42.0	39.0

Notes: 1. Injuries are classified according to the International Classification of Diseases (ICD-9) External Cause Codes: E800–E899. Codes referring to medical misadventure, complications of care etc. have been omitted from this table. These include ICD-9 External Cause Codes: E870–E879, E930–E949.

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

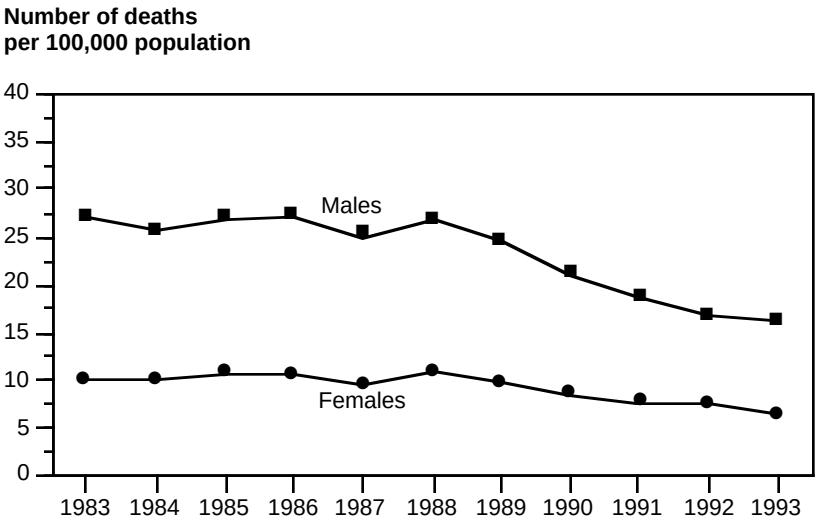
Source: AIHW National Injury Surveillance Unit.

- Injury is a leading cause of both morbidity and mortality in Australia. In 1993, injury accounted for 6% of all deaths. Although other leading causes of death such as cardiovascular disease and cancer occur primarily in older people, mortality due to injury is more evenly distributed among all age groups. It accounts for about half of all deaths at ages 1–39 years.
- Although the death rate from most forms of injury fell over the last decade, much of the decline occurred between 1988 and 1993. The age-adjusted death rates for the total population were unchanged at about 50 deaths per 100,000 population in 1983 and 1988 compared with 39 in 1993.
- Death rates for males have been consistently higher than for females. In 1993, there were 58.6 male and 20.2 female deaths per 100,000 population from injury.
- In 1993, road deaths, child drowning, falls and burns in the elderly, homicide and suicide accounted for 75% of male and 80% of female injury deaths.

For more information, see:

Harrison JE & Cripps RA eds (1994). Injury mortality—Australia 1992. *Australian injury prevention bulletin*. Issue 6. Adelaide: AIHW National Injury Surveillance Unit.

Death rate for road vehicle accidents per 100,000 population



	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993
Males	27.2	25.8	27.0	27.3	25.1	26.9	24.4	21.2	18.7	16.7	16.2
Females	10.1	10.0	10.8	10.6	9.7	10.9	9.8	8.6	7.5	7.4	6.4
Total	18.6	17.7	18.8	18.9	17.3	18.8	17.0	14.8	13.0	12.0	11.2

Notes: 1.Road vehicle accidents are classified according to the International Classification of Diseases (ICD-9) External Cause Codes: E810–819, E826–829.

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

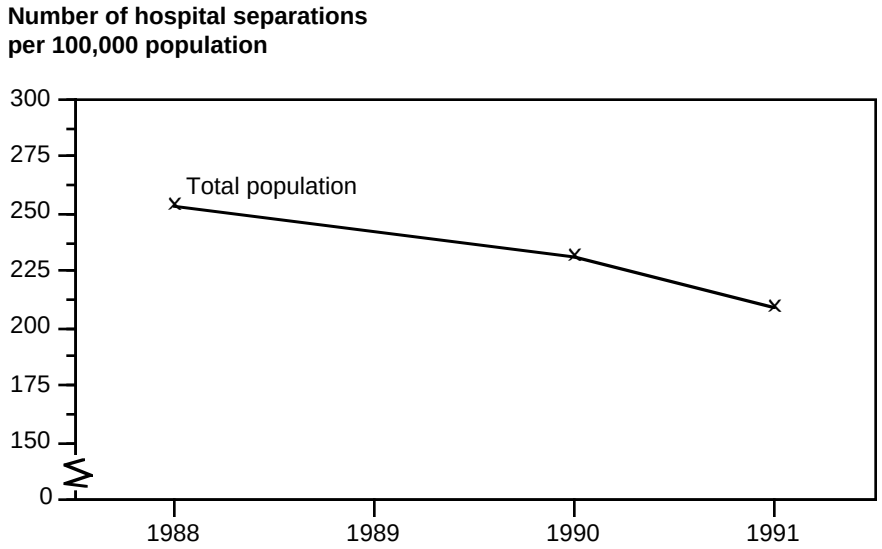
Source: AIHW National Injury Surveillance Unit.

- For most of this century, road deaths have accounted for a large proportion of injury deaths in Australia. Fatality rates rose steeply during the 1950s and 1960s, peaking in 1970. Since then, death rates have declined considerably despite an increase in the average amount of road travel per person.
- Between 1983 and 1993, the road accident death rate for the total population fell from an age-adjusted level of 18.6 deaths per 100,000 to 11.2.
- However, much of the decline occurred between 1988 and 1993. During that time, the male rate fell from 26.9 to 16.2 deaths and the female death rate fell from 10.9 to 6.4 deaths per 100,000 population.
- Despite significant falls in the male death rate, mortality from road vehicle accidents was the leading cause of death among 15 to 24 year old males in 1993.
- The improvement in the death rates can be attributed to a range of interventions designed to improve road safety. These include better road design, lower speed limits, compulsory use of seat-belts and helmets, and more stringent controls on driving while under the influence of alcohol. The recent economic recession is also believed to have contributed to the decline in road deaths since 1988.

For more information, see:

O'Connor PJ (1995) *Road injury in Australia, 1991.* Adelaide: AIHW National Injury Surveillance Unit.

Hospital separation rate for road vehicle accidents per 100,000 population



	1988	1990	1991
Males	na	na	276.9
Females	na	na	139.2
Total	253.6	231.0	208.6

na Data not available

Notes: 1. Road vehicle accidents are classified according to the International Classification of Diseases (ICD-9) External Cause Codes: E810–819, E826.

2. Hospital separation rates were age-adjusted using the total Australian population as at 30 June 1991.

Source: AIHW National Injury Surveillance Unit.

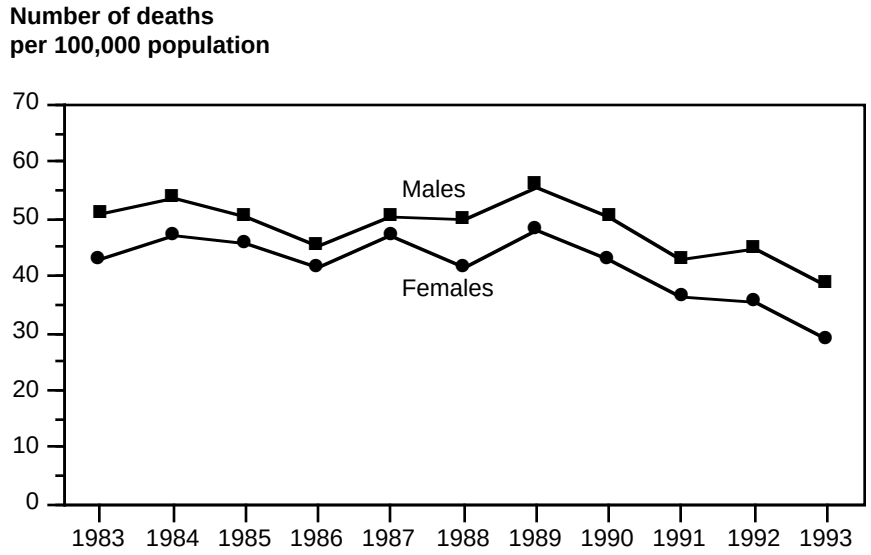
- This indicator provides a measure of the level of severe non-fatal road injury, although it counts hospital inpatient episodes rather than injury events.
- The age-adjusted road injury hospital separation rate fell by 8.9% between 1988 and 1990, and by 9.7% between 1990 and 1991. This almost certainly reflects reductions in the incidence of road injury, as road vehicle death rates fell by 21.3% and 12.2% during those periods (see *Death rate for road vehicle accidents per 100,000 population* on page 30). However, other factors such as changes in hospital admission practices and changes in data reporting may have also affected road injury hospital separation rates.
- The level of economic activity affects the extent of travel in the community and it is generally believed that the recent economic recession has contributed to the decline in road injury.

For more information, see:

O'Connor PJ (1995) *Road injury in Australia, 1991.* Adelaide: AIHW National Injury Surveillance Unit.

Harrison JE & Cripps RA (eds) (1994) *Injury in Australia—An epidemiological review.* Canberra: AGPS

Death rate for falls among people aged 65 years and over per 100,000 population



	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993
Males	50.9	53.4	50.4	45.1	50.4	49.9	55.7	50.3	42.9	44.7	38.4
Females	42.9	46.9	45.6	41.3	47.1	41.3	47.9	42.9	36.3	35.3	28.8
Total	45.5	49.4	47.2	43.0	49.0	44.8	51.1	45.4	38.9	39.1	32.3

Notes: 1. Accidental falls are classified according to the International Classification of Diseases (ICD-9) External Cause Codes: E880–E888.

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

Source: AIHW National Injury Surveillance Unit.

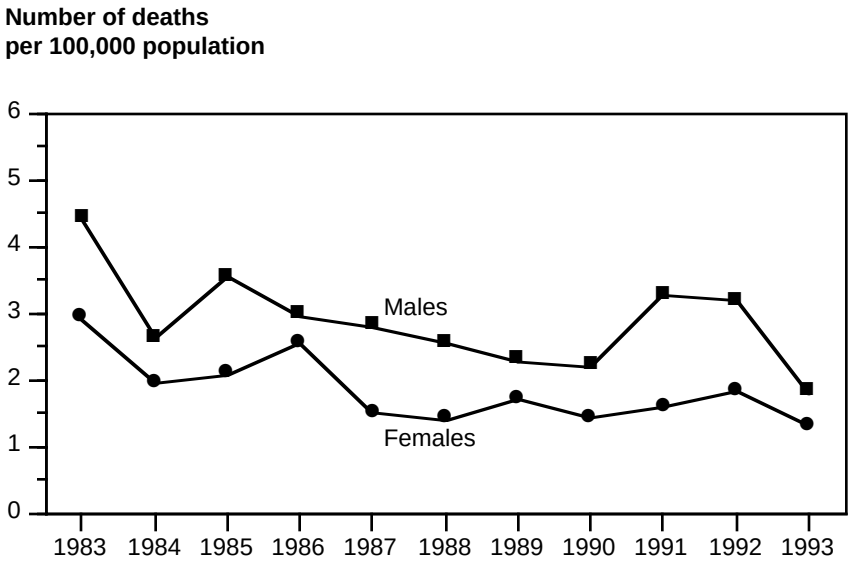
- Approximately one-third of older people living in the community have falls each year. Although most falls do not result in injuries that require hospital care, falls accounted for 4% of all hospital separations in persons aged 65 years and over in 1991–92.
- Death rates for falls at ages 65 and over declined in the period from 1983 to 1993. However, much of the change occurred during the 1990s.
- A large proportion of all deaths from external causes in old age result from the consequences of falls. The proportion rises with age, from about 15% of deaths from external causes among people aged 65–69 years, to about 75% at age 85 years and over.

For more information, see:

Harrison JE & Cripps RA (1994) *Injury in Australia—An epidemiological review*. Canberra: AGPS.

Harrison JE & Cripps RA (eds) (1994) Injury mortality—Australia 1992. *Australian injury prevention bulletin* Issue 6. Adelaide: AIHW National Injury Surveillance Unit.

Death rate for accidents due to fire, burns and scalds among people aged 55 years and over per 100,000 population



	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993
Males	4.4	2.6	3.5	3.0	2.8	2.5	2.3	2.2	3.3	3.2	1.8
Females	2.9	1.9	2.1	2.5	1.5	1.4	1.7	1.4	1.6	1.8	1.3
Total	3.5	2.3	2.7	2.8	2.1	1.9	1.9	1.8	2.3	2.4	1.5

Notes: 1. Accidents due to fire, burns and scalds are classified according to the International Classification of Diseases (ICD-9) External Cause Codes: E890–E899, E 924.0, E924.8, E924.9.

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

Source: AIHW National Injury Surveillance Unit.

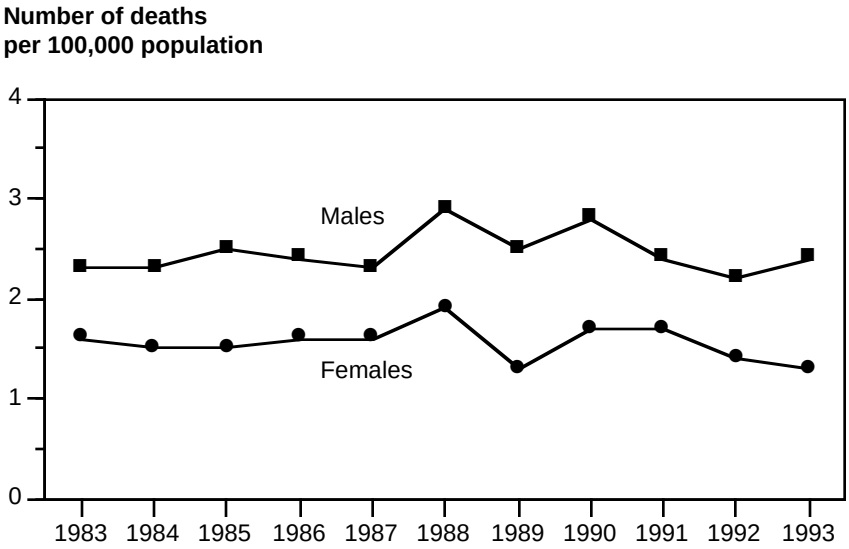
- The age-adjusted death rate for accidents due to fire, burns and scalds among people aged 55 years and over was 1.5 per 100,000 population in 1993, compared with a rate of 3.5 per 100,000 population in 1983.
- Death rates have declined for both males and females during the period 1983 to 1993: from 4.4 to 1.8 deaths per 100,000 males and from 2.9 to 1.3 deaths per 100,000 females.
- Accidents due to fire, burns and scalds account for a relatively small proportion of injury deaths, but a proportion that increases after middle age. Overall, about 2% of external causes of death are attributed to fire, burns and scalds. This proportion rises to 3% among people aged 55 years and over, and to 4% at ages 85 years and over.

For more information, see:

Harrison JE & Cripps RA (eds) (1994) *Injury in Australia—An epidemiological review.* Canberra: AGPS.

Harrison JE & Cripps RA (eds) (1994) Injury mortality—Australia 1992. *Australian injury prevention bulletin* Issue 6. Adelaide: AIHW National Injury Surveillance Unit.

Death rate for homicide and injury purposely inflicted by other persons per 100,000 population



	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993
Males	2.3	2.3	2.5	2.4	2.3	2.9	2.5	2.8	2.4	2.2	2.4
Females	1.6	1.5	1.5	1.6	1.6	1.9	1.3	1.7	1.7	1.4	1.3
Total	2.0	2.0	2.0	2.0	2.0	2.4	1.9	2.3	2.0	1.8	1.9

Notes: 1. Homicide is classified according to the International Classification of Diseases (ICD-9) External Cause Codes: E960–969.

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

Source: Estimates based on data derived from AIHW Mortality database.

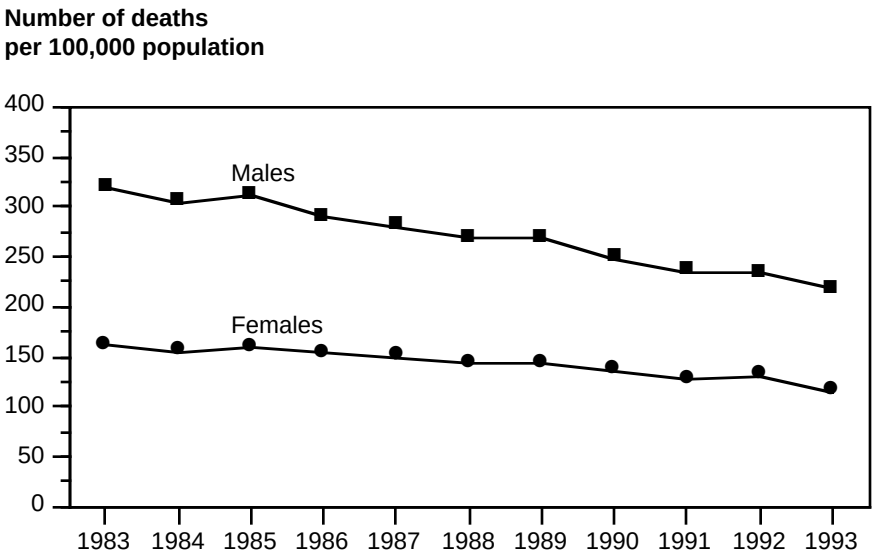
- Between 1983 and 1993, the death rate for homicide remained fairly static in Australia at about two deaths per 100,000 population. Homicide accounted for nearly 5% of all injury-related deaths in 1993.
- Homicide rates for males are almost double those for females. In 1993, the age-adjusted homicide death rate was 2.4 per 100,000 among males and 1.3 per 100,000 among females.
- In 1993, homicide rates were highest in early and middle adult years and lowest in mid-childhood and the elderly, although a number of homicides occur in early childhood. Children aged 0–4 years accounted for nearly 9% of all homicide deaths in 1993.
- Aboriginal people have a much higher death rate from interpersonal violence than non-Aboriginal people, with estimated national death rates of 23 and 16 per 100,000 for males and females in 1990–1992.

For more information, see:

Bennett S et al. (1994) *Mortality surveillance, Australia* 1981–1992. AIHW Mortality surveillance series No. 2. Canberra: AGPS.

Harrison J & Moller J (1994) Injury mortality amongst Aboriginal Australians. *Australian injury prevention bulletin* Issue 7. Adelaide: AIHW National Injury Surveillance Unit.

Death rate for coronary heart disease per 100,000 population



	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993
Males	319.0	304.2	310.2	289.5	280.3	268.3	268.6	248.7	235.4	233.5	217.1
Females	161.2	155.3	159.4	153.5	150.0	142.6	144.1	136.7	127.9	131.0	115.1
Total	229.8	220.0	224.8	213.1	207.2	198.1	198.7	186.2	175.4	176.5	160.2

Notes: 1. Coronary heart disease is classified according to the International Classification of Diseases (ICD-9) Codes: 410–414.

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

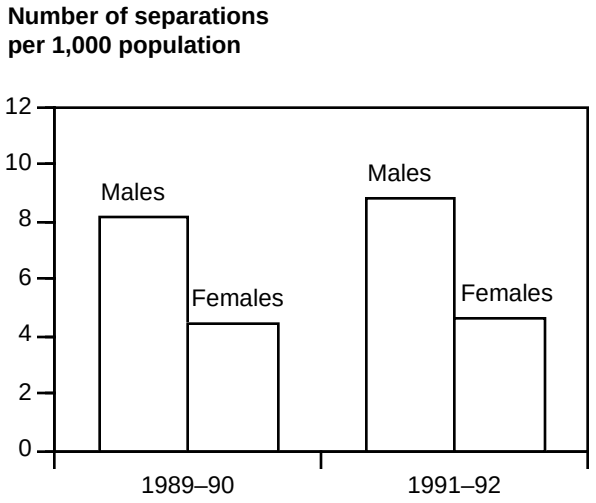
Source: Estimates based on data derived from AIHW Mortality database.

- Coronary heart disease is the single most important cause of death in Australia. In 1993, coronary heart disease accounted for 29,464 deaths in Australia, representing 24% of all deaths in that year.
- Mortality from coronary heart disease has been declining in Australia since the late 1960s. Between 1983 and 1993, the average annual decline in coronary heart disease mortality was 3.8% for males and 3.3% for females. Despite the slightly higher rate of decline in male mortality, the death rate in males is nearly twice that of women.
- Risk factors for coronary heart disease include cigarette smoking, raised blood cholesterol, raised blood pressure, obesity, physical inactivity and diabetes mellitus.
- Reductions in smoking and blood pressure levels and improvements in medical care have contributed to the decline in mortality from coronary heart disease.
- Groups such as Aboriginal and Torres Strait Islander peoples, those on low income, and those with lower education levels have higher rates of coronary heart disease mortality than other Australians.

For more information, see:

d'Espaignet ET (1993) *Trends in Australian mortality—Diseases of the circulatory system, 1950–1991.* AIHW Mortality series No. 2 Canberra: AGPS.

Hospital separation rate for coronary heart disease per 1,000 population



	1989–90			1991–92		
	Public[2]	Private[3]	Total	Public[2]	Private[3]	Total
Males	7.1	1.1	8.2	7.4	1.4	8.8
Females	3.9	0.5	4.4	4.0	0.6	4.6
Total	5.5	0.8	6.3	5.6	1.0	6.6

Notes: 1. Coronary heart disease is classified according to the International Classification of Diseases (ICD-9) Codes: 410–414.
2. Public hospitals included Department of Veterans' Affairs (Repatriation) hospitals.
3. Private hospital figures were estimated from NSW, QLD, WA and SA data.

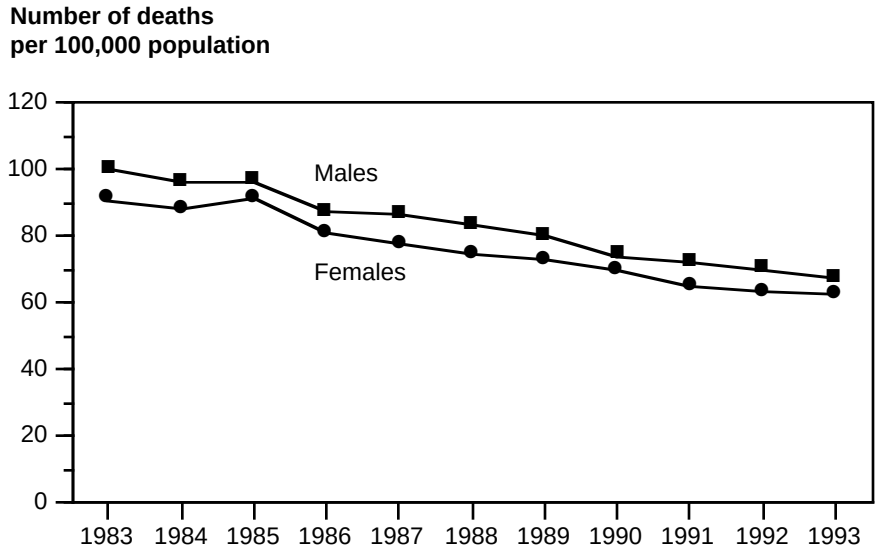
Sources: AIHW Hospital utilisation and costs studies: 1989–90; 1991–92.

- In 1991–92, coronary heart disease accounted for approximately 3% of all hospital inpatient episodes. In the period 1989–90 to 1991–92, there was a small increase in the separation rate for coronary heart disease. The trend was consistent with the overall increase in hospital separation rate (see *Acute care hospital separation rate per 1,000 population* on page 97).
- Increased hospitalisation may reflect changes in the treatment of heart disease because complex interventions such as coronary artery bypass surgery and angioplasty are becoming more readily available.
- The increase in hospitalisation may also reflect changes in diagnostic practices, as conditions now designated as coronary heart disease may previously have been more generally described, or diagnosed as non-cardiac.

For more information, see:

AIHW (1994) *Australia's health 1994: the fourth biennial report of the Australian Institute of Health and Welfare.* Canberra: AGPS.

Death rate for stroke per 100,000 population



	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993
Males	100.2	96.2	96.5	87.6	86.4	83.1	80.4	74.1	72.3	70.2	67.5
Females	91.0	88.3	91.3	80.7	77.7	74.5	72.9	69.5	64.9	63.1	62.4
Total	95.9	92.8	94.6	84.5	82.3	78.8	76.9	72.5	68.8	66.9	65.3

Notes: 1. Stroke is classified according to the International Classification of Diseases (ICD-9) Codes: 430–438.

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

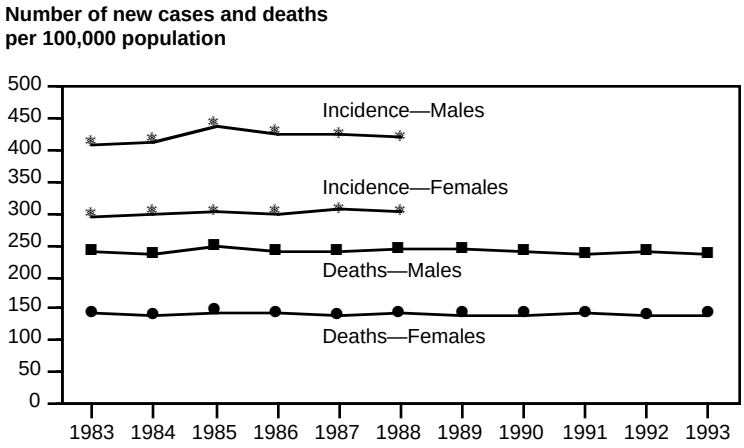
Source: Estimates based on data derived from AIHW Mortality database.

- Stroke (cerebrovascular disease) is the second most important cause of death in Australia after coronary heart disease. In 1993, stroke killed 65 per 100,000 persons in Australia. These deaths represented nearly one in four of all deaths attributed to diseases of the cardiovascular system. Most of these deaths occurred to people aged 75 years and over.
- Between 1983 and 1993, death rates for stroke declined by an average 3.8% per year for both males and females.
- Risk factors for stroke, like those for coronary heart disease, include high blood pressure, cigarette smoking, raised blood cholesterol and triglyceride levels, obesity, physical inactivity and diabetes mellitus.
- Non-fatal stroke is responsible for considerable levels of illness and disability among survivors. A stroke often damages parts of the brain responsible for speech and mobility.

For more information, see:

d'Espaignet ET (1993) *Trends in Australian mortality—Diseases of the circulatory system 1950–1991.* AIHW Mortality series No. 2 Canberra: AGPS.

Incidence and death rate for all cancers per 100,000 population



	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993
Incidence rates											
Males	408.6	415.0	438.0	426.4	425.2	421.2	na	na	na	na	na
Females	295.3	299.4	303.7	300.8	305.9	302.5	na	na	na	na	na
Total	339.2	343.7	356.0	349.3	352.0	348.9	na	na	na	na	na
Death rates											
Males	239.3	234.1	246.4	238.8	238.3	242.5	241.5	238.1	234.8	238.2	235.5
Females	141.2	139.2	144.5	143.2	139.2	142.1	140.8	140.7	142.7	139.4	141.0
Total	181.2	178.1	186.0	182.3	180.0	183.4	182.3	180.9	181.0	180.8	180.2

na Data not available

Notes: 1. Cancers are classified according to the International Classification of Diseases (ICD-9) Codes: 140–208. Incidence rates do not include non-melanocytic skin cancers ICD-9 Code: 173.

2. The incidence and death rates were age-adjusted using the total Australian population as at 30 June 1991.

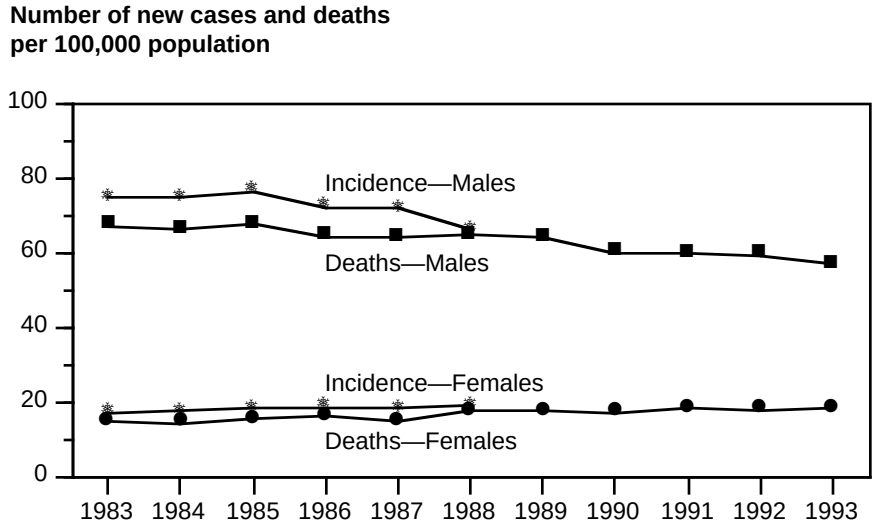
Sources: Incidence data from AIHW National Cancer Statistics Clearing House; mortality data derived from AIHW Mortality database.

- Cancers are the second most important group of causes of death in Australia after cardiovascular diseases. In 1993, cancer accounted for 27% of all deaths in Australia. Death rates for all cancers combined have remained relatively unchanged over the last decade with death rates rising for some cancers and falling for others (see following indicators for specific cancers).
- Incidence rates of cancer appear to have stabilised in the recent past at about 350 new cases per 100,000 population.
- The major types of cancer causing death among men are lung, colorectal and prostate cancers. For women, the major types are breast, colorectal and lung cancers. Cancer of the brain and central nervous system and lymphatic leukemia are the major causes of cancer death among children.

For more information, see:

Australian Institute of Health and Welfare & Australasian Association of Cancer Registries (1994) *Cancer in Australia 1986–1988.* Canberra: AGPS.

Incidence and death rate for cancer of the trachea, bronchus and lung per 100,000 population



	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993
Incidence rates											
Males	74.9	74.7	76.5	72.3	71.7	66.1	na	na	na	na	na
Females	17.2	17.8	18.3	18.6	18.4	19.0	na	na	na	na	na
Total	42.7	42.8	43.6	41.8	41.7	39.7	na	na	na	na	na
Death rates											
Males	67.3	65.9	67.6	64.4	64.0	65.0	63.9	60.0	59.6	59.4	56.9
Females	14.9	14.5	15.3	16.1	15.0	17.4	17.4	17.2	18.3	17.9	18.5
Total	37.6	36.7	38.0	36.9	36.3	38.0	37.6	35.9	36.4	36.2	35.3

na Data not available

Notes: 1. Cancer of the trachea, bronchus and lung is classified according to the International Classification of Diseases (ICD-9) Code: 162.

2. The incidence and death rates were age-adjusted using the total Australian population as at 30 June 1991.

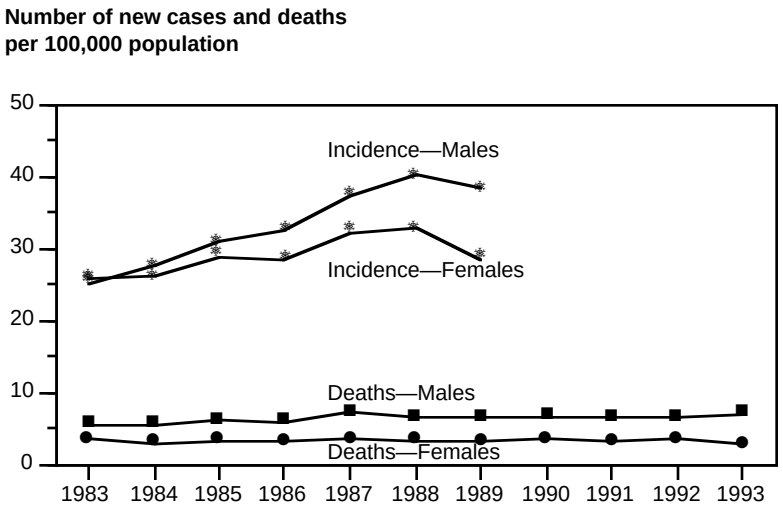
Sources: Incidence data from AIHW National Cancer Statistics Clearing House; mortality data derived from AIHW Mortality database.

- Lung cancer is the commonest cause of cancer death in the Australian population. In 1993, the death rate was 35.3 per 100,000 population. Between 1983 and 1993, the male rates fell by an average 1.7% a year. In contrast, the female rates increased by an average 2.2% a year.
- The mortality trends reflect changes in incidence trends. Males were 4.4 times more likely than females to develop these cancers in 1983 compared with 3.5 in 1988.
- Cigarette smoking is the single most important cause of lung cancer. A particular cause of concern is the increasing level of smoking among teenagers, especially among young women.

For more information, see:

Australian Institute of Health and Welfare & Australasian Association of Cancer Registries (1994) *Cancer in Australia 1986–1988.* Canberra: AGPS.

Incidence and death rate for melanoma per 100,000 population



	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993
Incidence rates											
Males	25.3	27.5	30.8	32.6	37.3	40.2	38.2	na	na	na	na
Females	26.0	26.2	29.0	28.5	32.3	32.8	28.7	na	na	na	na
Total	25.3	26.5	29.4	30.1	34.4	35.9	32.8	na	na	na	na
Death rates											
Males	5.5	5.5	6.1	6.0	7.1	6.6	6.5	6.7	6.5	6.6	7.0
Females	3.5	3.0	3.3	3.2	3.4	3.4	3.1	3.4	3.2	3.6	2.8
Total	4.4	4.2	4.6	4.4	5.0	4.8	4.6	4.9	4.7	4.9	4.7

na Data not available

Notes: 1. Melanoma is classified according to the International Classification of Diseases (ICD-9) Code: 172.

2. The incidence and death rates were age-adjusted using the total Australian population as at 30 June 1991.

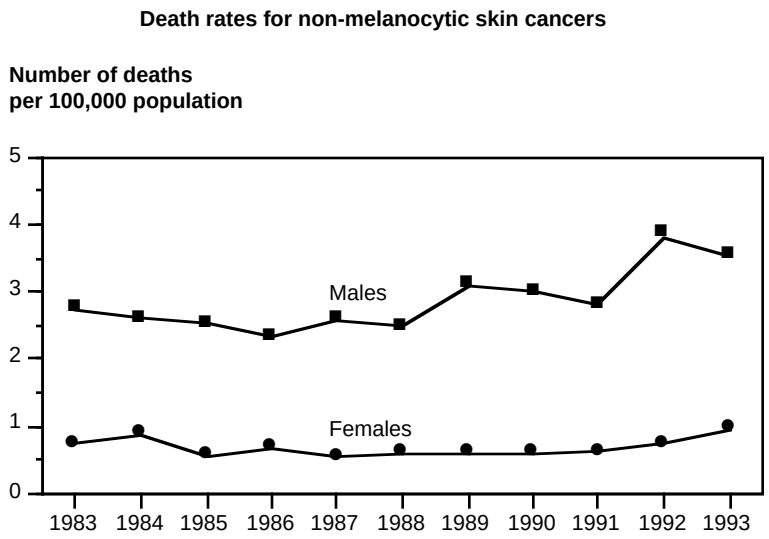
Sources: Incidence data from AIHW National Cancer Statistics Clearing House; mortality data derived from AIHW Mortality database.

- The age-adjusted incidence of melanoma in both males and females increased appreciably between 1983 and 1988. The death rates in men also increased during this period but appear to have stabilised since 1988. Between 1983 and 1993, the female death rates remained relatively stable.
- Sun exposure is the main cause of melanoma in Australians of European background. Exposure in childhood may be particularly important.
- The incidence of melanoma is higher in people with fair, sun-sensitive skin, those with many pigmented naevi or moles on their skin, and those whose pattern of sun exposure has been intermittent as indicated by high recreational exposure or frequent sunburns.

For more information, see:

Australian Institute of Health and Welfare & Australasian Association of Cancer Registries (1994) *Cancer in Australia 1986–1988.* Canberra: AGPS.

Incidence and death rate for non-melanocytic skin cancers per 100,000 population



	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993
Incidence rates											
Males	na	na	944	na	na	na	na	1,187	na	na	na
Females	na	na	714	na	na	na	na	769	na	na	na
Total	na	na	823	na	na	na	na	977	na	na	na
Death rates											
Males	2.7	2.6	2.5	2.3	2.6	2.5	3.1	3.0	2.8	3.8	3.5
Females	0.7	0.9	0.6	0.7	0.5	0.6	0.6	0.6	0.6	0.7	1.0
Total	1.5	1.6	1.3	1.4	1.4	1.4	1.6	1.6	1.5	2.1	2.1

na Data not available

Notes: 1. Non-melanocytic skin cancer is classified according to the International Classification of Diseases (ICD-9) Code: 173.

2. The incidence and death rates were age-adjusted using the total Australian population as at 30 June 1991.

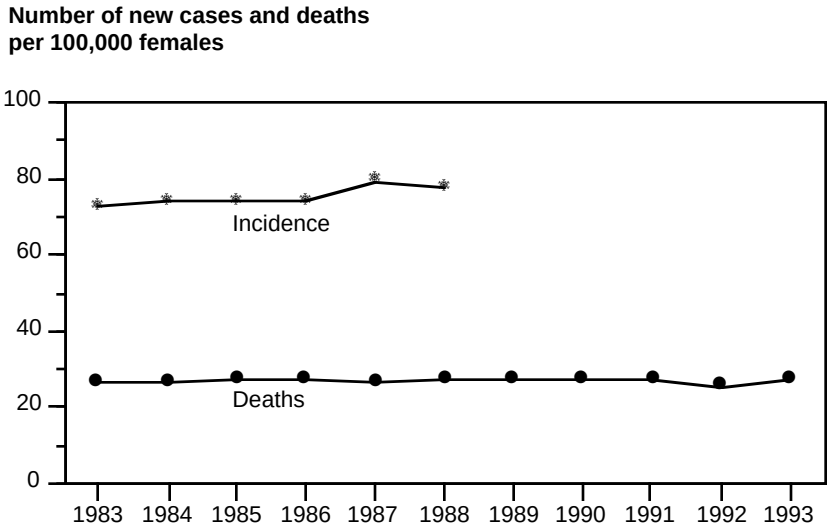
Sources: Incidence data from AIHW National Cancer Statistics Clearing House; mortality data derived from AIHW Mortality database.

- Non-melanocytic skin cancers (NMSC) are the most common cancers in Australia. In males, NMSCs are about 12 times more common than lung cancer and in females about 7.5 times more common than breast cancer.
- Provided NMSCs are treated early, they can usually be cured. Removal is usually simple and often done in doctor's surgeries. Despite this, mortality has increased recently. In 1993, NMSC killed 272 men and 107 women.
- Sun exposure is the main cause of NMSCs. Fair-skinned people who tan poorly are at highest risk. As with melanoma, sun exposure in early life may be particularly important in the development of these cancers.

For more information, see:

Australian Institute of Health and Welfare & Australasian Association of Cancer Registries (1994) *Cancer in Australia 1986–1988.* Canberra: AGPS.

Incidence and death rate for breast cancer per 100,000 females



	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993
Incidence rates											
Females	72.6	73.7	73.8	73.8	78.9	76.9	na	na	na	na	na
Death rates											
Females	26.2	26.3	27.3	26.9	26.5	26.9	27.1	26.9	27.0	25.5	26.9

na Data not available

Notes: 1. Breast cancer is classified according to the International Classification of Diseases (ICD-9) Codes: 174–175.

2. The incidence and death rates were age-adjusted using the total Australian population as at 30 June 1991.

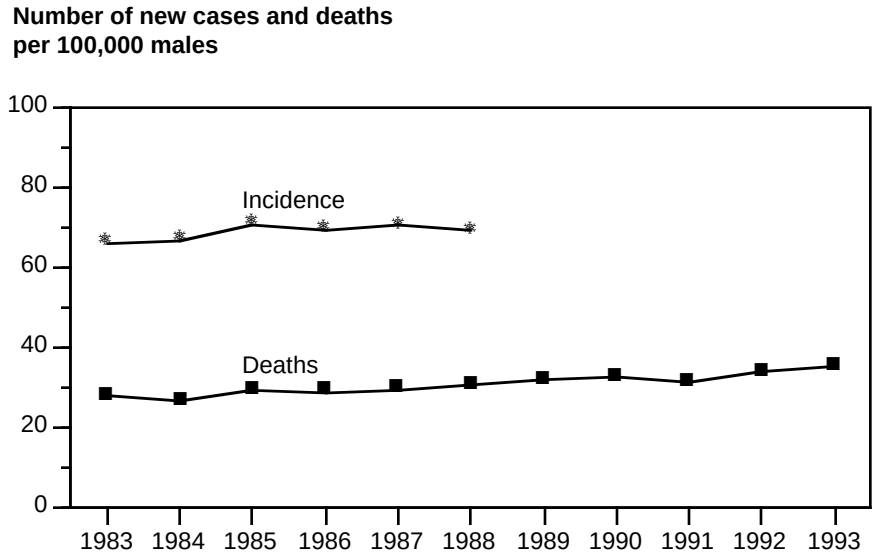
Sources: Incidence data from AIHW National Cancer Statistics Clearing House; mortality data derived from AIHW Mortality database.

- Breast cancer is the second most common cancer in women after NMSC and is the commonest cause of cancer death in women. In 1993, it accounted for 19% of all female cancer deaths.
- The age-adjusted death rates for breast cancer remained fairly constant between 1983 and 1993. However, the number of newly diagnosed cases of breast cancer rose by 6% from 72.6 per 100,000 population in 1983 to 76.9 in 1988.
- A national breast cancer screening program began in 1991. Over the next few years, this will lead to an apparent increase in incidence as cases of breast cancer are diagnosed earlier than they would have been without the screening program. In the longer term, the earlier diagnosis of breast cancer should lead to a fall in mortality.
- The risk of breast cancer is increased in women with a family history of the disease, in those who have never borne a child or whose first full-term pregnancy was later in their reproductive life, in those with a history of benign breast disease, and by exposure to ionising radiation.

For more information, see:

Australian Institute of Health and Welfare & Australasian Association of Cancer Registries (1994) *Cancer in Australia 1986–1988.* Canberra: AGPS.

Incidence and death rate for prostate cancer per 100,000 males



	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993
Incidence rates											
Males	66.0	66.7	70.7	69.4	70.4	69.0	na	na	na	na	na
Death rates											
Males	27.8	26.3	29.2	28.7	29.4	30.5	31.5	32.1	31.2	33.7	35.2

na Data not available

Notes: 1. Prostate cancer is classified according to the International Classification of Diseases (ICD-9) Code: 185.

2. The incidence and death rates were age-adjusted using the total Australian population as at 30 June 1991.

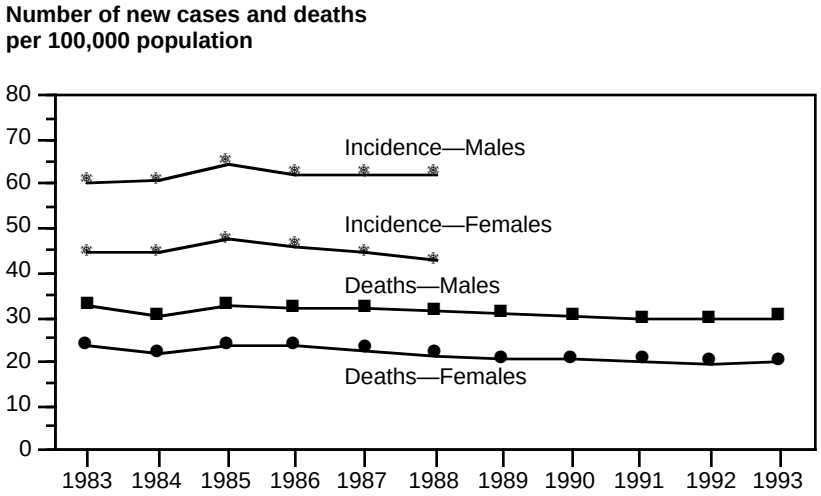
Sources: Incidence data from AIHW National Cancer Statistics Clearing House; mortality data derived from AIHW Mortality database.

- Prostate cancer is the third most common form of cancer among men in Australia. It is now the commonest cancer after non-melanocytic skin cancers in the States of New South Wales, Victoria, Western Australia, South Australia and Tasmania.
- The age-adjusted incidence rate for prostate cancer increased by 4.5% between 1983 and 1988.
- Between 1983 and 1993, the age-adjusted death rate increased by 26% from 27.8 to 35.2 per 100,000 population. This represents an average annual rate of increase of 2.4%.
- The risk of cancer of the prostate increases with age; 95% are detected in men who are 60 years of age or older.

For more information, see:

Australian Institute of Health and Welfare & Australasian Association of Cancer Registries (1994) *Cancer in Australia 1986–1988.* Canberra: AGPS.

Incidence and death rate for colorectal cancer per 100,000 population



	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993
Incidence rates											
Males	60.2	60.7	64.8	62.4	62.0	62.3	na	na	na	na	na
Females	44.5	44.7	47.5	45.9	44.7	42.8	na	na	na	na	na
Total	51.3	51.5	54.9	53.0	52.1	51.2	na	na	na	na	na
Death rates											
Males	32.4	30.0	32.3	31.8	31.8	31.6	30.8	30.3	29.8	29.7	30.0
Females	23.3	21.8	23.6	23.5	22.5	21.4	20.4	20.6	20.3	19.7	20.1
Total	27.1	25.4	27.4	27.1	26.5	25.8	24.8	24.8	24.5	24.0	24.4

na Data not available

Notes: 1. Colorectal cancer is classified according to the International Classification of Diseases (ICD-9) Codes: 153–154.

2. The incidence and death rates were age-adjusted using the total Australian population as at 30 June 1991.

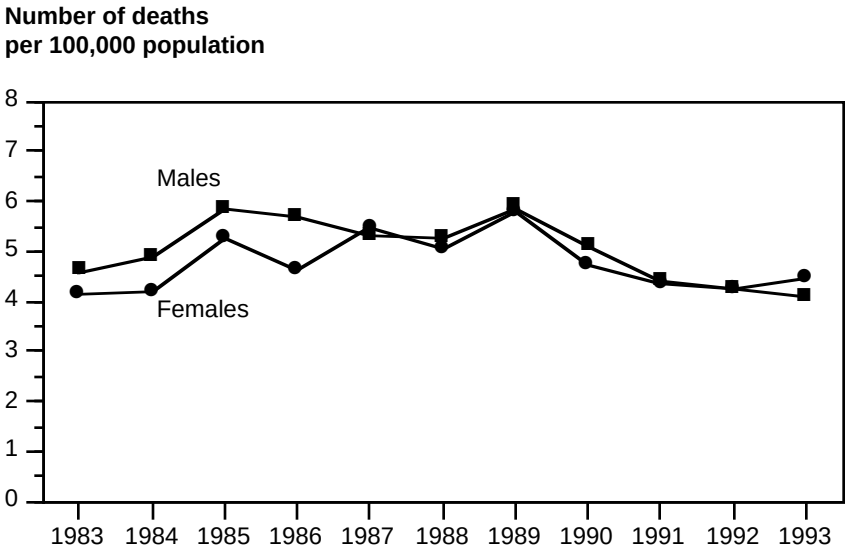
Sources: Incidence data from AIHW National Cancer Statistics Clearing House; mortality data derived from AIHW Mortality database.

- Colorectal cancer affects approximately 4,500 males and nearly 4,000 females each year. Approximately 85% of these cases occur in those aged over 55 years.
- The incidence rate for colorectal cancer has been relatively stable recently with similar levels observed in 1983 and 1988.
- Between 1983 and 1993, the death rates fell by an average 0.8% per year in males. In 1983, the male death rate was 32.4 per 100,000 population compared with 30.0 in 1993. The female death rate fell by an average 1.5% per year during the same time period. In 1983, the female death rate was 23.3 deaths per 100,000 population compared with 20.1 in 1993.
- The risk of colorectal cancer is increased by a family history of the disease, a diet high in fat and low in vegetables, and physical inactivity.

For more information, see:

Australian Institute of Health and Welfare & Australasian Association of Cancer Registries (1994) *Cancer in Australia 1986–1988.* Canberra: AGPS.

Death rate for asthma per 100,000 population



	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993
Males	4.6	4.9	5.9	5.7	5.3	5.3	5.9	5.1	4.4	4.2	4.1
Females	4.1	4.2	5.3	4.6	5.5	5.0	5.8	4.7	4.4	4.2	4.4
Total	4.3	4.5	5.4	5.1	5.3	5.1	5.8	4.9	4.3	4.3	4.3

Notes: 1. Asthma is classified according to the International Classification of Diseases (ICD-9) Code: 493.

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

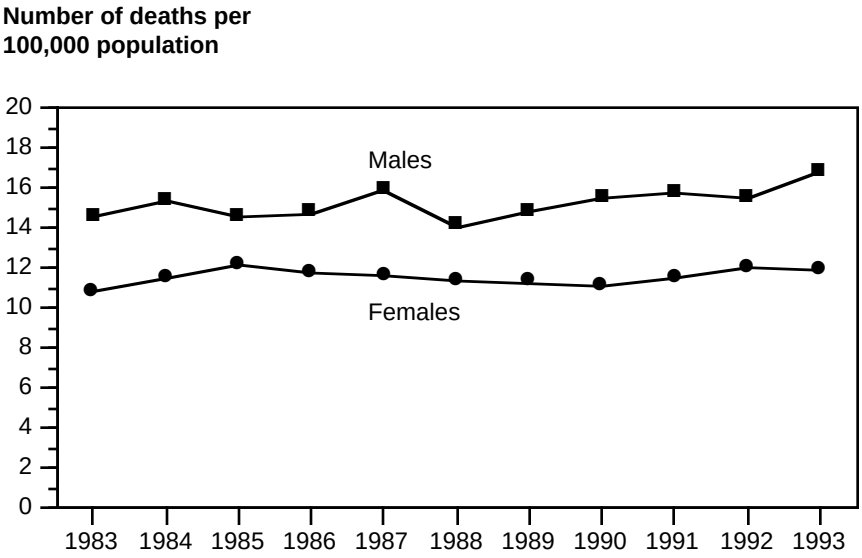
Source: Estimates based on data derived from AIHW Mortality database.

- The prevalence of asthma is difficult to ascertain. However, the results from one Australian study found the prevalence to be between 15 and 20% in children and adolescents and between 6 and 7% in adults. Although more children suffer from the disease than adults, deaths from asthma generally increase with age in both males and females.
- Death rates for asthma between 1983 and 1993 peaked in 1989, but have since fallen back to the levels of the early eighties. For men, the death rate in 1993 was 4.1 per 100,000 and for women, 4.4 per 100,000.
- The National Asthma Campaign, established in 1989, aimed to improve the recognition and management of asthma by informing both the public and health professionals about the disease. The activities of the campaign may have contributed to the recent decline in asthma deaths by raising awareness of the disease.
- It has been estimated that up to 60% of all asthma deaths may be associated with avoidable factors such as exposure to cigarette smoke and to cat and house dust allergens.

For more information, see:

NHMRC (1988) *Asthma in Australia: strategies for reducing morbidity and mortality.* Working party report. Canberra: AGPS.

Death rate for diabetes per 100,000 population



	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993
Males	14.6	15.4	14.6	14.8	15.9	14.1	14.9	15.5	15.8	15.5	16.8
Females	10.9	11.5	12.2	11.8	11.6	11.4	11.3	11.1	11.5	12.0	11.9
Total	12.4	13.1	13.2	13.0	13.4	12.6	12.9	13.0	13.2	13.5	14.0

Notes: 1. Diabetes is classified according to the International Classification of Diseases (ICD-9) Code: 250.

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

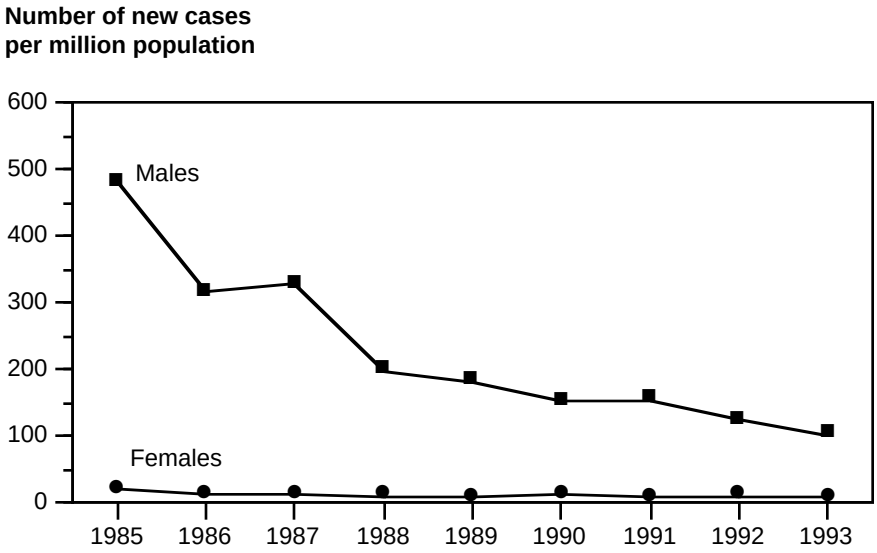
Source: Estimates based on data derived from AIHW Mortality database.

- Mortality from diabetes has been relatively stable over the last decade. Between 1983 and 1993, the male death rate ranged between 14 and 17 deaths per 100,000 and the female death rate between 10 and 12 deaths per 100,000.
- Diabetes affects 2–3% of the adult population, with much higher rates among Aboriginal and Torres Strait Islander peoples.
- Approximately 85% of diabetics have non insulin dependent diabetes mellitus (NIDDM), with one in ten people aged 65 years and over affected by the disease. There is some evidence that the incidence of NIDDM is rising, even after adjusting for improved detection and the ageing of the Australian population.
- There is scope for prevention of NIDDM since its risk factors include potentially modifiable factors such as obesity, diet and physical inactivity.
- People with diabetes have a higher mortality rate than the non-diabetic population. This increase in mortality can be attributed to an increased risk of vascular disease; in particular coronary heart disease and stroke.

For more information, see:

Guest CS & O'Dea K (1992) Diabetes in Aborigines and other Australian populations. *Aust J Public Health* 16: 340–349.

Incidence rate for HIV per million population



	1985[a]	1986	1987	1988	1989	1990	1991	1992	1993
Males	481.4	316.2	329.9	198.7	183.2	153.9	154.4	125.8	103.2
Females	20.0	14.2	13.4	10.9	10.2	11.9	9.6	10.6	8.5
Total[b]	249.6	164.1	170.4	103.5	95.6	82.3	81.8	69.0	56.5

(a) The 1985 rate includes the number of cases diagnosed in 1985 or earlier (or the prevalence of HIV in 1985).

(b) Includes people whose sex was not reported.

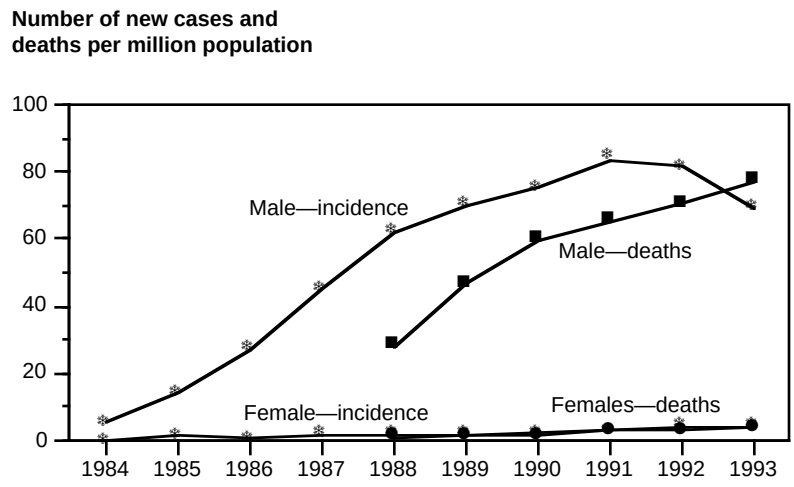
Source: Australian HIV Surveillance Report, April 1994.

- In 1993, the number of reported newly diagnosed human immunodeficiency virus (HIV) infections among males had decreased to half the level of the late 1980s. The high reported rates in the early and mid 1980s are probably not true measures of incidence but more likely reflect the initial discovery of the pool of cases prevalent at the time.
- HIV is a retrovirus that causes acquired immune deficiency syndrome (AIDS). The average interval between exposure to the virus and onset of AIDS appears to be more than seven years. HIV is not easily spread by casual contact. It can only be acquired by a person if there is direct contact between their body fluids and those of a HIV-positive person.
- The two main modes of transmission are sexual intercourse and the sharing of needles among drug users. It is generally believed that increased community awareness of HIV has led to changes in sexual behaviour and to preventive programs aimed at reducing the risk associated with needle sharing. These changes have contributed to the reduction in the spread of HIV.

For more information, see:

National Centre in HIV Epidemiology and Clinical Research. *Australian HIV surveillance reports.* Sydney: NCHECR.

Incidence and death rate for AIDS per million population



	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993
Incidence rates										
Males	5.8	14.5	27.5	44.7	62.2	69.8	74.7	83.9	81.6	69.1
Females	0.1	1.5	0.9	1.8	1.8	1.7	1.9	2.7	3.9	4.1
Total[(a)]	3.0	8.0	14.3	23.4	32.2	36.0	38.4	45.0	42.7	36.6
Death rates										
Males	na	na	na	na	28.1	46.2	59.7	65.3	70.8	77.1
Females	na	na	na	na	1.0	1.2	1.2	2.9	2.7	3.4
Total	0.9	4.1	9.0	12.4	14.7	24.0	30.7	34.4	37.0	40.5

na Data not available

(a) Includes transsexuals.

Notes: 1. AIDS is classified according to the International Classification of Diseases (ICD-9) Codes: 30, 136.3, 279.1 or an AIDS flag as indicated on the death certificate.

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

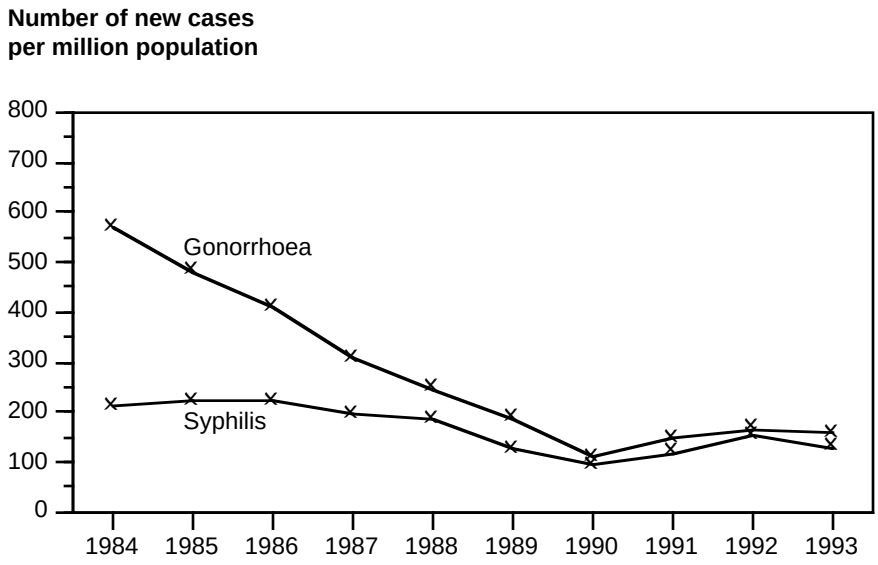
Sources: Incidence data from Australian HIV Surveillance Report, April 1994; mortality data derived from the AIHW Mortality database.

- The incidence of reported acquired immune deficiency syndrome (AIDS) appears to have peaked in 1991. This trend is consistent with the falling incidence of reported HIV infection in the population. In contrast to the high incidence and death rates for males, the female rates are low.
- The occurrence of reported HIV and AIDS has largely been confined to specific groups in the population. People at higher risk include homosexual and bisexual men and intravenous drug users.
- Although the rate of infection in the groups at higher risk for AIDS appears to be falling, continuing surveillance of the spread of HIV in the general population must remain an important public health activity.

For more information, see:

National Centre in HIV Epidemiology and Clinical Research. *Australian HIV surveillance reports.* Sydney: NCHECR.

Incidence rate for sexually transmitted diseases per million population



	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993
Chlamydia	na	na	na	na	na	na	na	234.0	359.8	367.7
Gonorrhoea	570.9	481.7	411.1	306.1	246.6	187.3	112.5	146.4	166.3	158.9
Syphilis	213.3	223.1	224.4	196.1	184.8	124.7	96.3	118.8	154.1	129.9

na Data not available

Note: Case definitions for each disease have varied with time and between States.

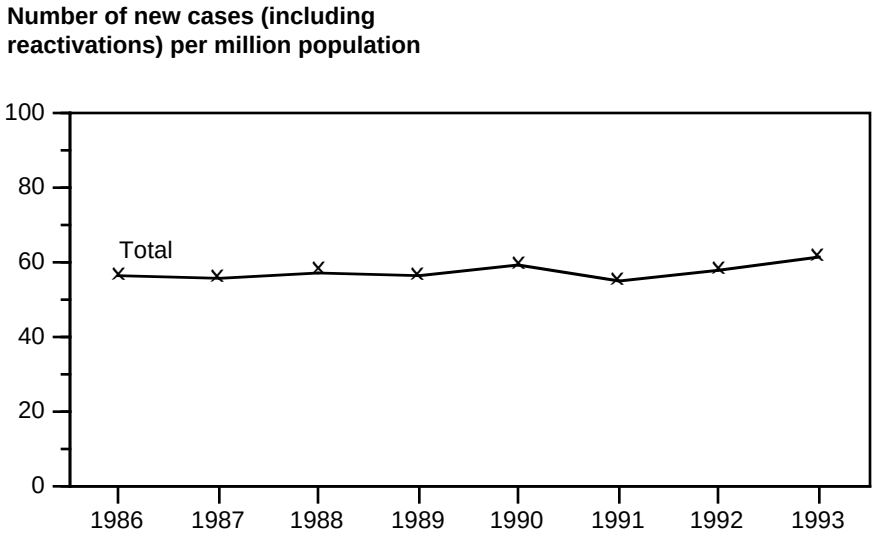
Source: Communicable Diseases Network —Australia New Zealand—National Notifiable Diseases Surveillance System.

- Between 1984 and 1993, the incidence of gonorrhoea (a gonococcal infection) and syphilis fell to a minimum of 112.5 and 96.3 cases per million population respectively in 1990.
- National data on incidence of infection with chlamydia have only been available since 1991 and it is too early to evaluate the trend. Infection with chlamydia is often asymptomatic and, if not treated, can cause tubal damage in women leading to infertility.
- The sudden threat of HIV and AIDS in the early 1980s added impetus to the provision of information to the community on safe sex. This campaign is possibly the main cause of the fall in the incidence of sexually transmitted diseases (STDs).
- Monitoring trends in the incidence of STDs may provide a relatively short term indication of changes in the community regarding knowledge, attitude and safe sexual practice.
- STDs are of particular concern amongst adolescents and younger adults. A recent study has indicated that young people remain relatively ignorant about many aspects of STDs.

For more information, see:

Communicable Diseases Network—Australia. *Communicable diseases intelligence.* Canberra: DHSH.

Rate of new and reactivated cases of tuberculosis per million population



	1986	1987	1988	1989	1990	1991	1992	1993
Males	na	na	na	na	na	58.7	62.1	66.3
Females	na	na	na	na	na	45.8	50.0	56.3
Total	56.6	55.8	57.7	56.6	59.5	55.0	57.8	61.4

na Data not available

Notes: 1. Total rates for 1986–1992 include new cases and reactivations (a case of active tuberculosis diagnosed again following previous full treatment which resulted in the inactivation of the bacterium).

2. All rates for 1993 and male/female rates for 1991–1992 include new cases only.

Sources: 1. Data for 1986–1992 from National Mycobacterial Surveillance System.

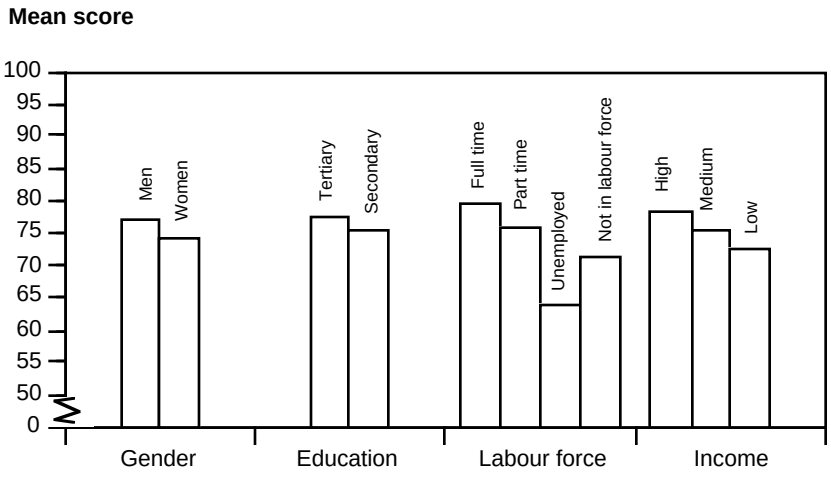
2. Data for 1993 from Communicable Diseases Network—Australia New Zealand—National Notifiable Diseases Surveillance System.

- Between 1986 and 1992, the reported rates of new and reactivated cases of tuberculosis (TB) did not alter substantially. In 1992, reactivated cases represented 2.7% of all TB notifications. The total 1993 rate of 61.4 new cases per million population, whilst not directly comparable with previous years, represents a slight increase from this earlier period.
- TB is transmitted from person to person via the respiratory route. Groups at high risk of TB include people born overseas (particularly from South-east Asia), the homeless and people infected with HIV. Of increasing public health concern are the changing characteristics of people suffering from the disease. In the early 1970s, TB was more common in Australian-born elderly males whereas, in the 1990s, TB patients are more likely to be younger and foreign-born.
- A resurgence of TB in the United States since 1985 points to the importance of continuing to monitor TB incidence in Australia.

For more information, see:

Communicable Diseases Network—Australia (1994) *Communicable diseases intelligence.*. Canberra: DHSH.

Mental health status of Australian adults (aged 18 years and over) in 1994



		Mean mental health score
Gender	Men	77.1
	Women	74.5
Education	Tertiary (Bachelor degree or higher)	77.4
	Secondary only	75.6
Labour force status	Employed full-time	79.4
	Employed part-time	75.9
	Unemployed	63.9
	Not in labour force	71.4
Household income	High (Top 30%)	78.3
	Medium (Middle 40%)	75.7
	Low (Bottom 30%)	72.6

Note: The mental health score is part of the Medical Outcomes Study SF-36 (see below). The score is a measure of psychological well-being ranging from 0 to 100, with a lower score indicating poorer mental health.

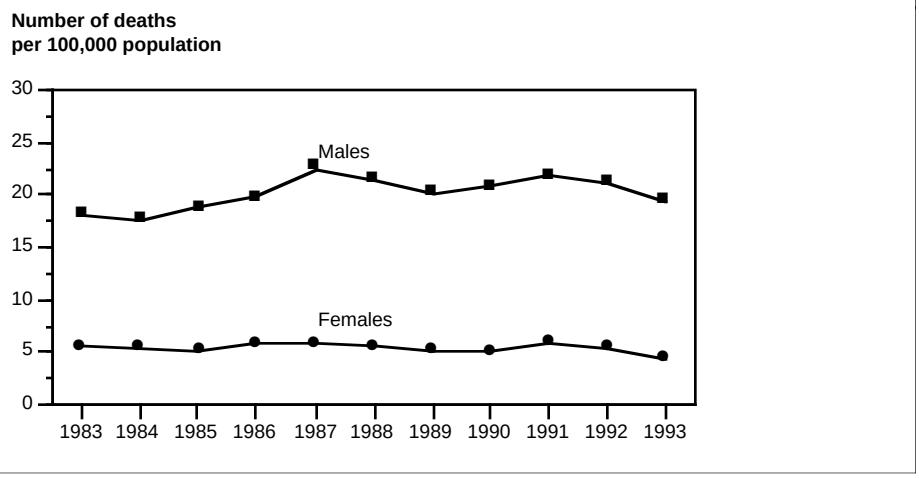
Source: AIHW, derived from the ABS Population Survey Monitor conducted in May and November 1994.

- It has been reported that mental health problems and disorders currently affect over 20% of the adult population and between 10 and 15% of young people in Australia. The analyses show differences in mental health status scores for different categorisations of the population, namely, gender, education level, labour force status and income level.
- Men reported a higher mental health score than women. There was an obvious gradient of decreasing mental health status within various social categories of the population. Tertiary educated people reported better scores than those with secondary education only. Similarly, employed people and those on higher incomes fared better than those who were either unemployed or on lower incomes.

For more information on the SF-36, see

Ware JE et al. (1993) *SF-36 health survey: manual and interpretation guide.* Boston, Massachusetts: The Health Institute, New England Medical Center.

Death rate for suicide and self-inflicted injury per 100,000 population



	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993
Males	18.0	17.6	18.8	19.8	22.5	21.5	20.1	20.7	21.7	21.1	19.3
Females	5.6	5.3	5.1	5.7	5.8	5.6	5.2	4.9	5.9	5.3	4.4
Total	11.6	11.3	11.8	12.6	13.9	13.4	12.5	12.7	13.7	13.1	11.7

Notes: 1. Suicide is classified according to the International Classification of Diseases (ICD-9) External Cause Codes: E950–959.

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

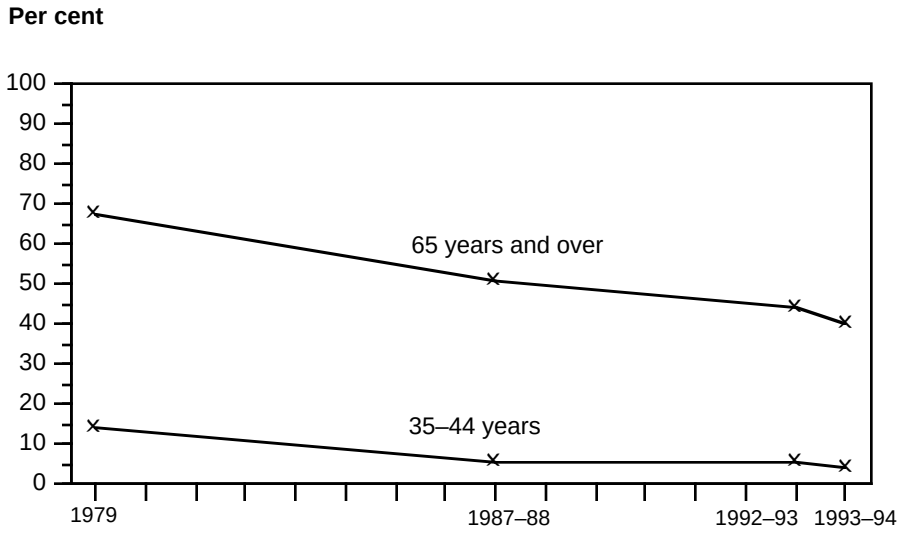
Source: Estimates based on data derived from AIHW Mortality database.

- Trends in suicide rates provide some indication of changes in mental health status of the population. Suicides are often expressions of breakdowns in social integration and cohesion. However, as more people attempt than complete suicide, mortality data may underestimate the incidence of self-harm.
- Age-adjusted male death rates for suicide rose substantially throughout the mid to late 1980s but appear to have stabilised in recent years. The male rate has fallen to 19.3 per 100,000 in 1993 from a peak of 22.5 in 1987. In 1993, more males died from suicide than from road deaths.
- Suicide rates for males are about four times higher than those for females. The age-adjusted female rates have not changed markedly in the last ten years. In 1993, the female suicide rate was 4.4 per 100,000.
- Rates for young men rose rapidly in the decade to 1990, continuing an increase that began in the 1960s. In 1993, suicide was the second most important cause of death behind motor vehicle accidents in men aged 15 to 24 years.
- The social forces underlying suicide are complex and include both personal and social components. Unaddressed long-standing personal and interpersonal problems are frequently associated with suicidal tendencies. Lack of social support or of a meaningful social role have also been linked to suicidal tendencies.

For more information, see:

Harrison J, Moller J & Dolinis J (1994) Suicide in Australia: past trends and current patterns. *Australian injury prevention bulletin* Issue 5. Adelaide: AIHW National Injury Surveillance Unit.

Proportion of adults experiencing edentulism



	1979	1987–88	1992–93[(a)]	1993–94
Age				
35–44 years (%)	14.0	5.7	5.4	4.0
65 years and over (%)	67.7	51.1	44.4	40.3

(a) Excludes NT data.

Source: AIHW Dental Statistics Research Unit.

- The loss of all natural teeth, or edentulism, is the end point of dental disease and, in a public health sense, is a measure of dental mortality. Edentulism therefore represents the final failure of preventive and restorative care. The major causes of tooth loss are decay and periodontal (gum) disease.
- The dramatic decline in the prevalence of edentulism from 1979 to 1993–94 is a significant achievement. The prevalence of edentulism declined by 40% in people aged 65 years or over during this period, and by 71% in the 35–44 year age group.
- For the individual, the loss of all natural teeth is usually associated with chewing difficulties, higher levels of discomfort during eating, personal embarrassment and social isolation.
- The rates of edentulism reflect both accumulation of disease and past patterns of dental care as well as cultural and social variation in treatment preference, professional norms of practice and access to services.

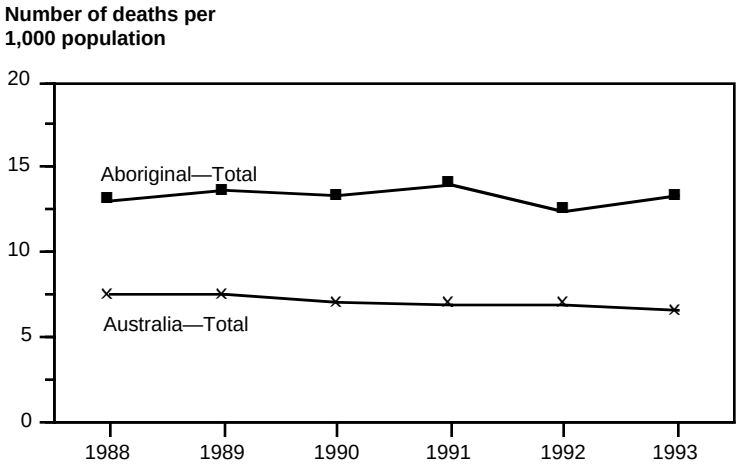
For more information, see:

AIHW Dental Statistics Research Unit (1993) *Dental care for adults in Australia.* Adelaide: DSRU.

Aboriginal health

- *Mortality and survival*
- *Perinatal and infant health*
- *Chronic diseases*
- *Population trends*

Death rate for all causes of death per 1,000 Aboriginal population



	1988	1989	1990	1991	1992	1993
Aboriginal rates						
Males	15.4	16.1	14.9	15.8	14.4	14.8
Females	10.4	10.9	11.6	12.1	10.5	11.8
Total	13.0	13.5	13.3	13.9	12.4	13.3
Australian rates						
Total	7.4	7.4	7.0	6.9	6.9	6.5

Notes: 1. Aboriginal data are for NSW, Vic, WA, SA and NT.

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

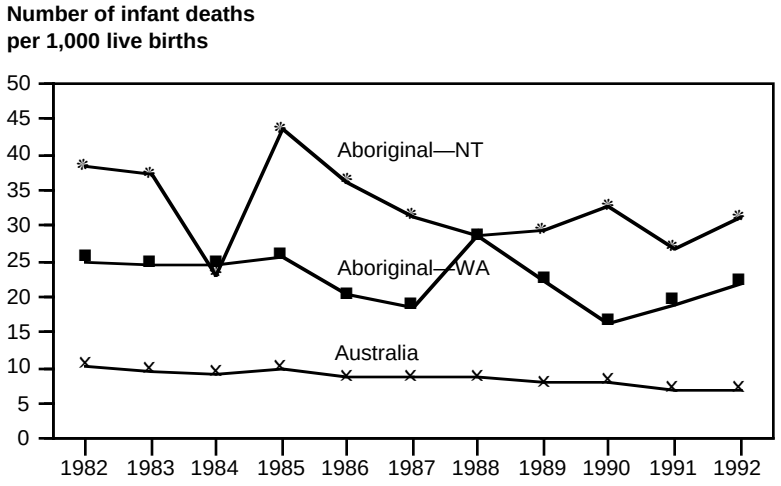
Source: Aboriginal and total Australian rates were based on data derived from AIHW Mortality database.

- Death rates for all causes among Aboriginal and Torres Strait Islander peoples remained relatively stable between 1988 and 1993. In the same period, there was a 12% decline in death rates for all causes in the total Australian population.
- Aboriginal death rates greatly exceeded the corresponding total Australian rates at all ages. The greatest differences occurred in the middle age groups (25 to 54 years), particularly among males. These differences were also reflected in lower Aboriginal life expectancies. In the period 1990–1992, Aboriginal life expectancy was estimated to be between 16 and 18 years shorter than that for the total Australian male population (see *Life expectancy at birth* on page 13).
- Mortality data are only available for some States. Aboriginal people are not always identified on death certificates, particularly in NSW and Victoria where identification is estimated at about 60%. The Aboriginal death rates presented here are therefore likely to be underestimates.

For more information, see:

Bhatia K & Anderson P (1995) *An overview of Aboriginal and Torres Strait Islander health: present status and future directions.* AIHW Information paper. Canberra: AGPS.

Infant mortality rate: number of Aboriginal infant deaths per 1,000 live births



	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
Aboriginal rates											
Aboriginal—NT	38.3	37.5	23.2	43.7	36.2	31.6	28.7	29.3	32.7	26.9	31.5
Aboriginal—WA	25.2	24.7	24.7	25.9	20.3	18.8	28.7	22.4	16.3	19.2	22.0
Australian rates											
Total	10.3	9.6	9.2	10.0	8.8	8.7	8.7	8.0	8.2	7.1	7.0

Sources: 1. Aboriginal rates—NT: Northern Territory Perinatal Collection 1992; WA: Data for 1982–1991 from Gee 1994; data for 1992 from unpublished data provided by the Western Australia Department of Health.

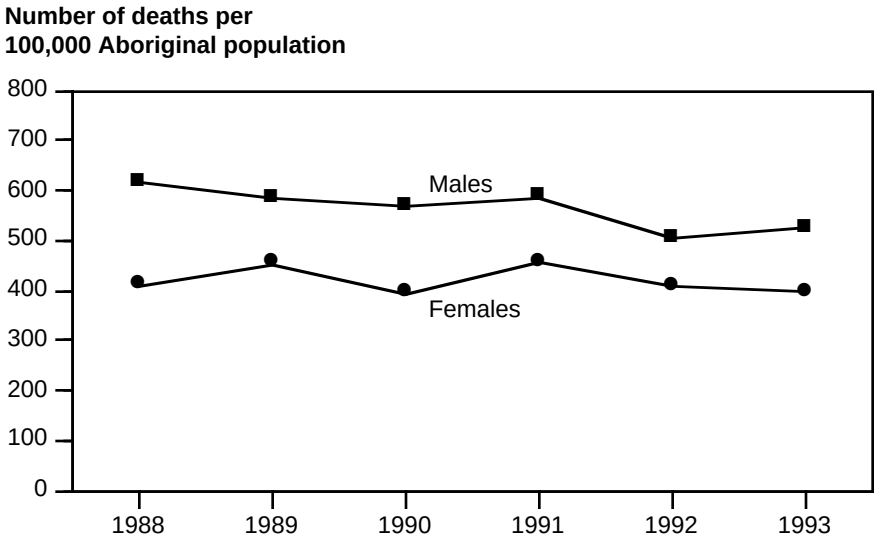
2. Australian rates—ABS Cat. No. 3302.0.

- The infant mortality rate for Aboriginal and Torres Strait Islander peoples varies substantially between regions. Reasonably accurate information is available for Western Australia and the Northern Territory. In 1992, the rates were 22.0 and 31.5 infant deaths per 1,000 live births respectively, in these two regions. These rates were about three to four times higher than those for all Australians combined, which in 1992 was 7.0 infant deaths per 1,000 live births.
- Between 1982 and 1992, Aboriginal infant mortality rates remained relatively stable. (Yearly variations are primarily caused by the estimation of rates based on small numbers of deaths and births).
- A fall in neonatal deaths (death in the first 4 weeks of life) and a rise in postneonatal deaths (death after the first 4 weeks but before the end of the first year of life) has contributed to the stability in the infant mortality rate. The fall in neonatal deaths was partly due to technological interventions which led to an increase in the survival rate of low birthweight and premature babies. The rise in postneonatal deaths was partly due to the increased mortality among those premature and low birthweight babies who survived the neonatal period but who subsequently died during the postneonatal period.

For more information, see:

ABS *Deaths, Australia* and *Causes of death, Australia.* Cat. Nos. 3302.0 and 3303.0.

Death rate for cardiovascular disease per 100,000 Aboriginal population



	1988	1989	1990	1991	1992	1993
Males	618	586	568	587	505	527
Females	410	453	395	456	408	396
Total	519	523	482	520	461	460

Notes: 1. Data are for NSW, Vic, WA, SA and NT.

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

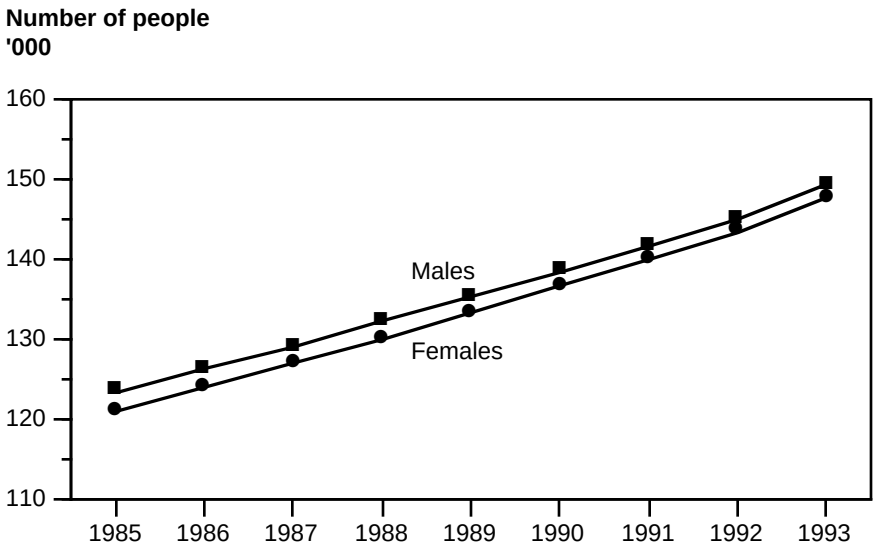
Source: Estimates based on data derived from AIHW Mortality database.

- Cardiovascular disease is the leading cause of death among Aboriginal and Torres Strait Islander peoples. However, it accounts for a lower proportion of deaths than in the non-Aboriginal population due to the greater relative importance of other causes of death.
- Between 1988 and 1993, Aboriginal death rates for cardiovascular disease fell slightly among males, but remained fairly constant among females.
- Cardiovascular disease includes coronary heart disease, stroke and rheumatic heart disease. The major risk factors for the Aboriginal population are the same as for the general population. These include cigarette smoking, raised blood cholesterol and triglyceride levels, raised blood pressure, obesity, physical inactivity and diabetes.
- The much higher prevalence of diabetes among the Aboriginal population (possibly as high as 15–20% in some communities) compared with the non-Aboriginal population (2–3%) is a risk factor of considerable public health importance.
- Also of considerable concern is the higher rate of smoking among the adult Aboriginal population (almost 50%), which is about double the rate in the total Australian population.

For more information, see:

Bhatia K & Anderson P (1995) *An overview of Aboriginal and Torres Strait Islander health: present status and future directions.* AIHW Information paper. Canberra: AGPS.

Size of the Aboriginal and Torres Strait Islander population



	1985	1986	1987	1988	1989	1990	1991	1992	1993
Males	123,372	126,693	129,658	132,818	135,956	139,281	142,528	145,910	149,368
Females	120,649	124,045	127,179	130,453	133,724	137,157	140,451	144,067	147,663
Total	244,021	250,738	256,837	263,271	269,680	276,438	282,979	289,977	297,031

Sources: 1. Data for 1985 were derived by linear extrapolation of 1986–1991 population estimates provided by the ABS.
2. Data for 1986–1991 from ABS Cat. No. 3230.0
3. Data for 1992–1994 derived from estimates of population provided by the ABS.

- Between 1985 and 1993, the Aboriginal and Torres Strait Islander population grew by 17.7% or an average 2.5% a year. In the same period, the total Australian population increased by 11.8% or an average 1.4% year (see *Annual rate of increase in the Australian population* on page 63). Some of this population increase is likely to be due to an increased willingness on the part of Aboriginal or Torres Strait Islander individuals to identify themselves as such.
- The Aboriginal population is fairly young when compared with the non-Aboriginal population. In 1993 just under 50% were under 20 years of age whereas only 2.5% were aged 65 years or over. In the non-Aboriginal population, 29.0% were under 20 years and 11.7% were aged 65 years or over.
- The spatial distribution of the Aboriginal population is quite different from that of the non-Aboriginal population. Only 28% of the Aboriginal population live in capital cities with easy access to all mainstream health services. One in five Aboriginal people and Torres Strait Islanders reside in remote rural settings, away from centres with basic health facilities.

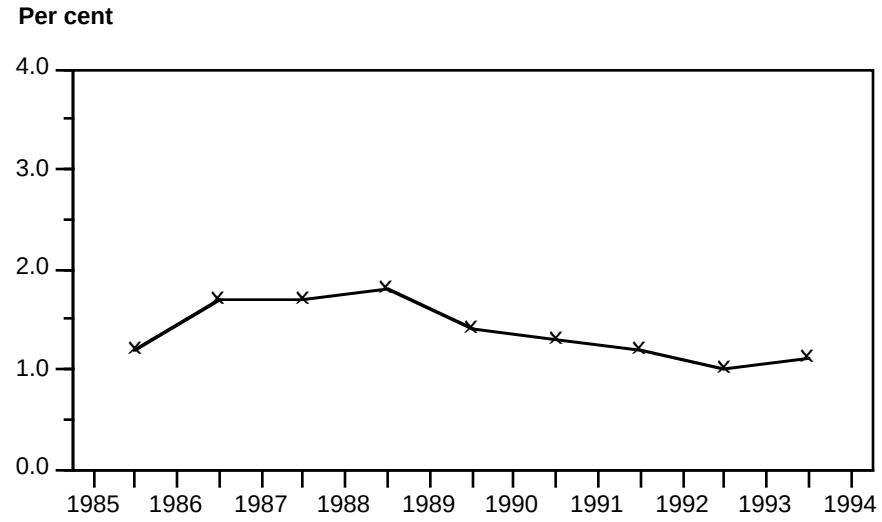
For more information, see:

ABS (1994) *Australia's Aboriginal and Torres Strait Islander population.* Cat. No. 2740.0.

Health determinants and risk factors

- *Population trends*
- *Fertility*
- *Economic environment*
- *Anthropometric measures*
- *Physiological measures*
- *Food and nutrition*
- *Physical activity*
- *Drug use*

Annual rate of increase in the Australian population



	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
Population size										
Males	7,882.7	7,968.6	8,112.6	8,254.2	8,404.8	8,511.3	8,615.4	8,714.9	8.795.8	8,887.0
Females	7,905.6	8,005.3	8,136.3	8,277.7	8,427.9	8,553.9	8,668.6	8,774.1	8,860.6	8,956.3
Total	15,788.3	15,973.9	16,248.8	16,531.9	16,832.7	17,065.1	17,284.0	17,489.1	17,656.4	17.843.3
Annual rate of increase (%)		1.2	1.7	1.7	1.8	1.4	1.3	1.2	1.0	1.1

Notes: 1. Population estimated as at 30 June each year.
2. Data for 1994 are preliminary.

Source: ABS Cat. No. 3101.0.

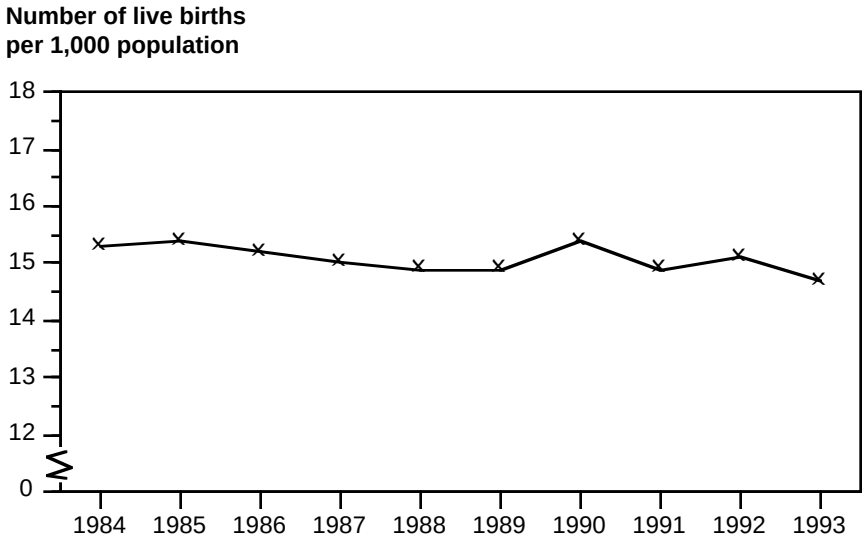
- The total Australian population has grown from 15.8 million people in 1985 to 17.8 million in 1994, representing an average annual increase of 1.4%.
- The increases in the annual growth of the population observed in the mid to late 1980s were due primarily to an increase in the numbers of immigrants (see *Net immigration rate per 1,000 population* on page 67). The birth rate during this time declined slightly (see *Crude birth rate per 1,000 population* on page 64) and the death rate declined steadily (see *Total death rate per 1,000 population* on page 15).
- Projections of the population by the Australian Bureau of Statistics indicate that the total population will reach 19.0 million by the year 2000, and 21.0 million by the year 2010. This represents an average annual growth rate of 1.1%, similar to the trend in recent years.

For more information, see:

ABS *Australian demographic statistics.* Cat. No. 3101.0.

ABS (1994) *Projections of the populations of Australia, States and Territories.* Cat. No. 3222.0. Canberra: ABS.

Crude birth rate per 1,000 population



	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993
Number of live births	238,472	242,910	243,408	243,959	246,193	250,853	262,648	257,247	264,151	260,229
Crude birth rate per 1,000 population	15.3	15.4	15.2	15.0	14.9	14.9	15.4	14.9	15.1	14.7

Notes: 1. Population estimated as at 30 June each year.
2. Number of births for each calendar year.

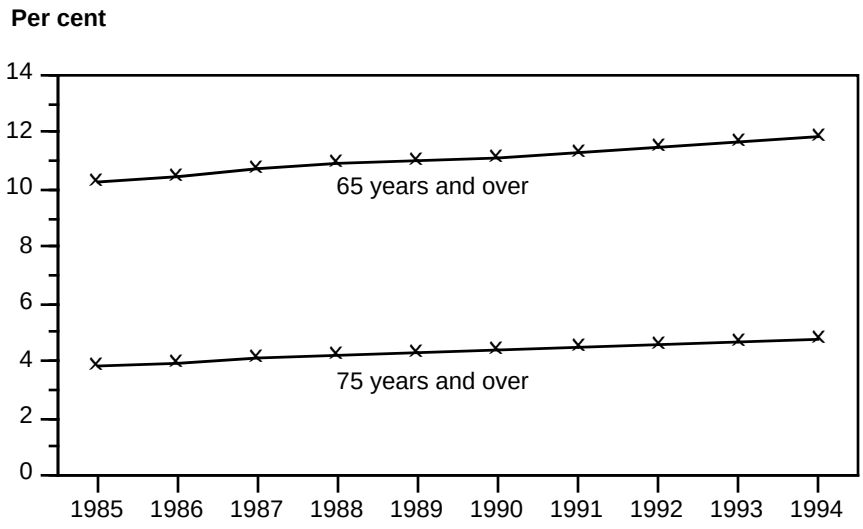
Source: ABS Cat. No. 3301.0.

- There were just over 260,000 live births in Australia in 1993, representing a crude birth rate of 14.7 per 1,000 population. The data indicate a slight fall since 1984 when the crude birth rate was 15.3 births per 1,000 population.
- There are marked regional differences in the crude birth rate in Australia. In 1993, the crude birth rate was highest in the Northern Territory and the Australian Capital Territory (21.1 and 16.2 live births per 1,000 population respectively) and lowest in South Australia and Victoria (13.8 and 14.4 respectively).
- These differences reflect variations in the proportion of women of child-bearing age living in these regions. One reason for this is the higher rates of migration of young people to the Territories. The Territories have a larger proportion of younger people than South Australia and Victoria.
- The high crude birth rate in the Northern Territory is also influenced by its relatively large Aboriginal and Torres Strait Islander population which has a high fertility rate. In 1993, the total fertility rate of the Northern Territory's Aboriginal women was about 3.4 children per woman compared with a rate of 1.9 for the total Australian population (see *Total fertility rate per woman* on page 68).

For more information, see:

ABS *Births, Australia.* Cat. No. 3301.0.

Proportion of the population aged 65 years and over and 75 years and over (%)



	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
Total aged population ('000)										
65 years and over	1,621.0	1,669.6	1,741.9	1,799.9	1,856.9	1,893.4	1,950.8	2,004.0	2,057.4	2,109.1
75 years and over	601.9	638.8	666.2	694.5	727.2	742.5	768.6	793.6	816.5	840.6
Proportion of the total population (%)										
65 years and over	10.2	10.5	10.7	10.9	11.0	11.1	11.3	11.5	11.7	11.8
75 years and over	3.8	4.0	4.1	4.2	4.3	4.4	4.4	4.5	4.6	4.7

Notes: 1. Population estimated as at 30 June each year.
2. Data for 1994 are preliminary.

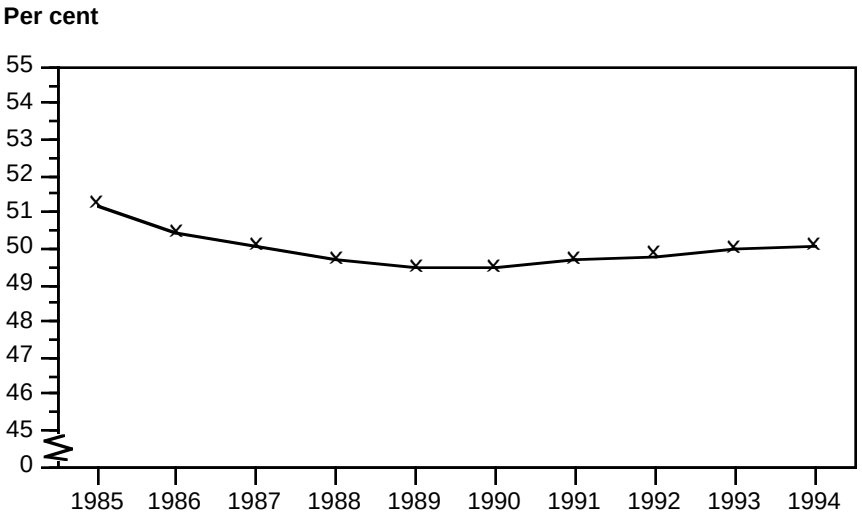
Source: ABS Cat. No. 3101.0.

- Between 1985 and 1994, the proportion of people aged 65 years and over increased by an average 0.2% per year. This increase was due to a combination of a slowly declining birth rate and increasing longevity.
- As people become older, the incidence of both non-fatal diseases of ageing and chronic degenerative diseases increases. These include diseases such as arthritis, diabetes, heart disease, cancer and dementia.
- These diseases, which can severely impact on the independence of older people and hence on their overall quality of life, are emerging challenges for Australian and other societies in which life expectancies are now very high and in which the population is ageing.

For more information, see:

ABS *Australian demographic statistics.* Cat. No. 3101.0.

Dependency ratio



	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
Child dependency ratio	35.7	34.7	34.0	33.4	33.0	32.9	32.8	32.6	32.5	32.3
Aged dependency ratio	15.5	15.7	16.1	16.3	16.5	16.6	16.9	17.2	17.5	17.8
Dependency ratio	51.2	50.4	50.1	49.7	49.5	49.5	49.7	49.8	50.0	50.1

Notes: 1. Population estimated as at 30 June each year.
2. Data for 1994 are preliminary.

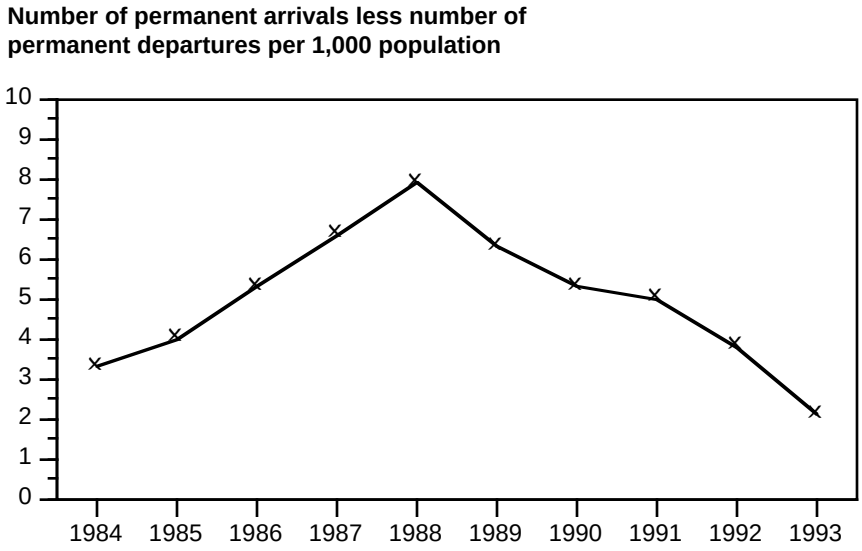
Source: AIHW, derived from the ABS Cat. No. 3101.0.

- The dependency ratio is an indicator of the proportion of people of non-working age in the community dependent on the number of people of working age. The ratio can be broken down into two components; the child dependency ratio which is the ratio of children aged 0–14 years dependent on the population of working age (15–64 years) and the aged dependency ratio which is the ratio of people aged 65 years and over dependent on the population of working age (15–64 years).
- The child dependency ratio declined by 1.1% per annum from 35.7 in 1985 to 32.3 in 1994. The fall was more substantial throughout the mid to late 1980s but has lessened in more recent years.
- By contrast, the aged dependency ratio increased from 15.5 in 1985 to 17.7 in 1994, corresponding to an average annual rate of increase of 1.5%.
- The dependency ratio reached a minimum of 49.5 in 1989 and 1990 and is expected to increase in the coming years due primarily to an increase in the proportion of people aged 65 years and over (see *Proportion of the population aged 65 years and over and 75 years and over* on page 65).

For more information, see:

ABS *Australian demographic statistics.* Cat. No. 3101.0.

Net immigration rate per 1,000 population



	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993
Number of permanent arrivals	73,110	82,000	103,330	128,290	151,550	131,060	121,560	116,650	94,250	65,680
Number of permanent departures	22,310	18,620	18,820	20,420	20,320	24,830	30,370	29,900	28,140	28,070
Net immigration rate per 1,000 population	3.3	4.0	5.3	6.6	7.9	6.3	5.3	5.0	3.8	2.1

Notes: 1. Population estimated as at 30 June each year.

2. Net immigration rate = (Number of permanent arrivals—Number of permanent departures)/Total population in the reference year * 1,000.

3. Number of permanent arrivals and departures for each calendar year.

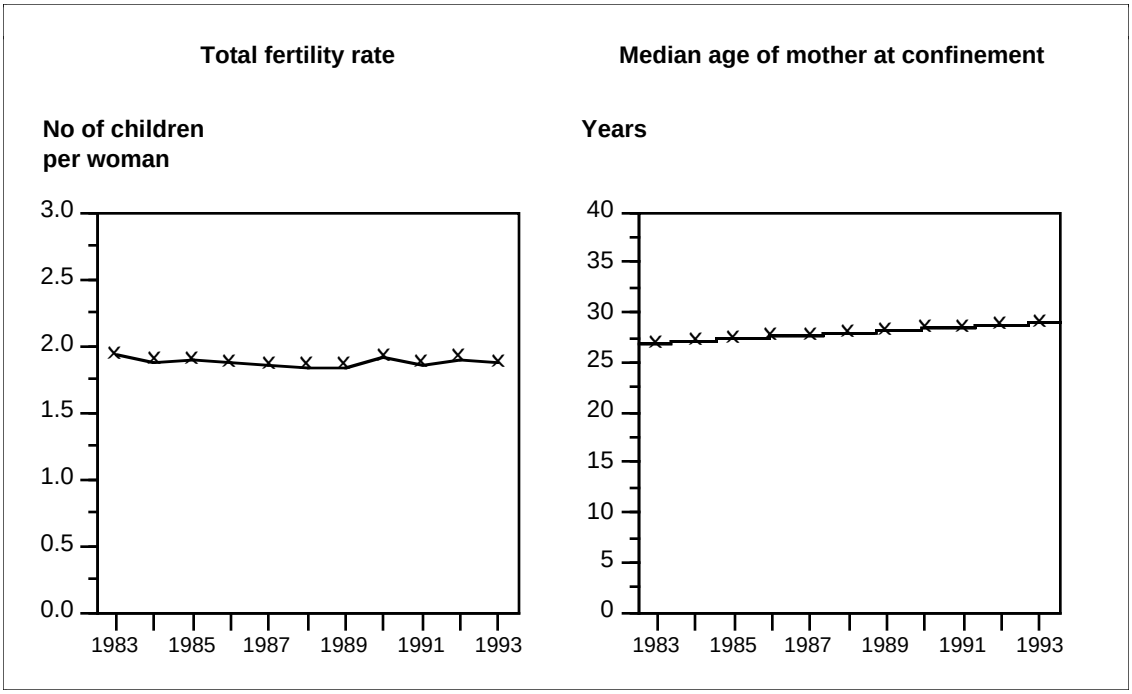
Source: ABS Cat. No. 3404.0.

- In the period 1984 to 1993, the number of people migrating to Australia peaked in 1988 at 7.9 per 1,000 population. Since 1988, the net immigration rate has been falling steadily to reach a low in 1993 of 2.1 per 1,000 population. This rate is lower than at any time in the previous ten years.
- Between 1984 and 1993, trends in the net immigration rates have mirrored movements in the number of permanent arrivals. By contrast the number of permanent departures has generally shown an upward trend.
- In 1993, over three-quarters of all migrants came from the following regions: Europe and the former USSR (30%), South-east Asia (20%), Oceania (14%) and North-east Asia (13%).
- In 1993, 72% of all permanent arrivals were between 15 and 64 years of age.

For more information, see:

ABS *Overseas arrivals and departures.* Cat. No. 3404.0.

Total fertility rate per woman and median age of mother at confinement



	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993
Total fertility rate	1.93	1.88	1.89	1.87	1.85	1.84	1.84	1.91	1.85	1.89	1.87
Median age of mother (years)	26.9	27.1	27.3	27.5	27.7	27.9	28.2	28.3	28.5	28.7	28.9

Note: Year ending 31 December.

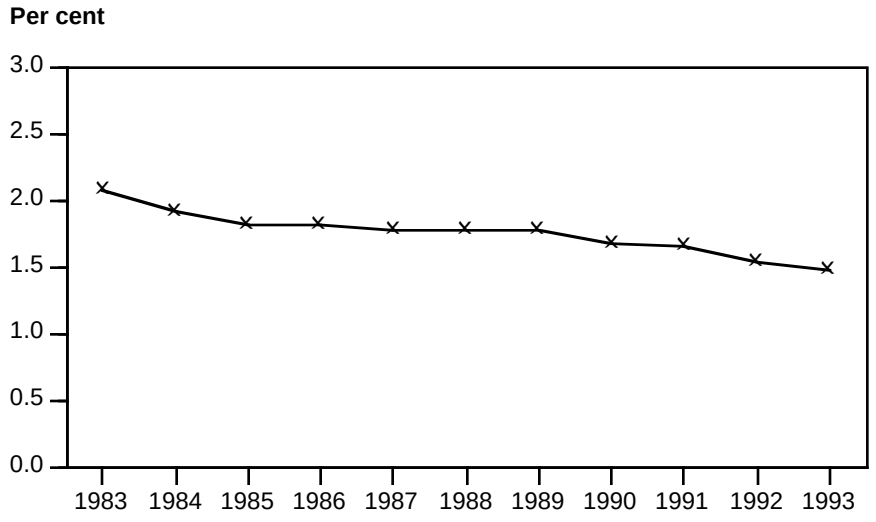
Source: ABS Cat. No. 3301.0

- The total fertility rate is a useful summary measure of fertility. It is the number of live births a woman would have if, throughout her reproductive years, she had children at the age-specific rates prevailing in the reference year. This rate is obtained by summing the age-specific fertility rates for one particular year. This sum yielded a total fertility rate of 1.87 children per woman in 1993.
- Whilst the total fertility rate fell between 1983 and 1993, the median age of women giving birth increased from 26.9 to 28.9 years in the same period. Women who delay the birth of their first child till late in their reproductive life span face some increased health risks to both themselves and their infant, but these risks are manageable with modern obstetric care.
- The pattern of continuing low fertility in Australia has also been observed in most other developed countries since the early 1970s. The reasons behind this pattern are complex and include the availability of a wider range of options or choices for women, including increased opportunities for women to participate more fully in the paid labour force, greater availability of contraceptives, more liberal divorce laws and easier access to abortion as a method of birth limitation.

For more information, see:

Lancaster P, Huang J & Pedisich E (1994) *Australia's mothers and babies 1991.* AIHW Perinatal statistics series No. 1. Sydney: National Perinatal Statistics Unit.

Number of live births to women less than 18 years of age (adolescents)



	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993
Live births to adolescents											
Number	5,004	4,445	4,464	4,389	4,306	4,322	4,377	4,330	4,186	3,977	3,844
% of total births	2.1	1.9	1.8	1.8	1.8	1.8	1.8	1.7	1.7	1.5	1.5

Note: Year ending 31 December.

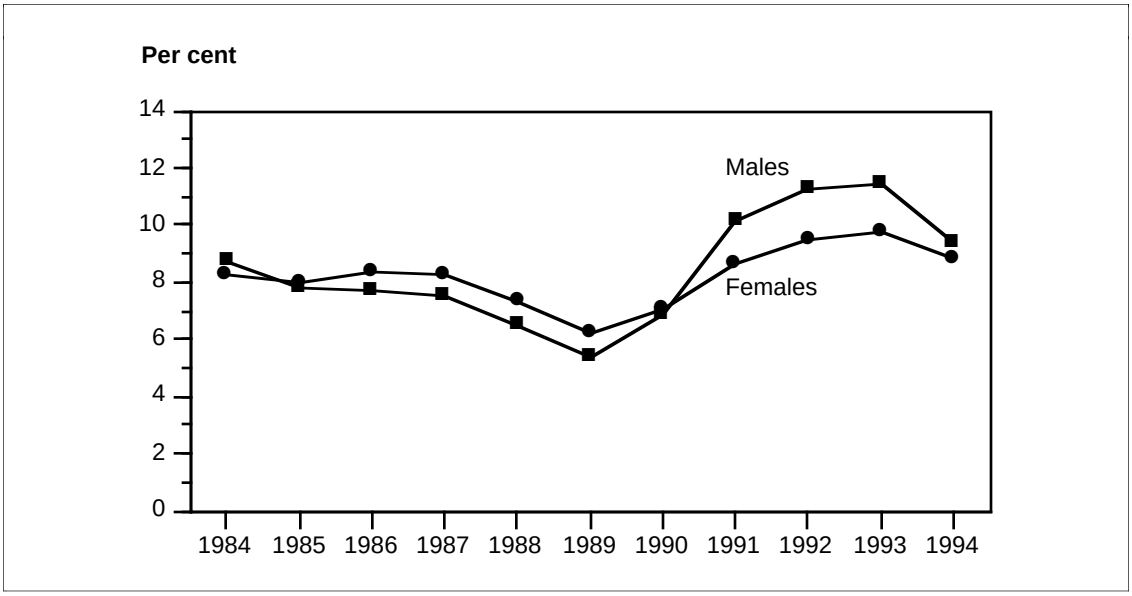
Source: ABS Cat. No. 3301.0

- In 1993, a total of 3,844 babies were born to mothers less than 18 years of age, compared with 5,004 births in 1983. The proportion of births where the mother was an adolescent fell from 2.1% of all births in 1983 to 1.5% in 1993.
- Age at first pregnancy is influenced by both biological, and social and cultural forces. The age of onset of menstruation, when a female becomes capable of bearing children, has decreased in Australia throughout this century. However, social and cultural forces still tend to discourage childbearing at very early ages. When it happens, it is usually under adverse social conditions.
- Infants born to teenagers less than 18 years of age are at greater risk of having low birthweight and higher perinatal mortality. These adverse birth outcomes are more readily explained by the conditions of social and economic disadvantage of the young mothers than by the influence of biological factors.
- The decline in the number of adolescent births may have been influenced by increased access to abortion as there is some evidence that the frequency of teenage pregnancy did not change during the late 1980s.

For more information, see:

Lancaster P, Huang J & Pedisich E (1994) *Australia's mothers and babies 1991.* AIHW Perinatal statistics series No. 1. Sydney: National Perinatal Statistics Unit.

Unemployment rate



	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
Males	8.7	7.8	7.7	7.5	6.5	5.4	6.9	10.1	11.3	11.4	9.4
Females	8.3	8.0	8.4	8.3	7.3	6.2	7.1	8.6	9.5	9.8	8.8
Total	8.5	7.9	8.0	7.8	6.8	5.7	7.0	9.5	10.5	10.7	9.2

Notes: 1. The unemployment rate includes persons looking for full-time and part-time work.
2. Data refer to August of each year.

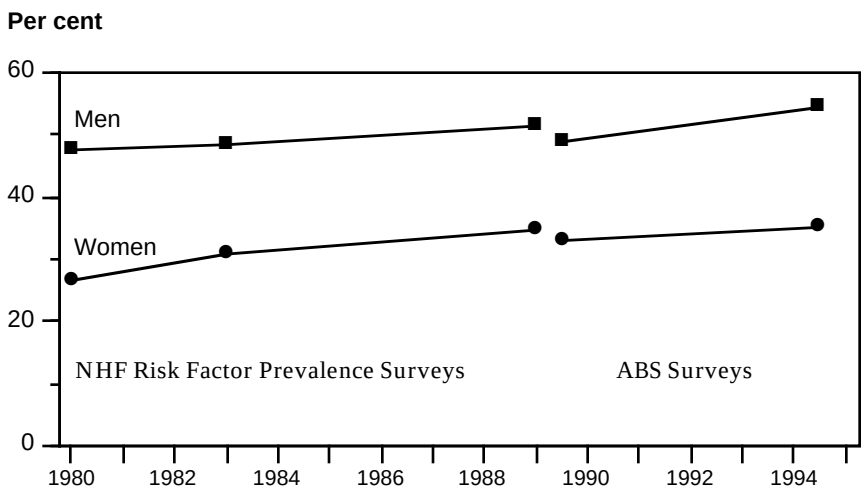
Source: ABS Cat. No. 6203.0.

- The unemployment rate is a ratio of the number of people out of work but seeking work, to the total labour force (which comprises both employed and unemployed people).
- There is clear evidence that, compared with people who are working, unemployed people are more likely to experience higher rates of ill-health and mortality, a greater prevalence of disability and handicap, to use medical services more frequently and to report poor or fair health.
- Harmful consequences of unemployment can result from combinations of poverty, stress, social isolation and deterioration of mental health. In men, in particular, the effect of unemployment increases the risk of premature death from suicide, cardiovascular disease and respiratory diseases.
- The total unemployment rate fell steadily between 1983 and 1989 but rose substantially in the period 1989 to 1993. Between August 1993 and August 1994, the total unemployment rate fell substantially for both males and females, but is still much higher than the prevailing rates of the mid to late 1980s. The male unemployment rate in 1994 was 9.4% and that for females was 8.8%.

For more information, see:

Mathers C. (1994) *Health differentials among adult Australians aged 25–64 years.* AIHW Health monitoring series No. 1. Canberra: AGPS.

Proportion of 25–64 year olds considered overweight (%)



	NHF Risk Factor Prevalence Surveys			ABS Surveys	
	1980	1983	1989	1989–90	1994
Men	47.6	48.2	51.5	48.6	54.5
Women	26.7	30.6	34.8	32.9	34.9

Notes: 1. In the NHF surveys, weight and height were measured by a nurse; in the ABS surveys, weight and height were reported by the respondents.

2. People were classified as overweight if they had a body mass index (BMI) exceeding 25.0 where BMI was calculated as weight/height^2 and expressed as kg per square metre.

3. The proportions were age-adjusted using the total Australian population as at 30 June 1991.

Sources: 1. Data for 1980, 1983 and 1989 were derived from the NHF Risk Factor Prevalence Surveys.

2. Data for 1989–90 were derived from the ABS National Health Survey.

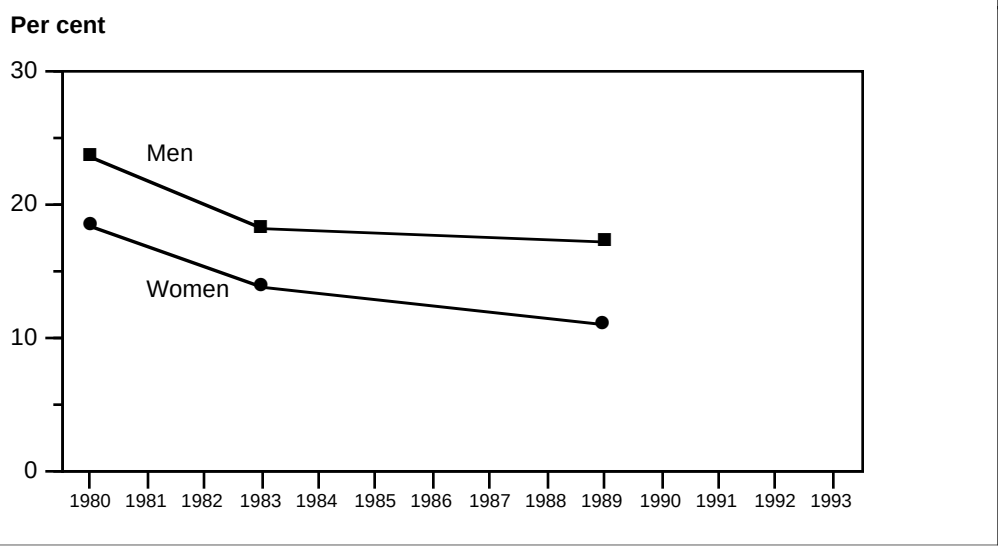
3. Data for 1994 were derived from the ABS Population Survey Monitor conducted in May, August and November 1994.

- Since 1980, there has been a steady increase in the proportion of men and women who are overweight. Increases have also been reported in the United Kingdom and the United States.
- Being overweight can lead to increased heart load and blood pressure, and to detrimental changes in blood lipids. These, in turn, often increase the risk of coronary heart disease, stroke, high blood pressure and diabetes. Overweight individuals also have an increased risk of developing cancer and respiratory and musculoskeletal problems.
- The differences between the ABS and NHF surveys reflect differences in methods. The NHF estimates were based on capital cities and actual measurements; the ABS surveys were national and used self reports.

For more information, see:

Waters AM & Bennett S (1995) *Risk factors for cardiovascular diseases—A summary of Australian data.* AIHW Cardiovascular disease monitoring series No. 1. Canberra: AGPS.

Proportion of 25–64 year olds with high blood pressure (%)



	1980	1983	1989
Men	23.6	18.2	17.2
Women	18.4	13.8	11.1

Notes: 1. People were classified as having high blood pressure if they had a systolic blood pressure ≥ 160 mmHg and/or diastolic blood pressure ≥ 95 mmHg and/or were taking tablets for blood pressure.

2. The proportions were age-adjusted using the total Australian population as at 30 June 1991.

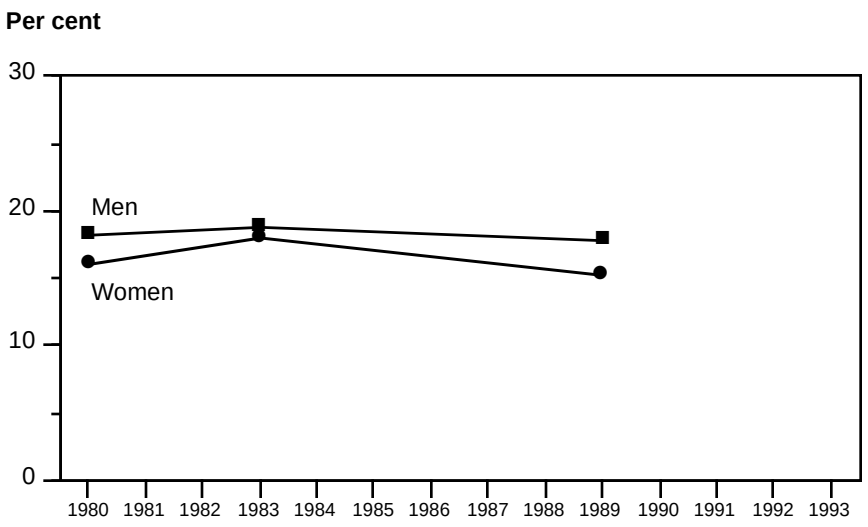
Source: Data were derived from the NHF Risk Factor Prevalence Surveys.

- During the 1980s, the proportions of people with high blood pressure declined for both men and women.
- Hypertension (high blood pressure) is more common in men than women, in people with lower education and income levels, and in men not in the workforce. Hypertension is also more prevalent among Aboriginal and Torres Strait Islander peoples. Except for men born in Eastern Europe, Australian residents born outside Australia usually have lower blood pressure than those born in Australia.
- Hypertension is a major independent risk factor for stroke, coronary heart disease and other cardiovascular disease. On average, the risk of cardiovascular disease is 2 to 4 times greater among hypertensive people than among non-affected people of the same age.
- High sodium intake, overweight, obesity and heavy drinking have all been associated with high blood pressure. Levels can be lowered by reducing weight, alcohol and salt intake. Exercise may help, either independently or by controlling weight.

For more information, see:

Waters AM & Bennett S (1995) *Risk factors for cardiovascular diseases—A summary of Australian data.* AIHW Cardiovascular disease monitoring series No. 1. Canberra: AGPS.

Proportion of 25–64 year olds with high total blood cholesterol (%)



	1980	1983	1989
Men	18.1	18.7	17.7
Women	16.0	17.9	15.2

Notes: 1. High blood cholesterol was defined as a total blood cholesterol of 6.5 mmol/L or greater.

2. The proportions were age-adjusted using the total Australian population as at 30 June 1991.

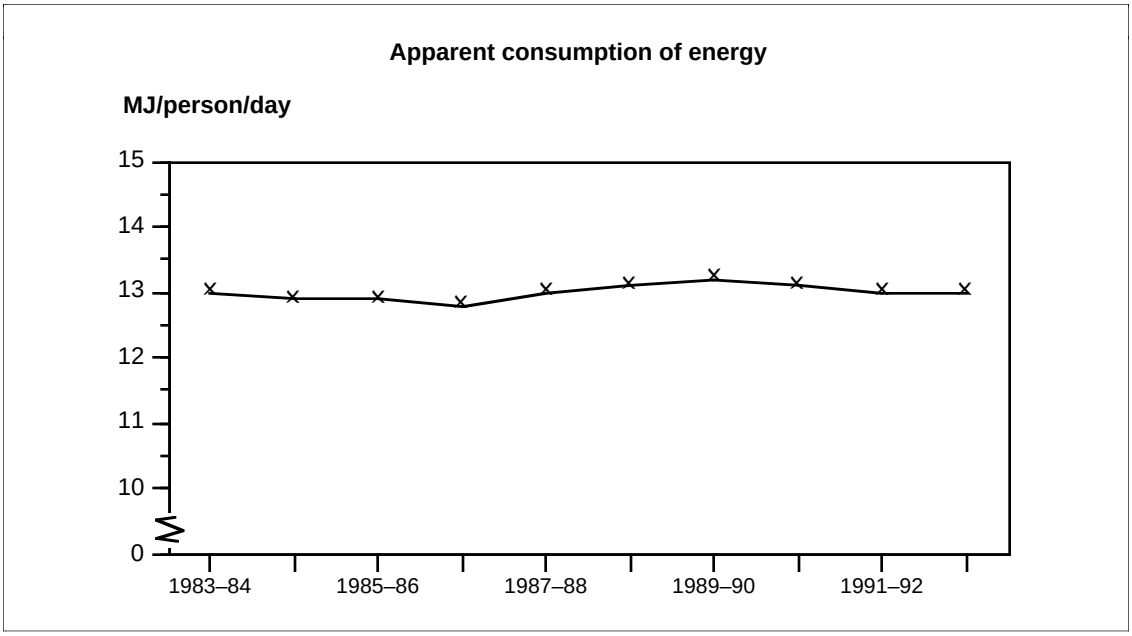
Source: Data were derived from the NHF Risk Factor Prevalence Surveys.

- The proportion of 25–64 year olds with high blood cholesterol has remained relatively unchanged during the 1980s. For men, the proportion was 17.7% in 1989 compared with 18.1% in 1980. The corresponding levels for women were 15.2% in 1989 compared with 16.0% in 1980. Although there was little change in total blood cholesterol levels in the adult population aged 25–64 years, total blood cholesterol levels decreased significantly in younger men and older women during the 1980s.
- There is strong scientific evidence linking high blood cholesterol with the development of coronary heart disease. Lowering total blood cholesterol has been shown to reduce the incidence of fatal and non-fatal coronary heart disease.
- The prevalence of high blood cholesterol tends to increase with age and is more common in men than women. Among Australia's immigrants, men and women from Italy have lower levels of total blood cholesterol than their Australian-born counterparts. Differentials between other population groups are not marked.

For more information, see:

Waters AM & Bennett S (1995) *Risk factors for cardiovascular diseases—A summary of Australian data.* AIHW Cardiovascular disease monitoring series No. 1. Canberra: AGPS.

Apparent consumption of energy and fat



	1983–84	1984–85	1985–86	1986–87	1987–88	1988–89	1989–90	1990–91	1991–92	1992–93
Energy										
MJ/person/day	13.0	12.9	12.9	12.8	13.0	13.1	13.2	13.1	13.0	13.0
Fat										
Per cent of energy	33.9	34.0	34.4	34.3	34.0	33.9	33.6	33.3	33.8	32.9

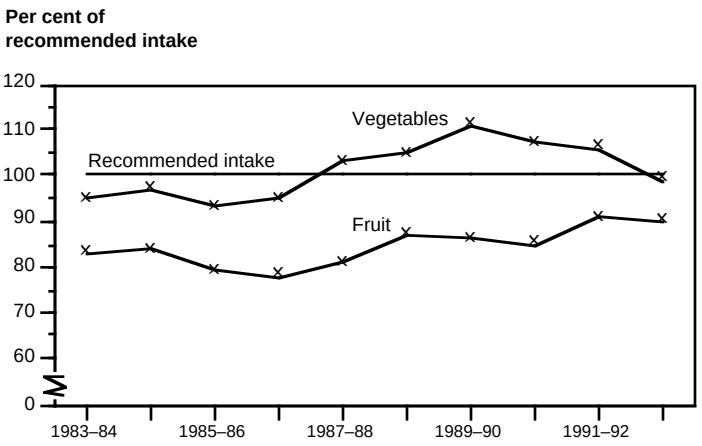
Source: ABS Cat. No. 4306.0

- In Australia, diet-related disease (coronary heart disease, stroke, hypertension, some cancers, non-insulin dependent diabetes and tooth decay) is due more to over-consumption of nutrients such as energy, fat and refined carbohydrate, than to any deficiency.
- Information on trends over time for the dietary intake of energy and fat is not available at the population level. Apparent consumption data, derived from food supply information, are used as surrogate indicators of energy and fat consumption in the population. Any significant change, up or down, of these indicators would signal a need for closer investigation of the food supply.
- Between 1983 and 1993, the apparent consumption of energy per person showed no consistent trend. During this period it exceeded the population requirement by at least 35%. An excess is expected because apparent consumption information does not take into account retail and household wastage or uses of food other than human consumption.
- The data show that the contribution of fat to the total supply of energy has not altered significantly since 1983. Due to limitations in the apparent consumption data, estimates of consumption by type of fat (i.e. saturated or unsaturated) cannot be made.

For more information, see:

Lester IH (1994) *Australia's food & nutrition.* Canberra: AGPS.

Apparent consumption of fruit and vegetables



	1983–84	1984–85	1985–86	1986–87	1987–88	1988–89	1989–90	1990–91	1991–92	1992–93
Fruit										
Per cent of recommended intake	83	84	79	78	81	87	86	85	91	90
Vegetables										
Per cent of recommended intake	95	97	93	95	103	105	111	107	106	99

Note: The data given are for fresh fruit and vegetables plus the fresh equivalent weight of produce used in processing (e.g. canning, juice). The data include allowances for non-commercial production (i.e. home production of fruits and vegetables).

Sources: ABS Cat. No. 4306.0; NHMRC 1994.

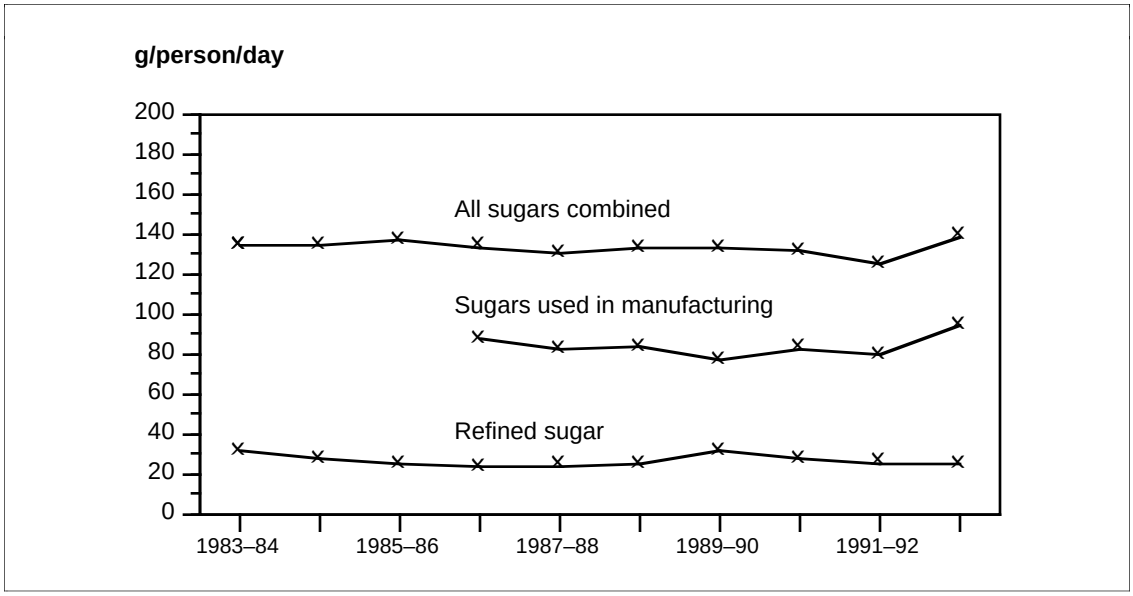
- Fruit and vegetables provide dietary fibre and a large range of essential nutrients (e.g. vitamin C, folic acid, beta carotene, potassium). The NHMRC recommends that individuals increase their intake of fruit and vegetables.
- Information on trends over time in the dietary intakes of fruit and vegetables is not available at the population level. Apparent consumption data, i.e. the quantity of fruit and vegetables available for consumption, are used as surrogate indicators of changes in intake at the population level.
- The NHMRC have made recommendations about appropriate levels of fruit and vegetables available for consumption for the population as a whole; these are 373 g/day/person for fruit and 401 g/day/person for vegetables.
- Apparent consumption of vegetables increased substantially between 1983 and 1990, but has since declined. Apparent consumption of fruit fell between 1983 and 1987, but appears to be increasing, although there was a levelling out in 1992–93.

For more information, see:

Lester IH (1994) *Australia's food & nutrition.* Canberra: AGPS.

NHMRC (1994) *The core food groups: the scientific basis for developing nutrition education tools.* Canberra: NHMRC.

Apparent consumption of sugars



	1983–84	1984–85	1985–86	1986–87	1987–88	1988–89	1989–90	1990–91	1991–92	1992–93
All sugars combined										
g/person/day	134.2	134.5	136.7	133.4	130.1	133.1	132.9	131.5	124.9	138.9
Refined sugar										
g/person/day	31.5	27.4	24.9	23.6	24.1	24.7	31.8	27.1	25.5	24.7
Manufacturing sugar (excl. brewing)										
g/person/day	na	na	na	87.9	82.2	83.2	76.8	82.7	79.4	93.9

na Data not available

Note: All sugars combined includes cane sugar, honey, glucose and syrups and excludes sugars in fruit and milk.

Source: ABS Cat. No. 4306.0

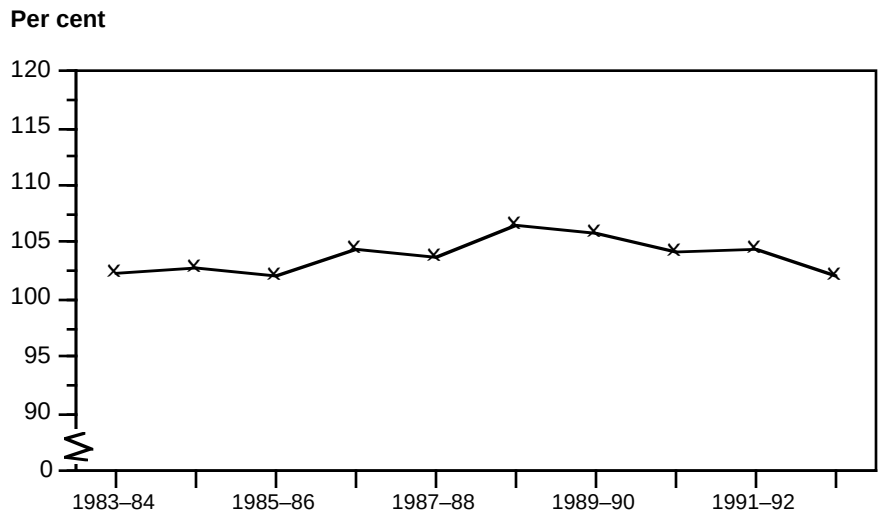
- Refined sugar is mostly used to make food, particularly fatty foods, more palatable. Consumption of refined sugar contributes to overweight and tooth decay. The NHMRC recommends that people eat only a moderate amount of sugars and foods containing added sugars.
- Information on trends over time for the dietary intake of sugars is not available at the population level. Apparent consumption data, i.e. the quantity of sugar available for consumption, are used as surrogate indicators of possible changes in dietary intake at the population level.
- Between 1983 and 1993, the consumption of all sugars combined fluctuated between 125 and 139 grams per person per day. A similar pattern was observed for refined sugar. The amount of sugars used in manufacturing has been increasing since 1989.

For more information, see:

Lester IH (1994) *Australia's food & nutrition.* Canberra: AGPS.

NHMRC (1992) *Dietary guidelines for Australians*. Canberra: AGPS.

Adequacy of the calcium supply



	1983–84	1984–85	1985–86	1986–87	1987–88	1988–89	1989–90	1990–91	1991–92	1992–93
Available calcium as a % of an adequate supply	102.2	102.8	102.0	104.3	103.6	106.4	105.7	104.1	104.3	102.1

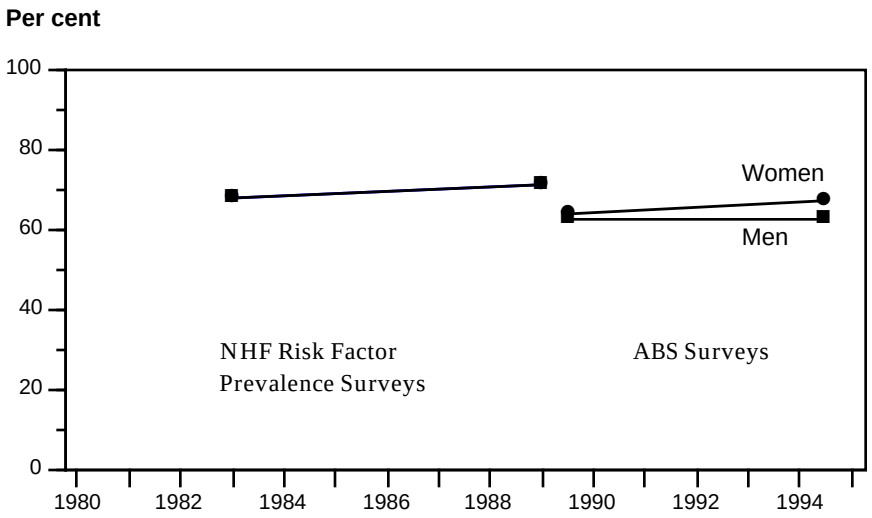
Source: AIHW, derived from ABS Cat. No. 4306.0

- Calcium is an important nutrient for maintaining adequate bone density. It is also important in a variety of metabolic functions in the body (e.g. muscle contraction and nerve functioning). When the diet is calcium deficient, calcium is drawn from bone to meet the body's metabolic needs. An adequate dietary intake of calcium throughout life is therefore necessary so that bone is not depleted of its store of calcium.
- An inadequate intake of calcium in childhood and early adulthood can predispose a person to bone fragility and osteoporosis in later life. Although calcium intake is of concern for the whole population, infants, children, pregnant and lactating women, and post-menopausal women are the most vulnerable groups.
- Information on trends over time for the dietary intake of calcium is not available at the population level. Apparent consumption data expressed as a proportion of the amount of calcium considered to be adequate for the population as a whole, is used as a surrogate indicator of the adequacy of the supply of this nutrient.
- If the available calcium supply is equal to 100%, then supply is just meeting demand. It is recommended that supply exceed demand by a substantial amount to allow for varying needs in the population, and to offset losses which occur in food processing and wastage. Between 1983 and 1993, the available calcium supply averaged 104% with no consistent trend evident during this period. Thus, the data indicate that calcium is a nutrient of concern and an examination of intakes is warranted.

For more information, see:

Lester IH (1994) *Australia's food & nutrition.* Canberra: AGPS.

Proportion of 25–64 year olds undertaking any physical exercise for sport or recreation (%)



	NHF Risk Factor Prevalence Surveys			ABS Surveys	
	1980	1983	1989	1989–90	1994–95
Men	na	68.0	71.0	62.4	62.7
Women	na	68.0	71.3	64.1	67.4

na Data not available

Notes: 1. Physical exercise included walking or any exercise for sport or recreation.

2. The exercise rates were age-adjusted using the total Australian population as at 30 June 1991.

Sources: 1. Data for 1980, 1983 and 1989 were derived from the NHF Risk Factor Prevalence Surveys.

2. Data for 1989–90 were derived from the ABS National Health Survey.

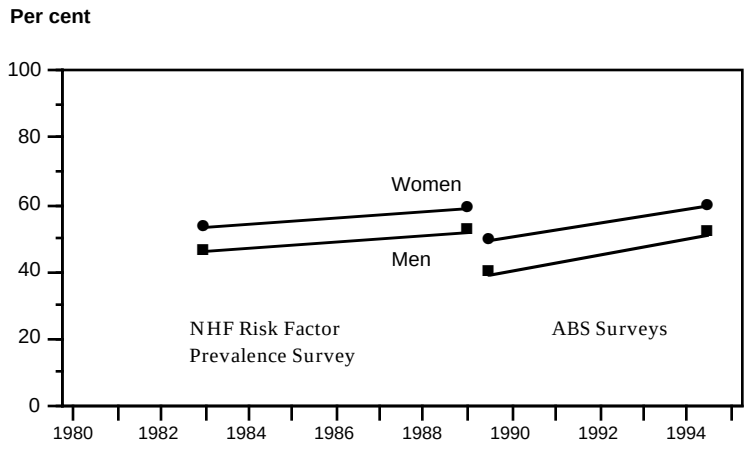
3. Data for 1994–95 were derived from the ABS Population Survey Monitor conducted in May, August and November 1994, and February 1995.

- Physical activity is important in preventing and managing a number of medical conditions such as coronary heart disease, hypertension, non insulin dependent diabetes mellitus, osteoporosis, obesity, and some mental health problems, specifically depression and self esteem. It has also been associated with a decreased risk of certain types of cancer.
- Between 1983 and 1995, the proportion of 25–64 year olds engaging in any exercise had not changed substantially, although more people were walking for exercise (see *Proportion of 25–64 year olds walking for exercise* on page 79).
- The differences between the ABS and NHF surveys reflect differences in methods. In particular, the NHF estimates were based on capital cities and self-completed questionnaires; the ABS surveys were national and responses were obtained via an interview.

For more information, see:

Waters AM & Bennett S (1995) *Risk factors for cardiovascular diseases—A summary of Australian data.* AIHW Cardiovascular disease monitoring series No. 1. Canberra: AGPS.

Proportion of 25–64 year olds walking for recreation or exercise (%)



	NHF Risk Factor Prevalence Surveys			ABS Surveys	
	1980	1983	1989	1989–90	1994–95
Men	na	46.5	52.4	40.0	51.9
Women	na	53.4	59.0	49.8	59.7

na Data not available

Notes: 1. Walking was defined as walking for recreation or exercise.

2. The walking rates were age-adjusted using the total Australian population as at 30 June 1991.

Sources: 1. Data for 1980, 1983 and 1989 were derived from the NHF Risk Factor Prevalence Surveys.

2. Data for 1989–90 were derived from the ABS National Health Survey.

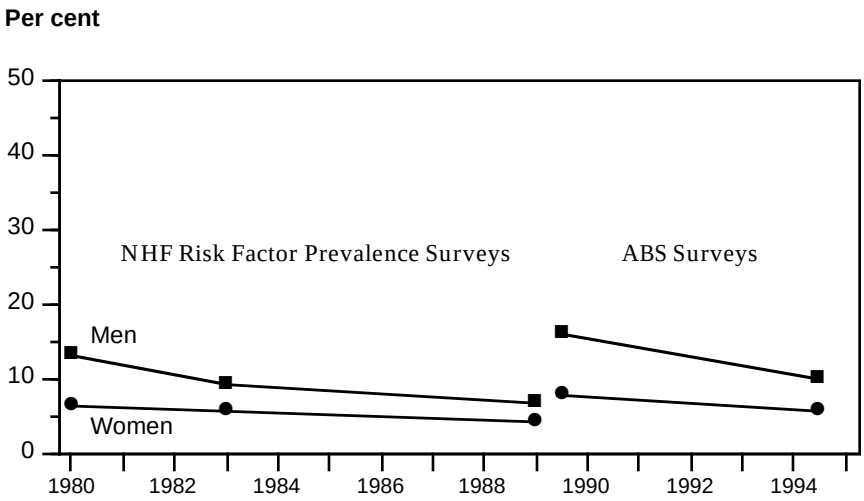
3. Data for 1994–95 were derived from the ABS Population Survey Monitor conducted in May, August and November 1994, and February 1995.

- There is increasing evidence that lower intensity exercise, such as walking, reduces the risk of cardiovascular disease. From a public health perspective, there may be greater merit in encouraging people to walk for exercise or to participate in other forms of low intensity exercise which can be incorporated into everyday life, than in promoting the benefits of vigorous, high intensity exercise.
- Between 1983 and 1995, the proportion of both men and women walking for exercise increased, with rates consistently higher for women than men. In 1994–95, over 50% of 25 to 64 year olds reported walking for exercise in the two weeks prior to participating in the survey.
- The differences between the ABS and NHF surveys reflect differences in methods. In particular, the NHF estimates were based on capital cities and self-completed questionnaires; the ABS surveys were national and responses were obtained via an interview.

For more information, see:

Waters AM & Bennett S (1995) *Risk factors for cardiovascular diseases—A summary of Australian data.* AIHW Cardiovascular disease monitoring series No. 1. Canberra: AGPS.

Proportion of 25–64 year olds who drink alcohol at a level hazardous to their health (%)



	NHF Risk Factor Prevalence Surveys			ABS Surveys	
	1980	1983	1989	1989–90	1994–95
Men	12.9	9.0	6.6	15.8	9.7
Women	6.4	5.6	4.3	7.6	5.6

Notes: 1. Hazardous levels of alcohol consumption are defined by the NHMRC as 'more than four standard drinks per day for men, and more than two standard drinks per day for women'.

2. The proportions were age-adjusted using the total Australian population as at 30 June 1991.

Sources: 1. Data for 1980, 1983 and 1989 were derived from the NHF Risk Factor Prevalence Surveys.

2. Data for 1989–90 were derived from the ABS National Health Survey.

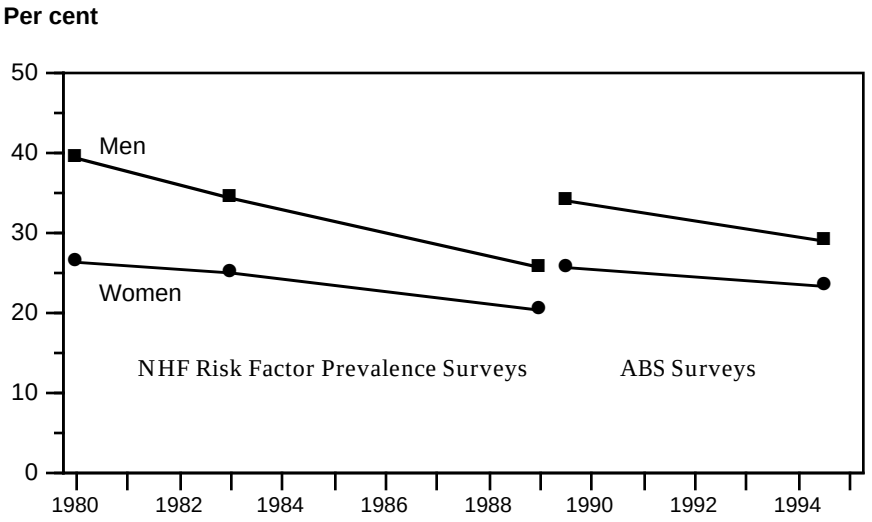
3. Data for 1994–95 were derived from the ABS Population Survey Monitor conducted in May, August and November 1994, and February 1995.

- Alcohol is a drug which has serious consequences when misused. Alcohol intoxication is a leading cause of road traffic accidents. In 1983, 40% of fatally injured drivers and motor cycle riders had blood alcohol concentrations of 0.05 mg/ml or more. In 1993, the proportion of driver fatalities had fallen to 32%. Hazardous levels of alcohol consumption have also been linked to an increased risk of heart disease, stroke, brain and liver damage, and some cancers.
- Between 1980 and 1995, there has been a decline in the proportion of men and women drinking alcohol at levels hazardous to their health. Despite these improvements, there were still an estimated 860,000 adults in Australia who drank alcohol at dangerous levels in 1994–95.
- The differences between the ABS and NHF surveys reflect differences in methods. In particular, the NHF estimates were based on capital cities and self-completed questionnaires; the ABS surveys were national and responses were obtained via an interview.

For more information, see:

AIHW (1994) *Australian health indicators.* No. 2.

Proportion of 25–64 year olds who smoke cigarettes (%)



	NHF Risk Factor Prevalence Surveys			ABS Surveys	
	1980	1983	1989	1989–90	1994–95
Men	39.3	34.4	25.7	34.0	29.0
Women	26.2	25.1	20.4	25.8	23.3

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

Sources: 1. Data for 1980, 1983 and 1989 were derived from the NHF Risk Factor Prevalence Surveys.

2. Data for 1989–90 were derived from the ABS National Health Survey.

3. Data for 1994–95 were derived from the ABS Population Survey Monitor conducted in February, May, August and November 1994, and February 1995.

- Tobacco smoking is a risk factor for heart disease, stroke, lung cancer and chronic lung disease. Reductions in the number of people smoking are likely to contribute to further falls in the numbers of people dying from cardiovascular disease. Smoking during pregnancy has also been linked to lower birthweight babies.
- Between 1980 and 1995, the proportion of men and women smoking declined substantially. Despite the decline, one in four adults were still smoking cigarettes in 1994–95. The distribution of smokers in the population is uneven with people on lower incomes, people with less education and unemployed people reporting higher rates of smoking.
- The differences between the ABS and NHF surveys reflect differences in methods. In particular, the NHF estimates were based on capital cities and self-completed questionnaires; the ABS surveys were national and responses were obtained via an interview.

For more information, see:

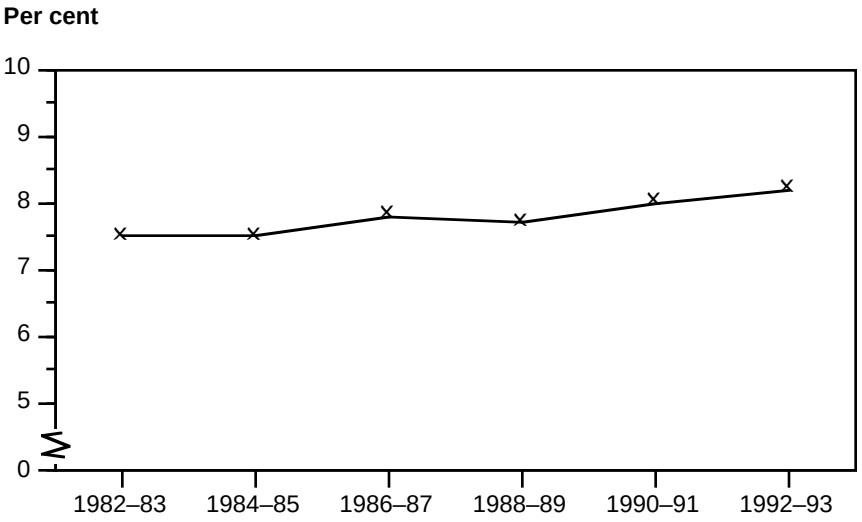
AIHW *Australian health indicators* No. 1 1994; No. 3 1995.

Mathers C (1994) *Health differentials among adult Australians aged 25–64 years.* AIHW Health monitoring series No. 1. Canberra: AGPS.

Health resources

- *Health expenditure*
- *Health labour force*
- *Hospitals*

Health expenditure as a proportion of GDP at constant 1989–90 prices



	1982–83	1984–85	1986–87	1988–89	1990–91	1992–93
Total health expenditure ($m)	20,673	22,862	25,341	27,748	29,358	31,068
Total GDP ($m)	275,444	306,651	326,505	359,506	368,524	380,602
Total health expenditure as a % of GDP	7.5	7.5	7.8	7.7	8.0	8.2

Notes: 1. Health expenditure is deflated to constant prices using specific health deflators (see AIHW Health expenditure bulletin referred to below).

2. Total health expenditure for 1992–93 based on preliminary AIHW and ABS estimates.

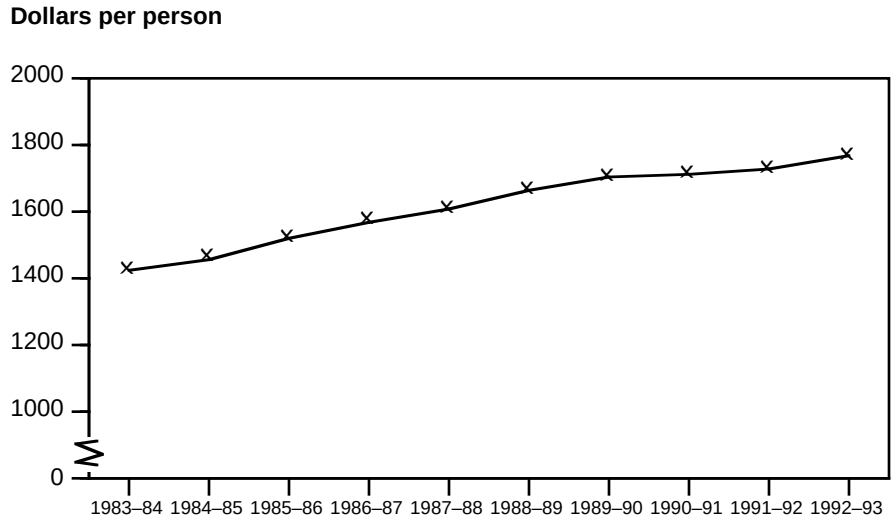
Sources: Health expenditure data from AIHW Health expenditure bulletin No. 10 (1994); GDP data from ABS Cat. No. 5204.0.

- The amount of resources allocated to health is one indicator of the priority which society places on health and health care. Gross domestic product (GDP) is a measure of expenditure or income occurring from production within the domestic economy. Hence, health expenditure, expressed as a proportion of GDP, indicates how much is spent on health in relation to the productive capacity of the economy. For the period 1982–83 to 1992–93, this proportion showed a slight upward trend.
- Health expenditure expressed as a proportion of GDP is also the best indicator for long-term and international comparisons. For example, in 1990, total health expenditure in the USA represented 12% of GDP and in Japan 6.5%, compared with approximately 8% for the same period in Australia. However fluctuations in the growth of GDP in different countries can distort these comparisons.

For more information, see:

AIHW (1994) *Health expenditure bulletin* No. 10. Canberra: AIHW.

Health expenditure per person at constant 1989–90 prices



	1983–84	1984–85	1985–86	1986–87	1987–88	1988–89	1989–90	1990–91	1991–92	1992–93
Health expenditure per person ($)	1,420	1,458	1,521	1,571	1,605	1,664	1,703	1,710	1,724	1,768
Annual growth rate (%)		2.7	4.3	3.3	2.2	3.7	2.3	0.4	0.8	2.6

Notes: 1. Health expenditure is deflated to constant prices using specific health deflators (see AIHW Health expenditure bulletin referred to below).

2. The health expenditure figures in 1991–92 and 1992–93 are based on preliminary AIHW and ABS estimates.

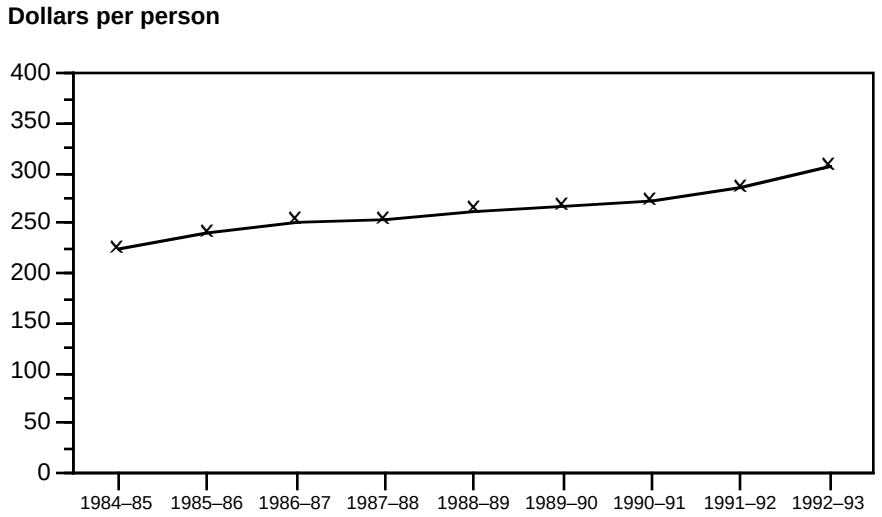
Source: AIHW Health expenditure bulletin No. 10 (1994).

- In the period 1983 to 1993, the amount per person spent on health increased substantially in real terms. The average annual growth rate during this time was 2.7%. In 1990–91, 52% of health expenditure was spent on acute care hospitals and medical services alone.
- Much of the increase in health expenditure per person is due to the growth in individual use of health services.

For more information, see:

AIHW (1994) *Health expenditure bulletin* No. 10. Canberra: AIHW.

Medical service fees per person at constant 1989–90 prices



	1984–85	1985–86	1986–87	1987–88	1988–89	1989–90	1990–91	1991–92	1992–93
Medical service fees per person ($)	224	240	252	253	263	267	272	284	307
Annual growth rate (%)		7.3	4.8	0.6	3.7	1.5	1.9	4.7	7.8

Notes: 1. Medical service fees include fees charged by general practitioners, specialists and private diagnostic service providers for services which are reimbursable under Medicare.

2. Health expenditure is deflated to constant prices using the 'doctor' private final consumption expenditur deflator (see AIHW Health expenditure bulletin referred to below).

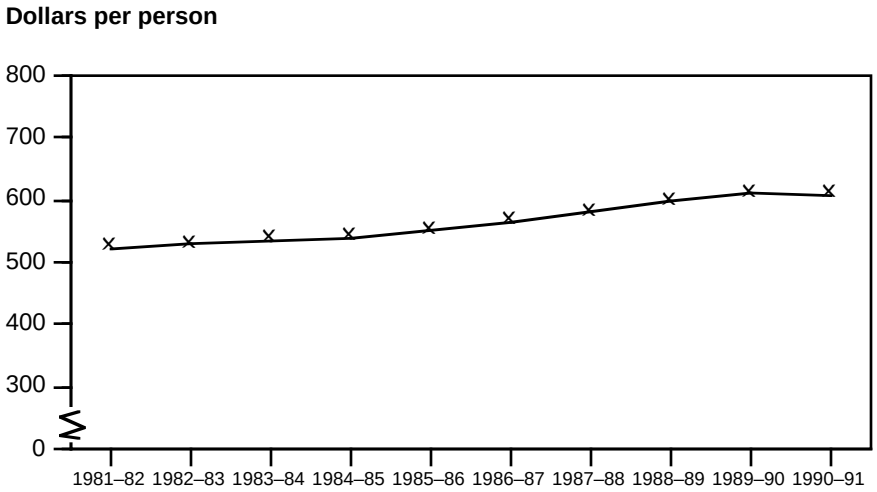
Source: AIHW, derived from Medicare Claims data provided by the Health Insurance Commission.

- Medical services refer to services provided by doctors for patients. These include GP attendances, pathology, radiology and optometry. Also included are medical services provided to private patients in public and private hospitals.
- Expenditure not included in this indicator are the cost of salaried medical practitioners, that of visiting medical officers at recognised public hospitals and that of compensable services or payments made directly by patients to a doctor that were not reimbursed by Medicare.
- Between 1984 and 1993, medical service fees per person rose by an average of 4% per year. In 1992–93, they accounted for 17% of total health expenditure. Thus, the growth in medical service fees per person has contributed substantially to the overall growth in health expenditure per person. In the period 1983 to 1993, health expenditure per person rose by an average 2.7% per year (see *Health expenditure per person at constant 1989–90 prices* on page 86).

For more information, see:

AIHW (1994) *Health expenditure bulletin* No. 10. Canberra: AIHW.

Acute care hospital expenditure per person at constant 1989–90 prices



	1981–82	1982–83	1983–84	1984–85	1985–86	1986–87	1987–88	1988–89	1989–90	1990–91
Acute care hospital expenditure ($m)	7,869	8,112	8,292	8,472	8,770	9,138	9,503	9,963	10,334	10,454
Acute care hospital expenditure per person ($)	523	531	536	540	552	566	579	597	610	609
Annual growth rate (%)		1.5	0.9	0.8	2.2	2.5	2.3	3.1	2.2	–0.2

Note: Hospital expenditure data are compiled and estimated by AIHW.

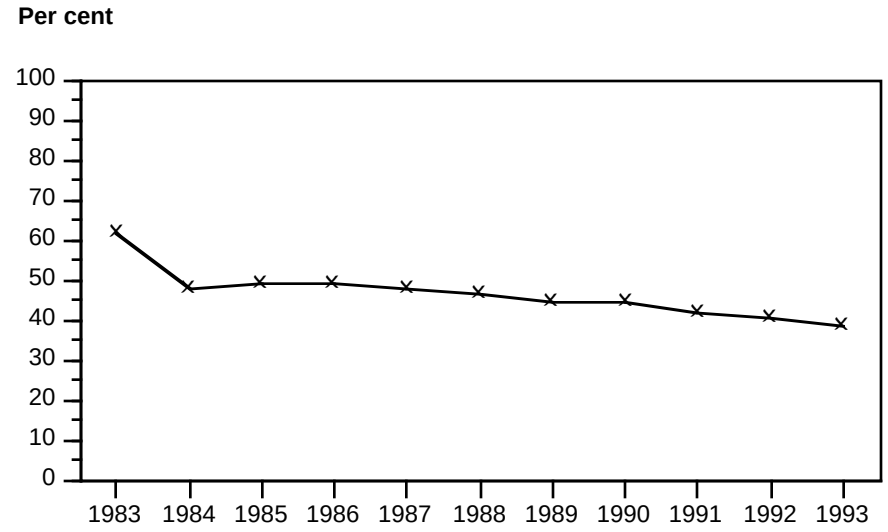
Sources: AIHW Hospital utilisation and costs study 1989–90; AIHW Hospital utilisation and costs study 1991–92.

- Acute care hospitals include public, private and repatriation hospitals that provide medical, surgical or obstetric services for inpatient treatment and round-the-clock nursing services. Most patients stay for a relatively short time.
- Acute care hospitals are an important sector of the health system. In 1990–91, they accounted for 36% of health expenditure. In 1991–92, 4.3 million people were admitted to acute care hospitals, and 32 million outpatient and accident and emergency services were provided.
- Acute care hospital expenditure is an important indicator of the resources being allocated to the health sector. Between 1981 and 1991, expenditure per person rose by an average 1.7% per year, despite falls in the average length of stay in hospital over the same period (see *Average length of stay in acute care hospitals* on page 99).

For more information, see:

Cook M & Sardana B (1994) *Hospital utilisation and costs study 1991–92.* Vol. 2, Canberra: AGPS.

Proportion of the population with private health insurance



	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993
Proportion with private health insurance (%)	61.5	47.9	49.1	49.2	47.5	46.2	44.5	44.5	41.9	40.4	38.4

Note: Private health insurance refers to basic hospital insurance coverage as at 31 December in each year.

Source: AIHW Australia's Health 1994.

- Every Australian resident is guaranteed adequate health care at minimal or no cost (at the point of service) through a comprehensive health insurance scheme funded by compulsory levies (Medicare scheme). However, a large proportion of the population choose to supplement that guaranteed level of health care by purchasing private health insurance.
- The factors that motivate people to purchase private health insurance are varied, and include the option of receiving treatment in a private hospital or as a private patient in a public hospital, perceived ability to avoid waiting lists for non-urgent services and perceived ability to choose their own physician. Changes in the proportion of people who choose to have private health insurance may reflect changes in their attitudes towards these factors as well as their ability to pay the health insurance premiums.
- Between 1983 and 1993, the proportion of people with basic private health insurance, fell from 61.5 to 38.4% of the total population. The introduction of Medicare in February 1984 caused a rapid decline between December 1983 and December 1984. From 1985 to 1993, the decline slowed to an average 1.3% per year.

For more information, see:

AIHW (1994) *Australia's health 1994: the fourth biennial report of the Australian Institute of Health and Welfare.* Canberra: AGPS.

Proportion of the labour force employed in the health industry

	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
Employed in the health industry ('000)	453.6	461.6	489.2	510.5	530.7	520.3	557.9	578.5	571.8	557.8	547.2
Civilian labour force ('000)	7,070.1	7,248.3	7,516.2	7,694.4	7,892.1	8,197.0	8,412.5	8,475.2	8,585.7	8,537.0	8,683.5
Proportion of the labour force employed in the health industry (%)	6.4	6.4	6.5	6.6	6.7	6.3	6.6	6.8	6.7	6.5	6.3

Note: Civilian labour force includes unemployed people looking for work.

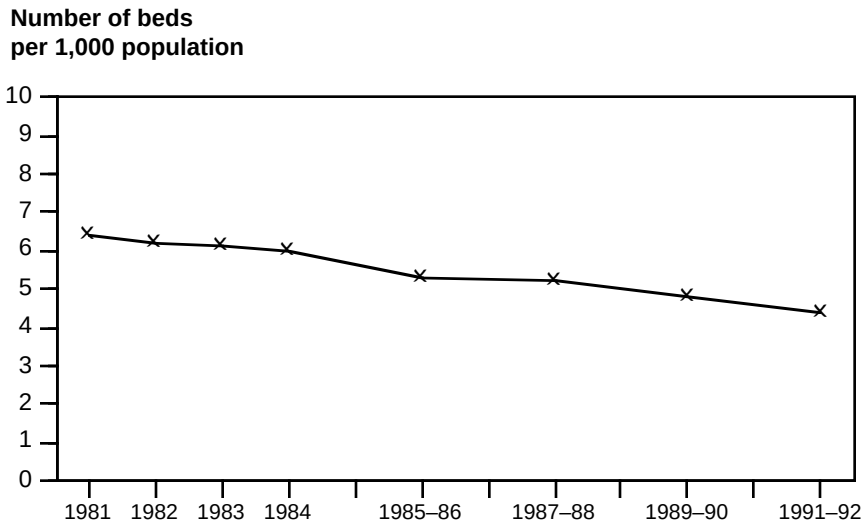
Sources: Health industry employment data from unpublished data provided by the ABS; civilian labour force data from ABS Cat. No. 6203.0.

- Workers employed in the health industry include people with a wide variety of skills. These range from health professionals (such as medical practitioners, nurses, physiotherapists) to other professionals (such as computer specialists, accountants, social workers, cooks) and general support staff (such as clerks, orderlies). In the past 15 years, workers employed in the health industry have accounted for 6 to 7% of the total civilian labour force in Australia.
- In the period 1984 to 1991, the proportion of health industry workers to the total civilian labour force increased by an average of 0.9% per year. Growth in the private sector accounted for most of that increase.
- The decline in the workforce since 1991 is directly attributed to reductions in the workforce in institutional care settings such as hospitals. Despite these reductions, the resources allocated to the health industry continue to grow.

For more information, see:

AIHW *Health labour force bulletins.*

Number of acute care hospital beds per 1,000 population



	1981	1982	1983	1984	1985–86	1987–88	1989–90	1991–92
Number of beds per 1,000 population	6.4	6.2	6.1	6.0	5.3	5.2	4.8	4.4

Notes: 1. Includes public, private and repatriation hospitals (operated by the Department of Veterans' Affairs) and private psychiatric hospitals.

2. Excludes prison hospitals, hospitals operated by the Department of Defence and public psychiatric hospitals.

Sources: AIHW Hospital utilisation and costs study 1989–90; AIHW Hospital utilisation and costs study 1991–92.

- The number of acute care hospital beds per 1,000 population provides a measure of the capacity of institutional health care facilities. It does not indicate total capacity as hospital services comprise a mix of inpatient, non-inpatient and outreach services.
- Acute care hospitals are establishments that provide at least minimal medical, surgical or obstetrical services for inpatient treatment and care, round-the-clock comprehensive qualified nursing service and other necessary professional services.
- The number of beds available in acute care hospitals has declined from 6.4 beds per 1,000 population in 1981 to 4.4 beds per 1,000 in 1991–92. However, this decline has not resulted in fewer people being treated in hospital *(see Acute care hospital separation rate per 1,000 population* on page 97).
- The decline is consistent with projected demand for hospital services. It has been projected that 3.3 beds per 1,000 persons will be required by the year 2001. These projections take account of population growth and ageing, trends in disease-specific admissions and decreases in the average length of stay in hospital.

For more information, see:

AIHW (1994) *Australia's health 1994: the fourth biennial report of the Australian Institute of Health and Welfare.* Canberra: AGPS.

AIHW *Hospital utilisation and costs study* series.

Health service use

- *Medical services*
- *Dental services*
- *Hospital use*
- *Secondary prevention*
- *Aged care*

Number of medical consultations per person

	1984–85	1985–86	1986–87	1987–88	1988–89	1989–90	1990–91	1991–92	1992–93
Males	4.0	4.2	4.3	4.5	4.6	4.8	4.8	5.0	5.2
Females	5.7	6.0	6.1	6.3	6.5	6.8	6.7	6.9	7.1
Total	4.9	5.1	5.2	5.4	5.6	5.8	5.8	6.0	6.2

Notes: 1. Includes general practice and specialist consultations (excludes services such as pathology, radiology, optometry, obstetrics, etc).

2. The consultation rates were age-adjusted using the total Australian population as at 30 June 1991.

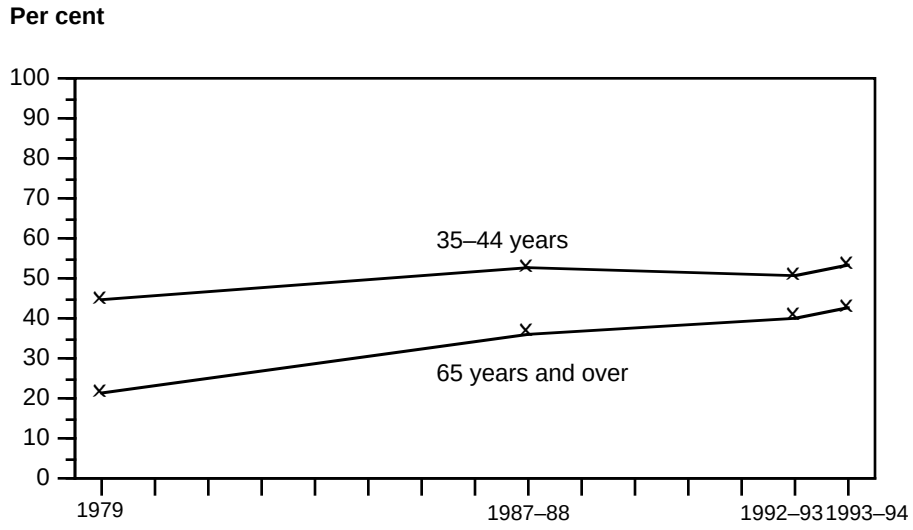
Source: AIHW, derived from Medicare Claims data provided by the Health Insurance Commission.

- Services by doctors (general practitioners and specialists) are a major component of Australia's health service system. In 1992–93, attendances to GPs and specialists represented about 64% of all medical services. The remaining services were provided by practitioners in various fields such as obstetrics, anaesthesia, pathology, radiology and surgery.
- The average number of GP and specialist consultations increased from 4.9 consultations per person in 1984–85 to 6.2 in 1992–93.
- Even excluding pregnancy related consultations, more females than males consulted GPs and specialists during that time. However, the ratio of female to male consultations has decreased slightly over that period. In 1984–85, there were 143 female for every 100 male consultations compared with 136 in 1992–93.
- One possible explanation for the increase between 1984 and 1993 is that access to practitioners has improved as a result of a 40% increase in the number of GPs and specialists.

For more information, see:

AIHW (1994) *Australia's health 1994: the fourth biennial report of the Australian Institute of Health and Welfare.* Canberra: AGPS.

Proportion of adults attending a dentist within the previous 12 months



	1979	1987–88	1992–93	1993–94
Age				
35–44 years (%)	44.9	52.6	51.0	53.4
65 years and over (%)	21.5	36.4	40.4	42.6

Source: AIHW Dental Statistics Research Unit.

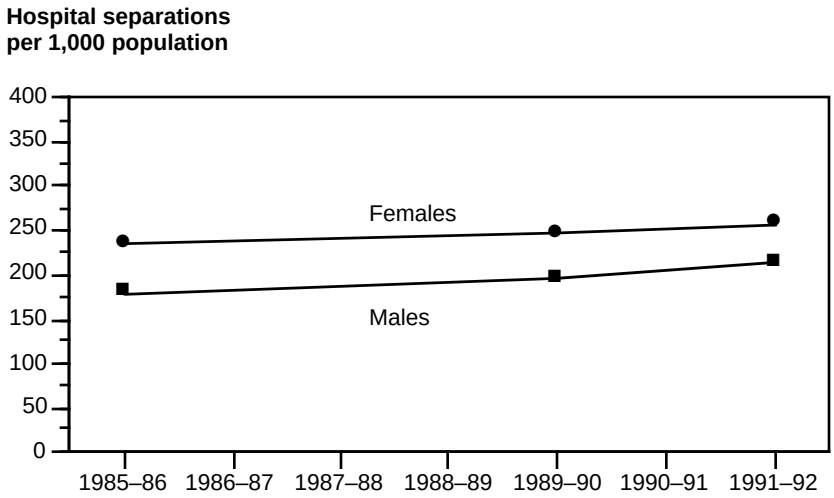
- In the period 1979 to 1993–94, the proportion of people in both age groups (35–44 years and 65 years and over), attending a dentist in the previous 12 months increased substantially.
- This increase can be attributed to an increased awareness of the need for preventive care within the community and to the decline in edentulism (loss of all natural teeth) within the adult community. Both of these changes are associated with an increase in the frequency of visits to a dentist, and an increase in the proportion of visits that are for check-ups rather than dental problems.
- Despite a total increase in dental attendance in adults aged 65 years and over in the previous 15 years, fewer dental visits occur in older men and women with lower socioeconomic status. Among younger age groups, socioeconomic differences are not as apparent.

For more information, see:

AIHW Dental Statistics Research Unit (1993) *Dental care for adults in Australia.* Adelaide: DSRU.

Mathers C. (1994) *Health differentials among older Australians.* AIHW Health monitoring series No. 2. Canberra: AGPS.

Acute care hospital separation rate per 1,000 population



	1985–86	1987–88	1989–90	1991–92
Males	179.0	na	193.8	214.0
Females	233.5	na	245.8	258.0
Total	206.3	213.5	219.8	237.0

na Data not available

Notes: 1. Includes public, private and repatriation hospitals (operated by the Department of Veterans' Affairs) and private psychiatric hospitals.

2. Excludes prison hospitals, hospitals operated by the Department of Defence and public psychiatric hospitals.

3. Private hospital separations have been estimated for Vic, ACT and NT.

Source: AIHW Hospital utilisation and costs study.

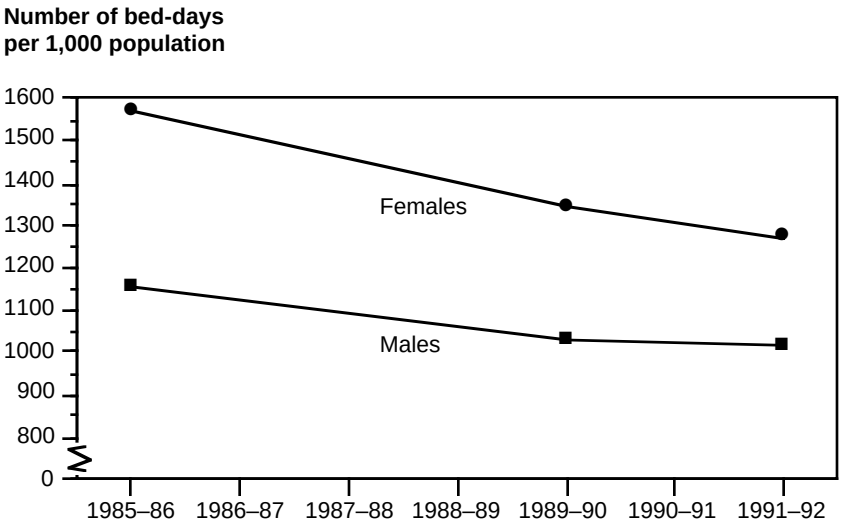
- Hospital separation rates provide an indicator of the numbers of episodes of hospital care per person and include same-day episodes when the patient is admitted.
- Trends in hospital separations (or discharges) are influenced not only by levels of serious illness in the population, but also by access to hospitals, repeated admissions, current medical attitudes towards treating an illness or injury in hospital and changes in the definition of a hospital separation.
- The number of acute care hospital separations has grown from 206 per 1,000 population in 1985–86 to 237 in 1991–92 representing an average annual growth rate of 2.3%. Part of the rise in the growth of services that occurred between 1989–90 and 1991–92 is due to an increase in the number of private hospitals which provide investigation and treatment of acute conditions on a same-day basis.
- Hospital separation rates for females were greater than for males throughout the reported period. This difference is due in part to a higher rate of hospital admissions among women for reproductive health care.

For more information, see:

AIHW (1994) *Australia's health 1994: the fourth biennial report of the Australian Institute of Health and Welfare.* Canberra: AGPS.

AIHW *Hospital utilisation and costs study* series.

Number of acute care hospital bed-days per 1,000 population (days)



	1985–86	1987–88	1989–90	1991–92
Males	1,159	na	1,033	1,013
Females	1,569	na	1,341	1,273
Total	1,346	1,319	1,187	1,145

na Data not available

Notes: 1. Includes public, private and repatriation hospitals (operated by the Department of Veterans' Affairs) and private psychiatric hospitals.

2. Excludes prison hospitals, hospitals operated by the Department of Defence and public psychiatric hospitals.

3. Private hospital bed-days have been estimated for Vic, ACT and NT.

Source: AIHW Hospital utilisation and costs study.

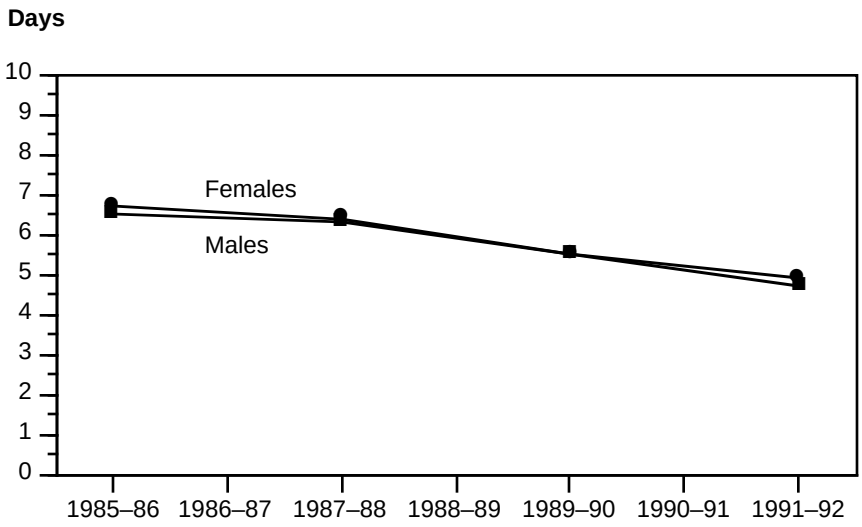
- The number of acute care hospital bed-days has declined steadily from 1,346 bed-days per 1,000 population in 1985–86 to 1,145 in 1991–92, representing an average annual fall of 2.6%.
- The decline in bed-days is due to two related factors. The first is that, on average, patient stays are shorter now than a few years ago (for the same conditions). The second is that some treatments that previously required patients to stay overnight can now be provided on a same-day basis (see *Average length of stay in acute care hospitals* on page 99). Same-day episodes of care count as one bed-day if the patient was admitted.
- The hospital bed-day rates for females were higher than for males in each of the years shown, though the decline during this period was more rapid for females (3.3%). The higher number of bed-days among females is due in part to a higher rate of hospital admissions for reproductive health care.

For more information, see:

AIHW (1994) *Australia's health 1994: the fourth biennial report of the Australian Institute of Health and Welfare.* Canberra: AGPS.

AIHW *Hospital utilisation and costs study* series.

Average length of stay in acute care hospitals (days)



	1985–86	1987–88	1989–90	1991–92
Males	6.5	6.3	5.5	4.7
Females	6.7	6.4	5.5	4.9
Total	6.6	6.3	5.5	4.8

Notes: 1. Includes public, private and repatriation hospitals (operated by the Department of Veterans' Affairs) and private psychiatric hospitals, except 1987–88 which includes public hospitals only.

2. Excludes prison hospitals, hospitals operated by the Department of Defence and public psychiatric hospitals.

3. Private hospital bed-days and separations have been estimated for Vic, ACT and NT.

4. Same-day hospital separations (or discharges) and a single overnight stay are attributed a length of stay of one day.

Source: AIHW Hospital utilisation and costs study.

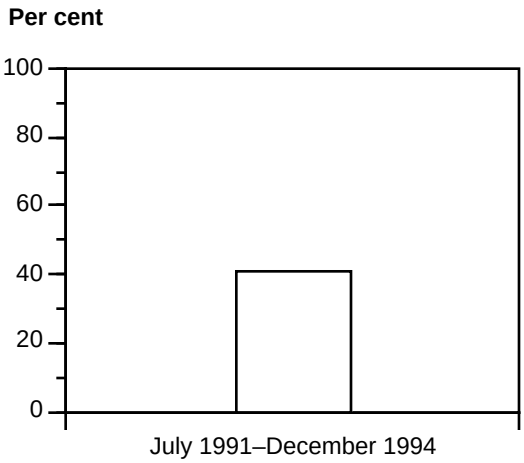
- The average length of stay in acute care hospitals has fallen from 6.6 days to 4.8 days in the period 1985–86 to 1991–92, representing an overall reduction of 26.0% or an average annual fall of 4.9%. The average length of stay profile is similar for males and females, both in terms of the average length of stay for any one year and for the rate of decline over the period shown.
- The decline in the average length of stay is due to several factors. These include better use of anaesthetics and antibiotics, the use of less invasive surgical techniques and the expansion of early discharge programs enabling patients to return to their home to receive follow-up care.

For more information, see:

AIHW (1994) *Australia's health 1994: the fourth biennial report of the Australian Institute of Health and Welfare.* Canberra: AGPS.

AIHW *Hospital utilisation and costs study* series.

Proportion of women aged 40 years and over who have participated in the national breast cancer screening program (%)



	1 July 1991–31 December 1994
Women aged 40 years and over (%)	41

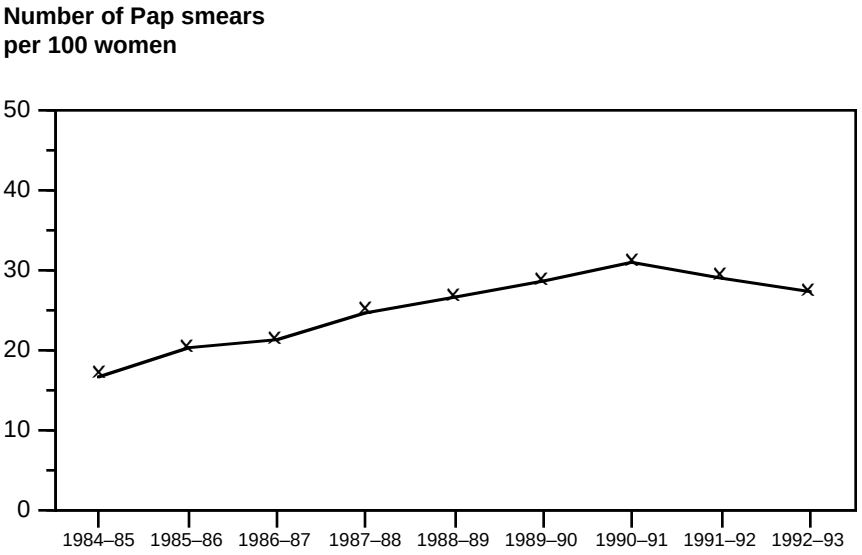
Source: Commonwealth Department of Human Services and Health.

- Breast cancer is the most common cause of cancer death in women. In 1993, 2,641 women in Australia died from the disease. Secondary prevention of breast cancer, via the early detection of symptoms, may help to stop the natural progression of the disease.
- A national breast cancer screening program began in 1991. The program aims to reduce mortality from breast cancer by the early detection of tumours. Two methods are being employed to encourage early detection: breast examinations (either self examination or examination by a clinician) and screening mammography.
- In the period 1 July 1991 to 31 December 1994, 41% of the 1.7 million Australian women over 40 years of age had participated in the national breast cancer screening program.
- Women aged 40 years or over are eligible for screening mammography offered under the program, although women in the 50–69 year age group have been actively targeted for screening.
- A reduction of 16% in breast cancer mortality amongst all women is projected to occur by the year 2005. This estimate allows for deaths among women who are not targeted or do not participate in screening and is based on a two yearly screening interval.

For more information, see:

AIHW (1992) *Australia's health 1992: The third biennial report of the Australian Institute of Health and Welfare.* Canberra: AGPS.

Pap smear rate for the early detection of cervical cancer per 100 women aged 15–69 years



	1984–85	1985–86	1986–87	1987–88	1988–89	1989–90	1990–91	1991–92	1992–93
Rate per 100 women aged 15 to 69 years	16.9	20.5	21.4	24.9	26.6	28.7	31.0	29.2	27.5

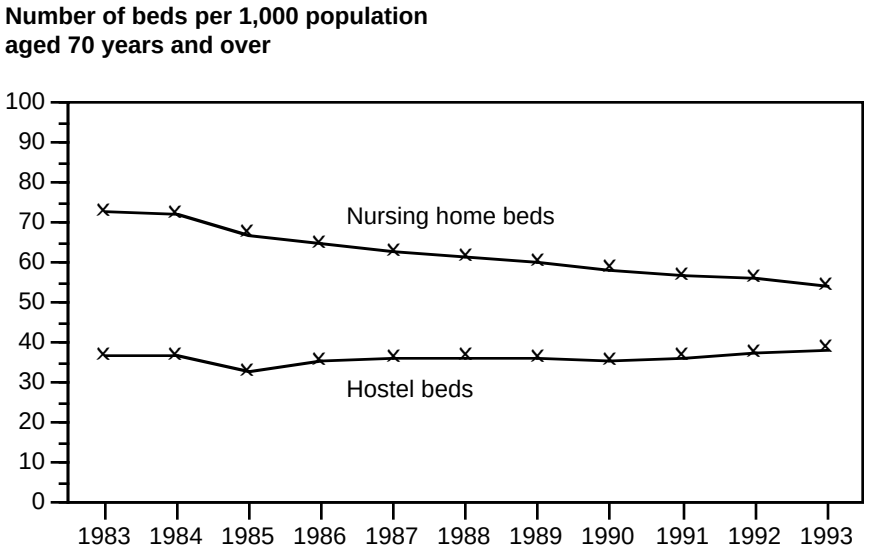
Source: Dankiw 1994.

- Between 1981 and 1993, cervical cancer caused the death of an average of 350 Australian women each year.
- The risk of cervical cancer increases with age. Women who are, or have been, sexually active and who have not had a hysterectomy are regarded as those at higher risk of developing the cancer. It is estimated that 90% of new cases of squamous cervical cancer (comprising 80–85% of all cases) could be prevented if women in the target group were to have a Pap smear once every two years.
- The 1989–90 ABS National Health Survey found that 72% of women aged 18–64 years had been screened at least once in the previous three years. Annual data from the Medicare system indicate that the Pap smear rates for women aged 15–69 years showed an upward trend between 1984–85 and 1992–93, although there has been a slight decline in the last two years. The proportion of Pap smears being performed in private (Medicare-funded) versus public laboratories may have influenced this rise.
- Although overall screening rates appear to have increased, it has been estimated that only half the potential cases are currently being prevented. The reason for this is that much of the screening is occurring among younger women who are at lower risk. Screening rates are lower among older women, Aboriginal women, women of non-English speaking background, and women of lower socioeconomic status.

For more information, see:

AIHW (1992) *Australia's health 1992: The third biennial report of the Australian Institute of Health and Welfare.* Canberra: AGPS.

Nursing home and hostel beds per 1,000 population aged 70 years and over



	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993
Nursing homes	72.8	72.0	67.2	64.9	63.0	61.4	60.4	58.5	56.8	56.4	54.3
Hostels	37.1	36.8	32.8	35.8	36.1	36.6	36.2	35.8	36.5	37.4	38.5
TOTAL	109.9	108.8	100.0	100.7	99.2	98.0	96.6	94.3	93.3	93.8	92.7

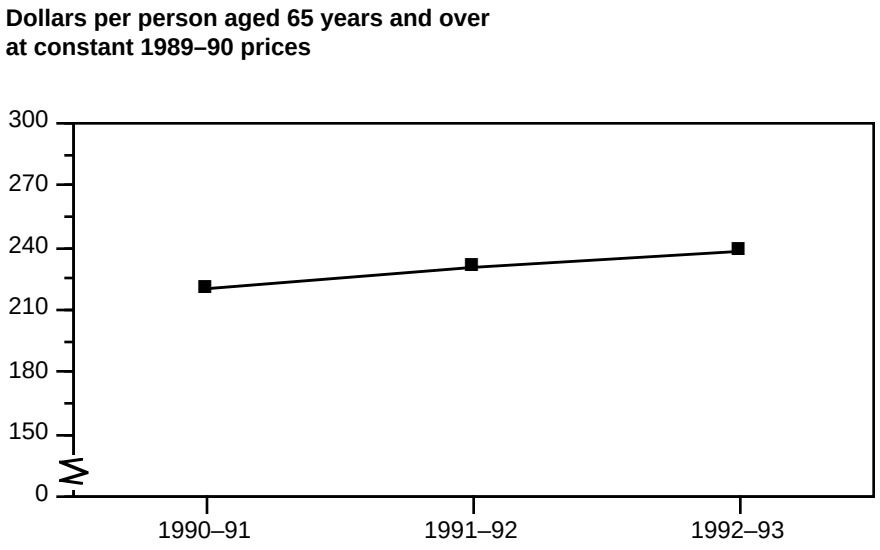
Sources: Department of Health, Housing and Community Services 1991; DHSH Annual reports.

- Nursing homes provide long-term nursing care to chronically ill, frail or disabled persons. They cater mainly for the aged. Hostels provide accommodation for people who are unable to live wholly independently but do not require nursing care. The ratio of nursing home and hostel beds per 1,000 population aged 70 years and over provides an indication of the response of the government sector (Commonwealth, State, Territory and Local governments), and of the not-for-profit and for-profit private sector, to the needs of older people in the community.
- During the 1960s and 1970s, strong emphasis was placed on providing accommodation for older people in nursing homes. Although this style of accommodation is necessary for a proportion of the aged population, most aged persons prefer to remain in the community. As a result, current government programs aim to reduce the number of nursing home beds for people aged 70 years and over to 40 beds per 1,000 population. The number of beds for that population has already been reduced from 72.8 beds per 1,000 population in 1983 to 54.3 in 1993.
- To offset the fall in the number of nursing home beds the government aims to provide 60 hostel beds per 1,000 population aged 70 years and over. In 1993, there were 38.5 beds. Recent approvals for additional hostel accommodation will increase this level of provision.

For more information, see:

AIHW (1994) *Australia's welfare 1993: services and assistance.* Canberra: AGPS.

Home and community care expenditure per person aged 65 years and over at constant 1989–90 prices



	1990–91	1991–92	1992–93
Expenditure per person aged 65 years and over ($)	219.54	230.65	237.67
Annual growth rate (%)		5.1	3.0

Note: Home and community care is deflated to constant prices using the 'other health and welfare' deflator (see AIHW Health expenditure bulletin No. 8 April 1993, Table 18).

Sources: DHSH Program Performance Statements; DHSH Home and community care expenditure for the aged.

- The home and community care (HACC) program began operating in 1984. It was established to provide an integrated range of services to assist frail older people, people with a disability, and their carers within the community. The services include home help, home nursing, meals and transport. A 1990 national survey of the program showed that 80% of its clients were 65 years of age and over.
- In 1990–91, Commonwealth, State and Territory Governments combined spent $220 at constant prices per person aged 65 years and over. This amount increased to $238 in 1992–93, representing an average annual growth rate of 4%.
- HACC expenditure per person aged 65 years and over provides an indicator of the shift in government policy away from institutionalised care to community based care (see *Nursing home and hostel beds per 1,000 population aged 70 years and over* on page 102). Although HACC expenditure has grown, data are not available to quantify the extent to which it improves the quality of life or reduces the need for institutionalisation.

For more information, see:

AIHW (1994) *Australia's welfare 1993: services and assistance.* Canberra: AGPS.

Appendix A: Age-adjustment

Age-adjustment was applied to death rates, incidence rates, prevalence rates, hospital separation and consultation rates in this report.

Using death rates as an example, the crude death rate, or the total number of people who die during any known time period, is strongly influenced by the age structure of the population during this period. By applying the technique of age-adjustment to age-specific death rates, the effect of variation in the population age structure is reduced. This report has used direct adjustment by applying the age-specific rates for a particular year to a standard population.

The standard population used in age-adjustment was the total estimated resident population of Australia at 30 June 1991. The usual convention of using age-specific rates for five-year age groups, as shown in the table below, has been followed for adjustment according to the following formula:

$$SR = \sum\{R_i \times P_i\} / \sum P_i$$

where SR = the age-adjusted rate
R_i = the age-specific rate for age group i
P_i = the standard population in age group i

It should be noted that trends in age-adjusted rates calculated using this standard may differ from those calculated using other standard populations.

Population, Australia, 1991

Age group	Males	Females	Total
0–4	652,302	619,401	1,271,703
5–9	652,418	619,790	1,272,208
10–14	638,311	603,308	1,241,619
15–19	698,773	665,301	1,364,074
20–24	707,124	689,640	1,396,764
25–29	702,728	696,935	1,399,663
30–34	713,784	711,951	1,425,735
35–39	664,228	664,159	1,328,387
40–44	655,138	639,133	1,294,271
45–49	526,498	502,647	1,029,145
50–54	433,762	413,172	846,934
55–59	367,302	358,648	725,950
60–64	366,779	370,089	736,868
65–69	320,142	351,248	671,390
70–74	228,494	282,261	510,755
75–79	158,993	225,502	384,495
80–84	84,413	145,415	229,828
85+	44,220	110,027	154,247
Total	8,615,409	8,668,627	17,284,036

Source: Australian Bureau of Statistics

Appendix B: Data sources

Australian Institute of Health and Welfare publications

- Australian Institute of Health and Welfare (1994) *Australia's health 1994: the fourth biennial report of the Australian Institute of Health and Welfare*. Canberra: AGPS.
- Australian Institute of Health and Welfare *Health expenditure bulletin* No. 10.
- Australian Institute of Health and Welfare *Hospital utilisation and costs study* series.
- Dankiw W (1994) *Pap smear examinations under Medicare 1984–85 to 1992–93 DRAFT*. Canberra: AGPS.
- Mathers CD (1991) *Disability-free and handicap-free life expectancy in Australia 1981 and 1988.* AIHW Health differentials series No. 1. Canberra: AGPS.
- Mathers CD (1995) *Expectation of disability and handicap in Australia.* Paper prepared for the 3rd National Rehabilitation Conference, Brisbane, May 1995.

Australian Institute of Health and Welfare databases

- Australian Institute of Health and Welfare Dental Statistics Research Unit.
- Australian Institute of Health and Welfare Mortality database.
- Australian Institute of Health and Welfare National Cancer Statistics Clearing House.
- Australian Institute of Health and Welfare National Injury Surveillance Unit.
- Australian Institute of Health and Welfare National Perinatal Statistics Unit.

Australian Bureau of Statistics publications

- Australian Bureau of Statistics (1994) *Experimental estimates of the Aboriginal and Torres Strait Islander population.* Catalogue No. 3230.0.
- Australian Bureau of Statistics *Australian demographic statistics* series. Catalogue No. 3101.0.
- Australian Bureau of Statistics *Births, Australia* series. Catalogue No. 3301.0.
- Australian Bureau of Statistics *Deaths, Australia* series. Catalogue No. 3302.0.
- Australian Bureau of Statistics *Perinatal deaths, Australia* series. Catalogue No. 3304.0.
- Australian Bureau of Statistics *Overseas arrivals and departures* series. Catalogue No. 3404.0.
- Australian Bureau of Statistics *Apparent consumption of foodstuffs and nutrients, Australia* series. Catalogue No. 4306.0.
- Australian Bureau of Statistics (1993) *Survey of disability, ageing and carers: Summary of findings.* Catalogue No. 4430.0.

- Australian Bureau of Statistics *Australian national accounts: National income, expenditure and product* series. Catalogue No. 5204.0.
- Australian Bureau of Statistics *The labour force, Australia* series. Catalogue No. 6203.0.

National surveys

- Australian Bureau of Statistics 1989–90 National Health Survey.
- National Heart Foundation 1980, 1983, 1989 Risk Factor Prevalence Surveys.

Other data collections

- Australian Bureau of Statistics, Health labour force data.
- Australian Bureau of Statistics, *Population survey monitor* data.
- Communicable Diseases Network—Australia New Zealand—National Notifiable Diseases Surveillance System.
- Department of Human Services and Health, Community care expenditure for the aged.
- Department of Human Services and Health, National breast cancer screening program.
- Health Insurance Commission, Medicare Claims data.
- National Mycobacterial Surveillance System.
- Western Australia Department of Health, Birth cohort data.

Other published sources

- Department of Health, Housing and Community Services (1991) *Aged care reform strategy. Mid-term review 1990–91.* Canberra: AGPS.
- Department of Human Services and Health *Annual reports.*
- Department of Human Services and Health *Program performance statements.*
- Gee V (1994) *The 1991 Western Australian birth cohort: Statistical series /34.* Perth: Health Department of Western Australia.
- National Centre in HIV Epidemiology and Clinical Research (1994) *Australian HIV surveillance report.* Vol. 10. No. 2. Sydney: NCHECR.
- National Health & Medical Research Council (1994) *The core food groups: the scientific basis for developing nutrition education tools.* Canberra: NHMRC.
- Northern Territory Perinatal Collection, *Statistical report.* 1992.

Abbreviations and acronyms

ABS
Australian Bureau of Statistics

AGPS
Australian Government Publishing Service

AIHW
Australian Institute of Health and Welfare

DHSH
Commonwealth Department of Human Services and Health

DSRU
Dental Statistics Research Unit

NCHECR
National Centre on HIV Epidemiology and Clinical Research

NHF
National Heart Foundation

NHMRC
National Health and Medical Research Council

NISU
National Injury Surveillance Unit

NPSU
National Perinatal Statistics Unit

The States and Territories of Australia have been abbreviated as follows:

NSW New South Wales
Vic Victoria
Qld Queensland
WA Western Australia
SA South Australia
Tas Tasmania
ACT Australian Capital Territory
NT Northern Territory

Glossary of terms

Acute care hospitals
Public, private and repatriation hospitals which provide services predominantly to inpatients with acute or temporary ailments; the average length of stay is relatively short.

Age-adjustment (or age-standardisation)
If comparing two populations where the age structures differ dramatically, crude rates (such as the crude death rate) are unreliable indicators of difference. The statistical technique of age-adjustment (the application of age-specific rates to a standard population structure) is applied to reduce the effect of differing population age structures.

Apparent consumption
In the absence of time trends of dietary intake data, apparent consumption data are used to indicate dietary intake. Apparent consumption refers to the quantity of food available for consumption. Food wastage and cooking losses are therefore not taken into account.

Average length of stay
For acute care hospitals, a reasonable estimate is obtained by dividing total occupied bed-days by total hospital separations.

Decay free rate
Proportion of a population with none of their teeth affected by decay, missing due to decay or filled due to decay.

Dependency ratio
The proportion of the population of non-working age (< 15 years and 65 years or older) who are dependent on the population of working age (15–64 years).

Disability
A person with a disability is defined as having one or more of a number of health-related conditions which has lasted or is likely to last for six months or more. The health-related conditions include: loss of sight or hearing, speech difficulties, learning difficulties, blackouts, incomplete use of arms, fingers, feet or legs, disfigurement, long-term treatment or medication, or the need for help or supervision because of a mental disability.

DMFT score
Sum of the number of teeth affected by decay, either missing or filled.

Edentulism
The loss of all natural teeth.

Handicap
A handicap is the social disadvantage that results from a disability. A disabled person is defined as handicapped if they are limited in one or more of the following five areas: self-care, mobility, verbal communication, schooling, and / or employment.

Hospital separation (or discharge)
The formal process by which a hospital records the completion of treatment and / or care. This occurs when an inpatient leaves hospital to return home, transfers to another institution, or dies.

Hostel
Residential establishments for aged or disabled persons who cannot live independently but do not require nursing care.

Incidence
The number of new cases of a disease that develop during a specified time period in a population at risk.

Infant mortality rate
The ratio of deaths among infants under one year to the number of infants born alive in that year.

Life expectancy
The average length of time that a person can expect to live if they continue to experience current mortality conditions. Thus, if mortality from all causes declines over time, estimates of life expectancy will increase.

Net immigration
Number of permanent arrivals less number of permanent departures.

Nursing homes
Institutions which are recognised by the Commonwealth government and provide long-term regular basic nursing care to chronically ill, frail or disabled persons. They cater mainly for the aged.

Potential years of life lost (PYLL)
A measure of premature mortality which highlights the burden of disease among younger members of the population.

Prevalence
The number of existing cases of a disease divided by the total population at any given time.

Total fertility rate
The number of live births a woman would have if, throughout her reproductive years, she had children at the age-specific rates prevailing in the reference year.

Health status

Mortality and survival

Australian Bureau of Statistics *Causes of death, Australia* series. Catalogue No. 3303.0. Canberra: ABS.

Australian Bureau of Statistics *Deaths, Australia* series. Catalogue No. 3302.0. Canberra: ABS.

Australian Institute of Health and Welfare (1994) *Australia's health 1994: the fourth biennial report of the Australian Institute of Health and Welfare*. Canberra: AGPS.

Australian Institute of Health and Welfare *Cancer* series.

Australian Institute of Health and Welfare *Mortality* series.

Australian Institute of Health and Welfare *Mortality surveillance* series.

Bhatia K & Anderson P (1995) *An overview of Aboriginal and Torres Strait Islander health: present status and future directions*. AIHW Information paper. Canberra: AGPS.

Disability and handicap

Australian Bureau of Statistics (1993) *Survey of disability, ageing and carers, Australia: Summary of findings.* Catalogue No. 4430.0. Canberra: ABS.

Mathers CD (1991) *Disability-free and handicap-free life expectancy in Australia 1981 and 1988.* AIHW Health differentials series No. 1. Canberra: AGPS.

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Perinatal and infant health

Australian Bureau of Statistics *Causes of death, Australia* series. Catalogue No. 3303.0. Canberra: ABS.

Australian Bureau of Statistics *Deaths, Australia* series. Catalogue No. 3302.0. Canberra: ABS.

Australian Bureau of Statistics *Perinatal deaths, Australia* series. Catalogue No. 3304.0. Canberra: ABS.

Australian Institute of Health and Welfare National Perinatal Statistics Unit & Australian Perinatal Society *Perinatal newsletter.* Sydney: AIHW National Perinatal Statistics Unit.

Australian Institute of Health and Welfare National Perinatal Statistics Unit *Congenital malformations monitoring report*. Sydney: AIHW National Perinatal Statistics Unit.

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Brooks-Gunn J, McCarton CM, Casey PH, McCormick MC, Bauer CR, Bernbaum JC, Tyson J, Swanson M, Bennett FC, Scott DT, Tonascia J & Meinert CL (1994) Early intervention in low-birth-weight premature infants. *J Amer Med Assoc* 272(16): 1257–1262.

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McCormick MC, Brooks-Gunn J, Workman-Daniels K, Turner J & Peckham GJ (1992) The health and development status of very low-birth-weight children at school age. *J Amer Med Assoc* 267(16): 2204–2208.

Child health

Drowning

Cass DT, Ross FI & Grattan-Smith TM (1991) Child drownings: a changing pattern. *Med J Aust* 154: 163–165.

Harrison JE & Cripps RA (eds) (1994) *Injury in Australia—An epidemiological review*. Canberra: AGPS.

Pitt WR & Balanda KP (1991) Childhood and near-drowning in Brisbane: the contribution of domestic pools. *Med J Aust* 154: 661–665.

Waugh JH, O'Callaghan MJ & Pitt WR (1994) Prognostic factors and long-term outcomes for children who have nearly drowned. *Med J Aust* 161: 594–599.

Immunisation

National Health & Medical Research Council (1994) *The Australian immunisation procedures handbook*. 5th ed. Canberra: AGPS.

Oral health

Australian Institute of Health and Welfare (1994) *Australia's health 1994: the fourth biennial report of the Australian Institute of Health and Welfare*. Canberra: AGPS.

Injury

Harrison JE & Cripps RA (eds) (1994) *Injury in Australia—An epidemiological review*. Canberra: AGPS.

Harrison JE & Cripps RA (1994) Injury mortality—Australia 1992. *Australian injury prevention bulletin*. Issue 6. Adelaide: AIHW National Injury Surveillance Unit.

O'Connor PJ (1993) *Road injury in Australia*. Adelaide: AIHW National Injury Surveillance Unit.

Interpersonal violence

Bennett S, Donovan J, Stevenson C & Wright P (1994) *Mortality surveillance, Australia 1981–1992*. AIHW Mortality surveillance series No. 2. Canberra: AGPS.

Harrison J & Moller J (1994) Injury mortality amongst Aboriginal Australians. *Australian injury prevention bulletin* Issue 7. Adelaide: AIHW National Injury Surveillance Unit.

Chronic diseases

Cardiovascular disease

Australian Institute of Health and Welfare (1994) *Australia's health 1994: the fourth biennial report of the Australian Institute of Health and Welfare*. Canberra: AGPS.

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Bauman A, Mitchell C, Henry RL, Robertson CF, Abramson MJ, Comino EJ, Hensley MJ & Leeder SR (1992) Asthma morbidity in Australia: an epidemiological study. *Med J Aust* 156: 827–31.

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Guest CS & O'Dea K (1992) Diabetes in Aborigines and other Australian populations. *Aust J Public Health* 16: 340–349.

McCann VJ, Knuiman MW, Stanton KG & Winter MG (1994) Mortality and coronary heart disease in diabetes mellitus. *Aust J Public Health* 18(1): 92–95.

Nutbeam D, Thomas M & Wise M (1993) *National action plan: Diabetes to the year 2000 and beyond*. A report prepared for the Australian Diabetes Society. Canberra.

Communicable diseases

HIV and AIDS

National Centre in HIV Epidemiology and Clinical Research *Australian HIV surveillance report*. Sydney: NCHECR.

Sexually transmitted diseases

Communicable Diseases Network—Australia. *Communicable Diseases Intelligence bulletins* . Canberra: DHSH.

Wyn J (1994) Young women and sexually transmitted diseases. *Aust J Public Health* 18(1): 32–39.

Tuberculosis

Communicable Diseases Network—Australia (1994) *Communicable Diseases Intelligence.* Vol. 18. No. 14. Canberra: DHSH.

MacIntyre CR, Dwyer B & Streeton JA (1993) The epidemiology of tuberculosis in Victoria. *Med J Aust* 159: 672–76.

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