Health status
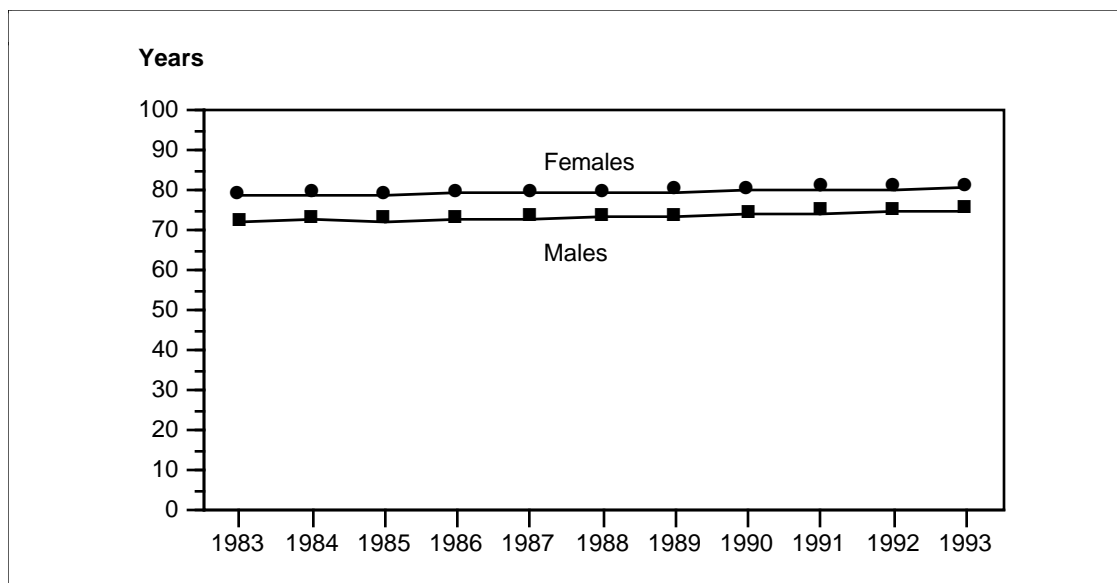
- *Mortality and survival*

- *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)

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
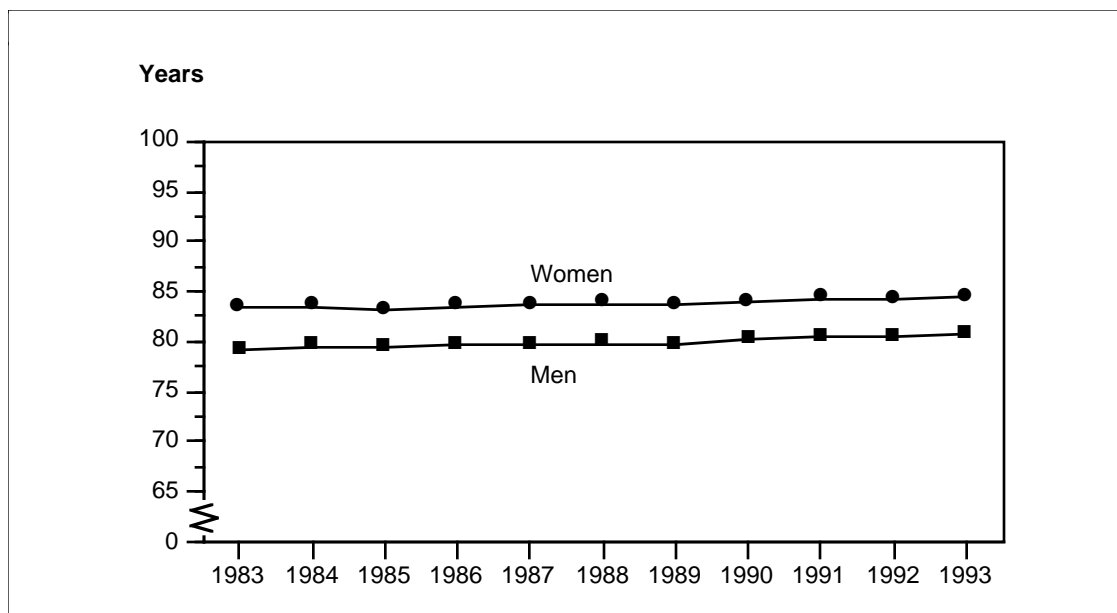
Years

	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

**Number of deaths
per 1,000 population**
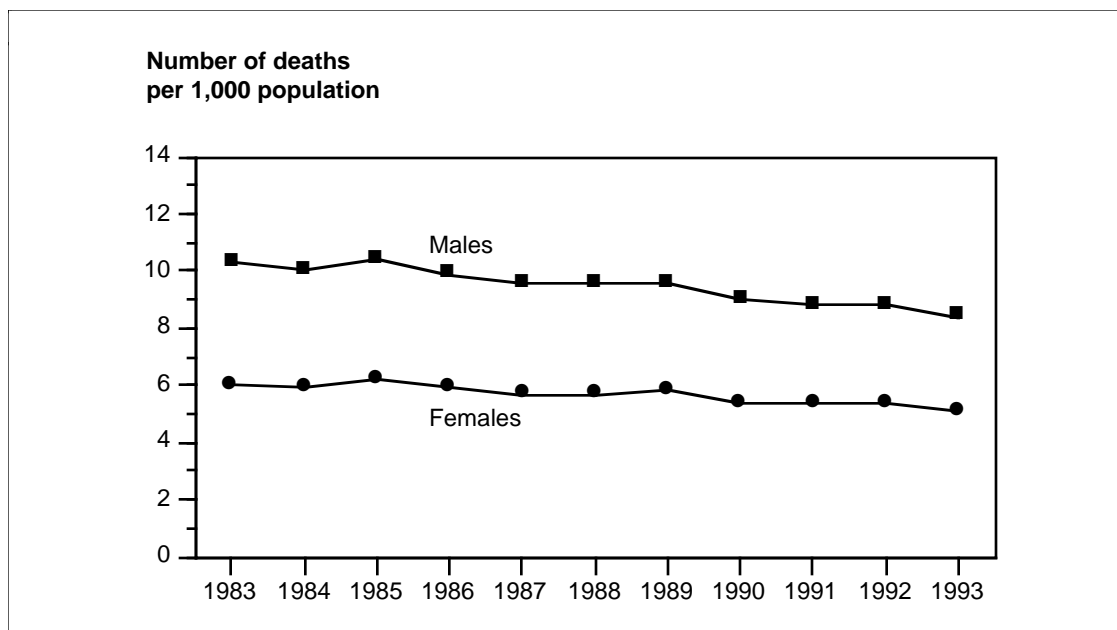
	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993
Males	10.3	10.0	10.4	9.9	9.6	9.6	9.6	9.0	8.8	8.8	8.4
Females	6.0	5.9	6.2	5.9	5.7	5.7	5.8	5.4	5.4	5.4	5.1
Total	7.9	7.7	8.0	7.6	7.4	7.4	7.4	7.0	6.9	6.9	6.5

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.
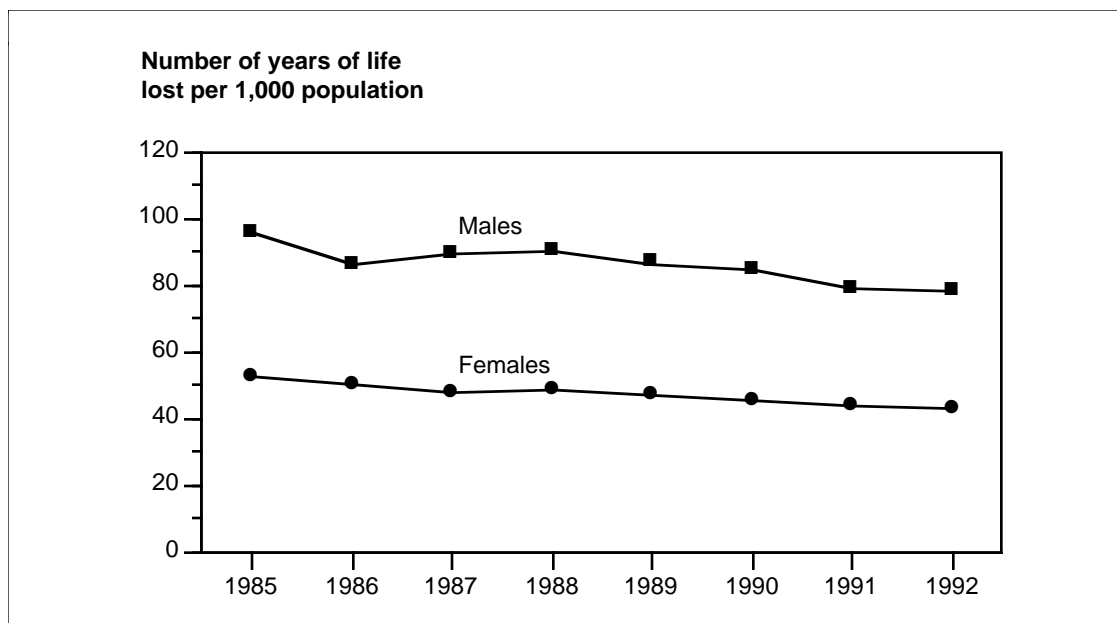
AIHW *Mortality* series.

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

**Number of years of life
lost 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 (%)

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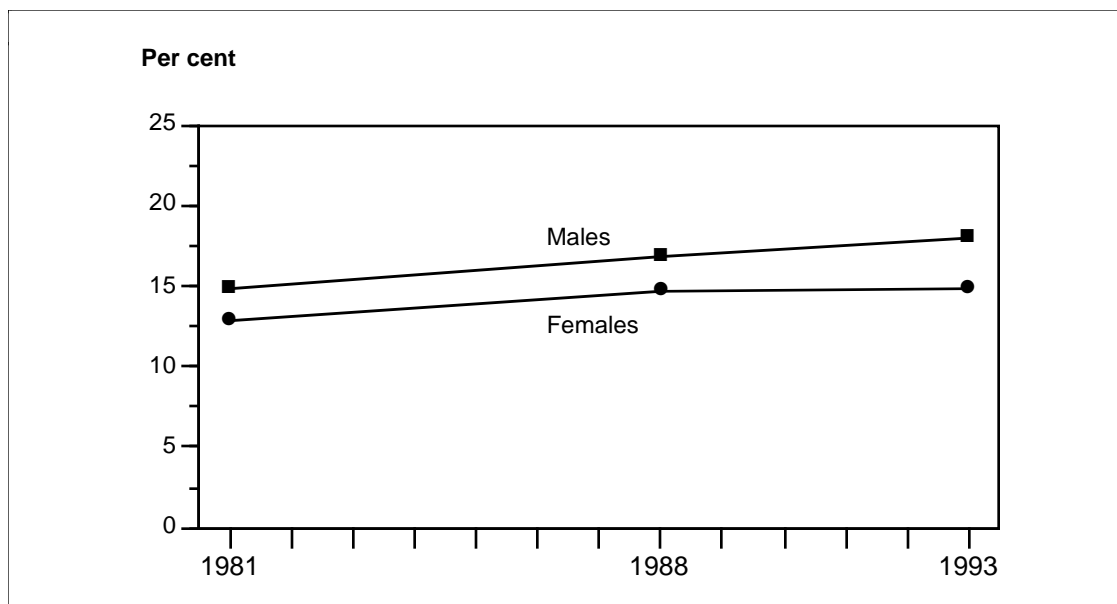
	1981	1988	1993
Males	14.8	16.9	18.0
Females	12.8	14.6	14.8
Total	13.8	15.8	16.4

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 (%)

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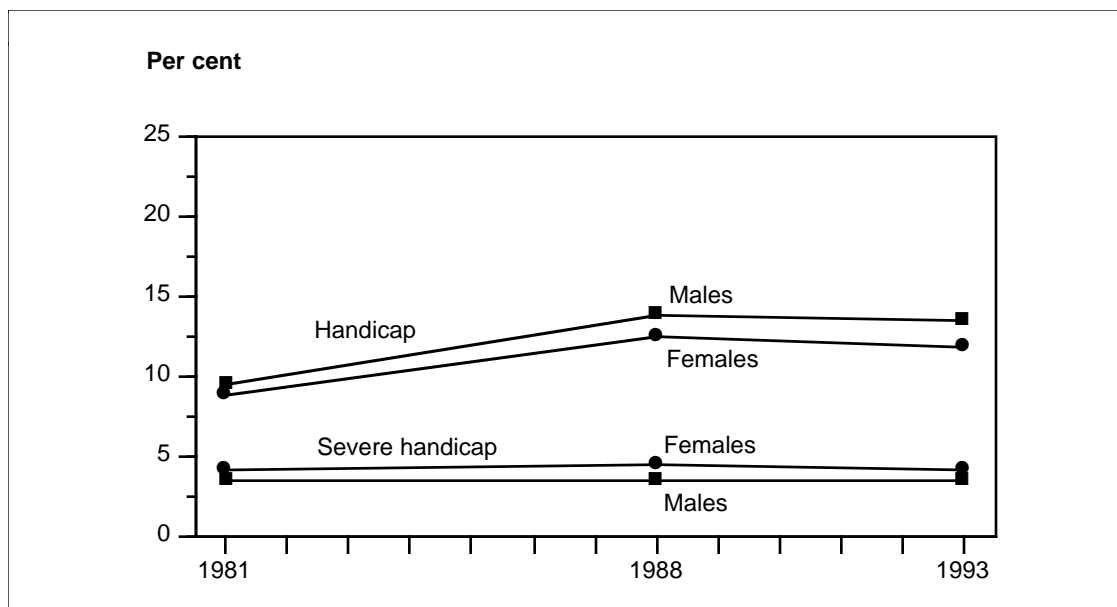
	Handicap			Severe handicap		
	1981	**1988**	**1993**	**1981**	**1988**	**1993**
Males	9.4	13.8	13.5	3.5	3.5	3.5
Females	8.8	12.4	11.8	4.1	4.5	4.1
Total	9.2	13.1	12.7	3.8	4.1	3.9

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

Years
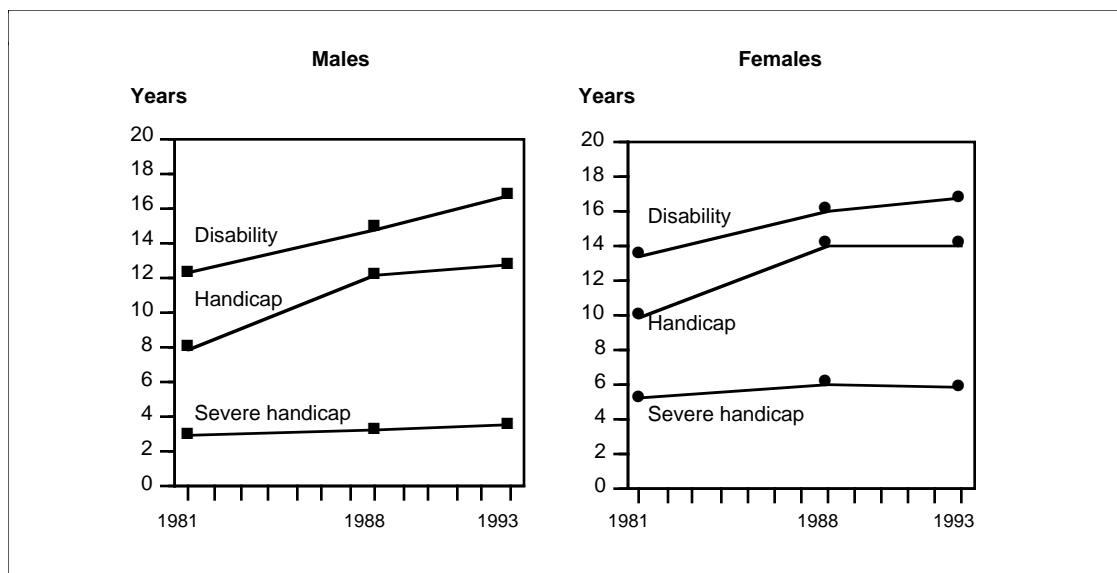
Females

Years

	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 — Years
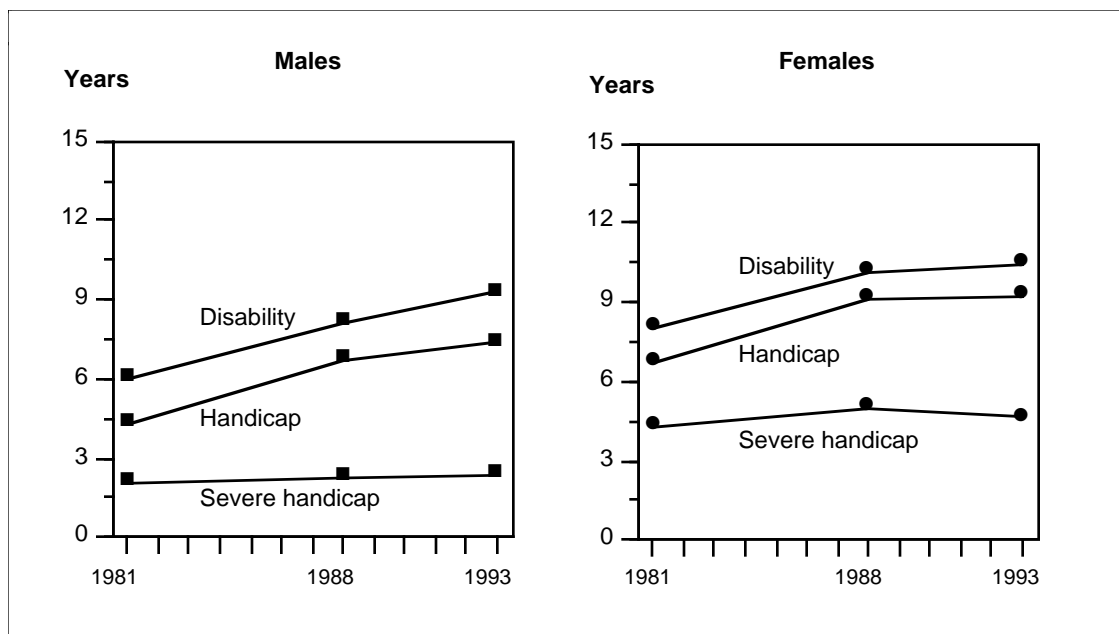
Females — Years

	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

**Number of deaths
per 1,000 births**
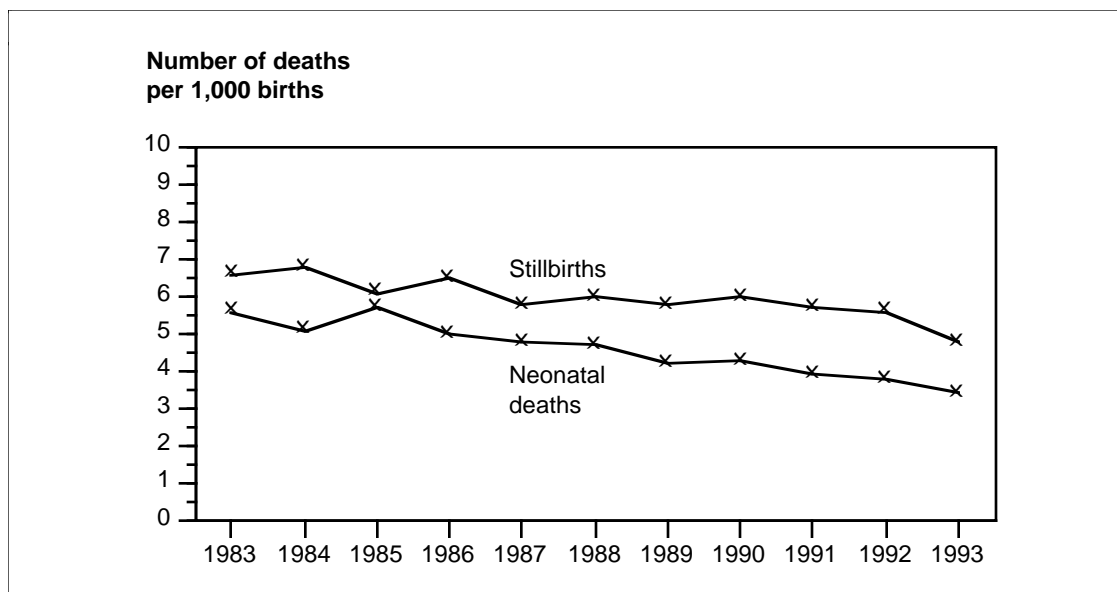
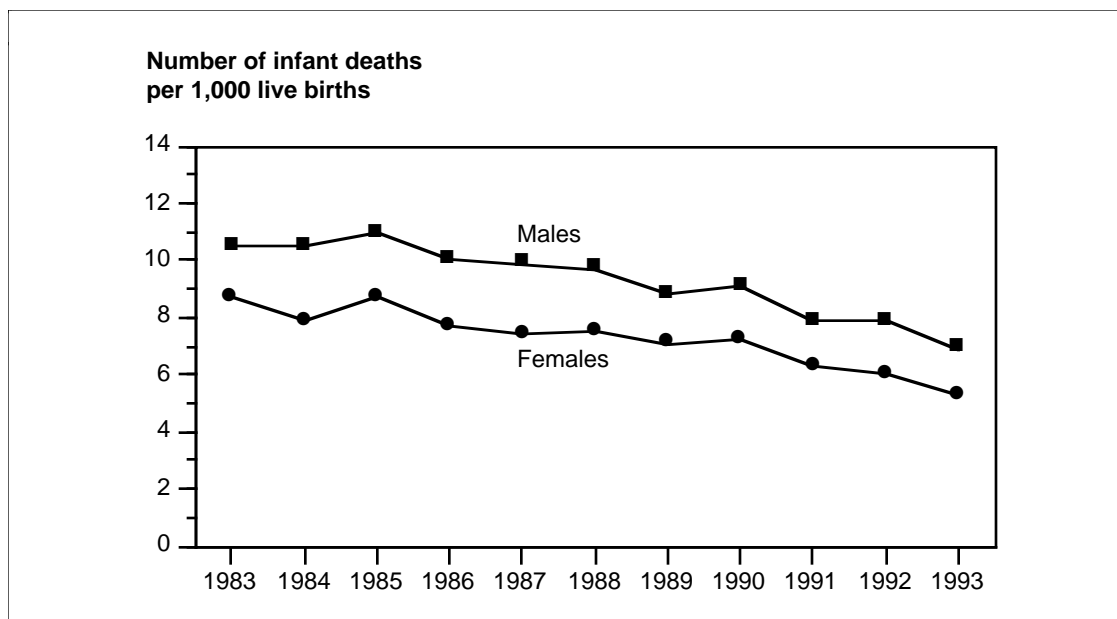|	**1983**	**1984**	**1985**	**1986**	**1987**	**1988**	**1989**	**1990**	**1991**	**1992**	**1993**
Stillbirths	6.6	6.8	6.1	6.5	5.8	6.0	5.8	6.0	5.7	5.6	4.8
Neonatal deaths	5.6	5.1	5.7	5.0	4.8	4.7	4.2	4.3	3.9	3.8	3.4
Perinatal mortality rate	12.2	11.9	11.8	11.5	10.6	10.7	9.9	10.3	9.6	9.4	8.2

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

**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 pre-natally, 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 synd-rome (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

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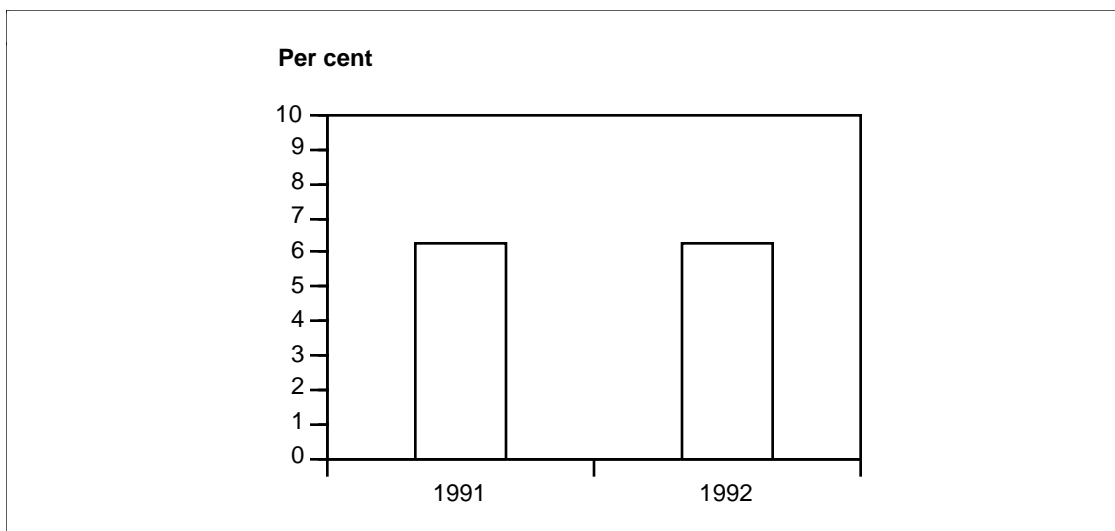
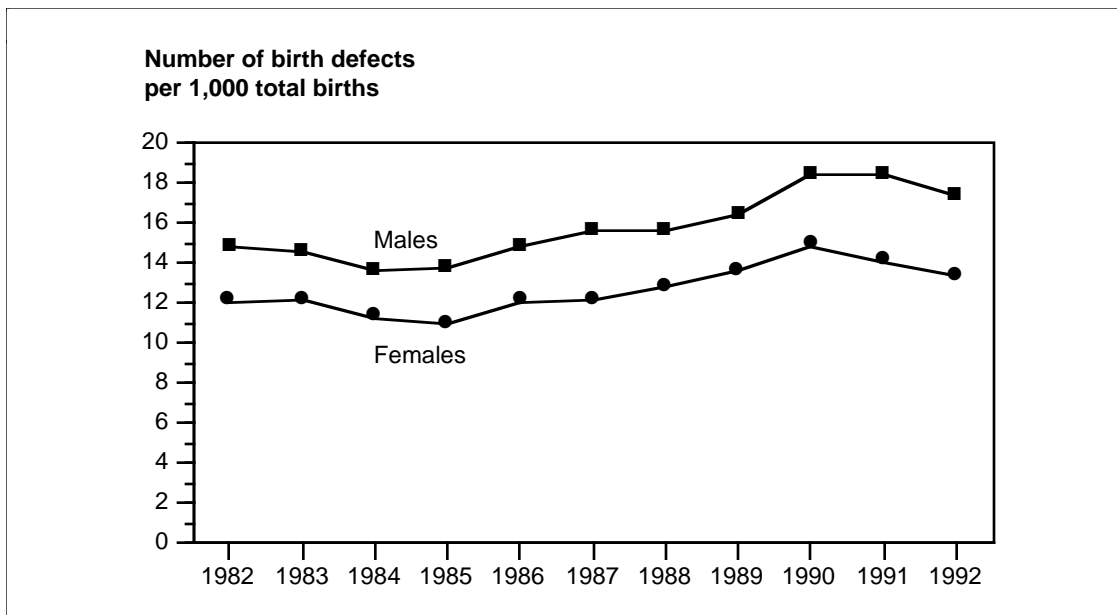|	1991	1992
Number of low birthweight infants	16,272	16,489
% of total live births	6.3	6.3

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

Number of birth defects 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

**Number of deaths
per 100,000 births**
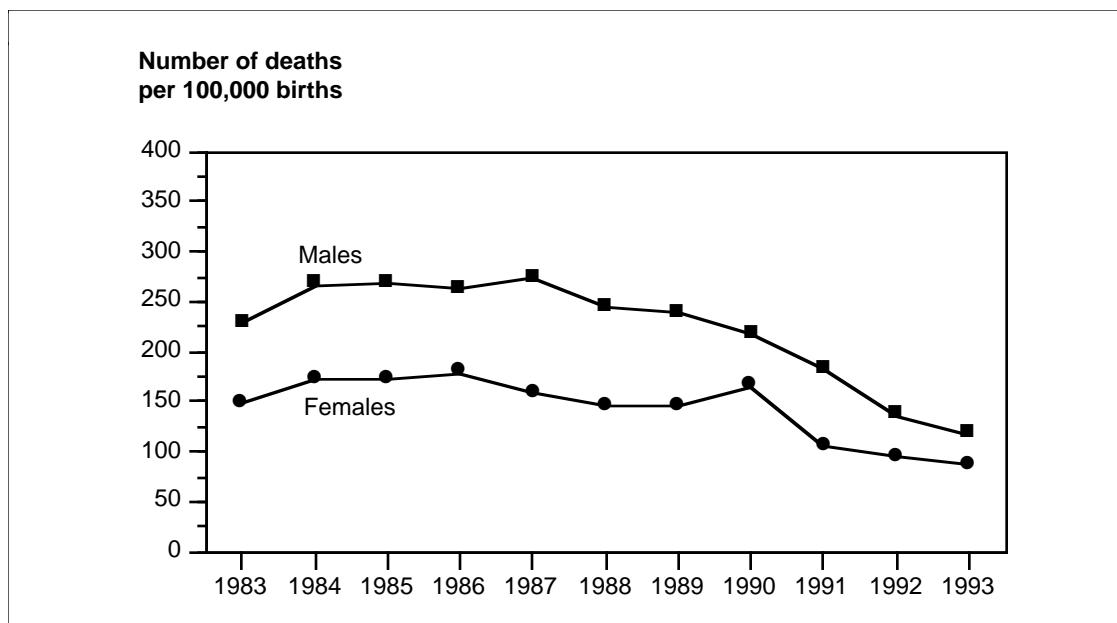
	1983	**1984**	**1985**	**1986**	**1987**	**1988**	**1989**	**1990**	**1991**	**1992**	**1993**
Males	228.8	267.1	268.9	263.4	273.8	243.2	239.7	218.2	182.2	136.4	117.5
Females	149.1	171.6	172.6	178.9	158.4	145.9	144.7	165.5	106.2	94.9	86.1
Total	190.0	220.5	222.0	222.3	217.7	195.8	193.3	192.7	145.1	116.2	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

**Number of deaths
per 100,000 children aged 1–4 years**
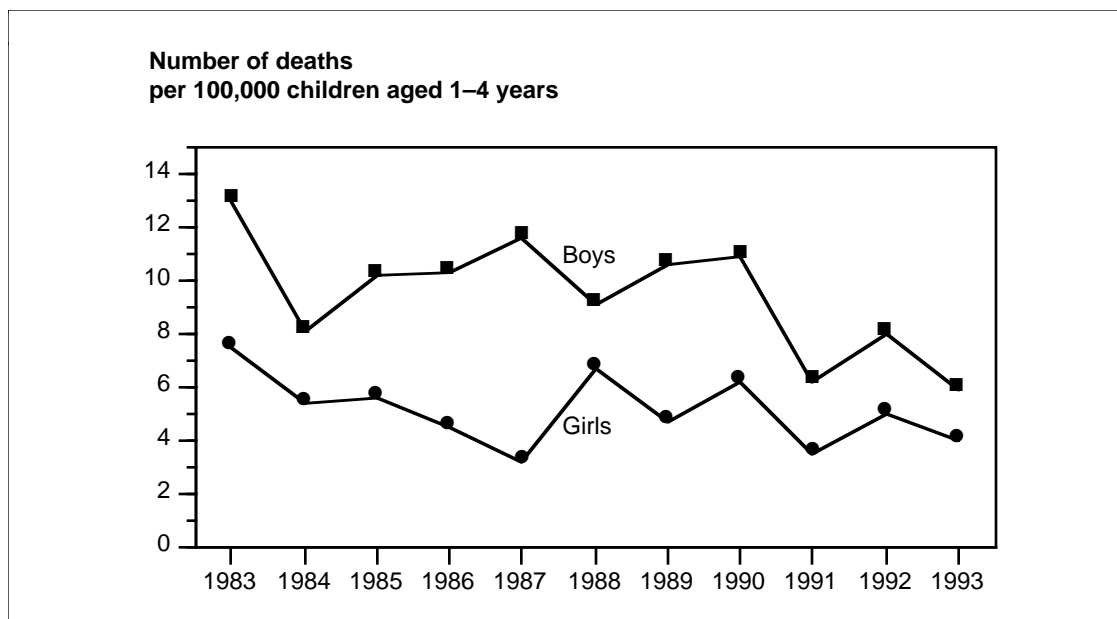
	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993
Boys	13.0	8.1	10.2	10.3	11.6	9.1	10.6	10.9	6.2	8.0	5.9
Girls	7.5	5.4	5.6	4.5	3.2	6.7	4.7	6.2	3.5	5.0	4.0
Total	10.3	6.8	7.9	7.4	7.5	7.9	7.7	8.6	4.8	6.5	5.0

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 (%)

Per cent
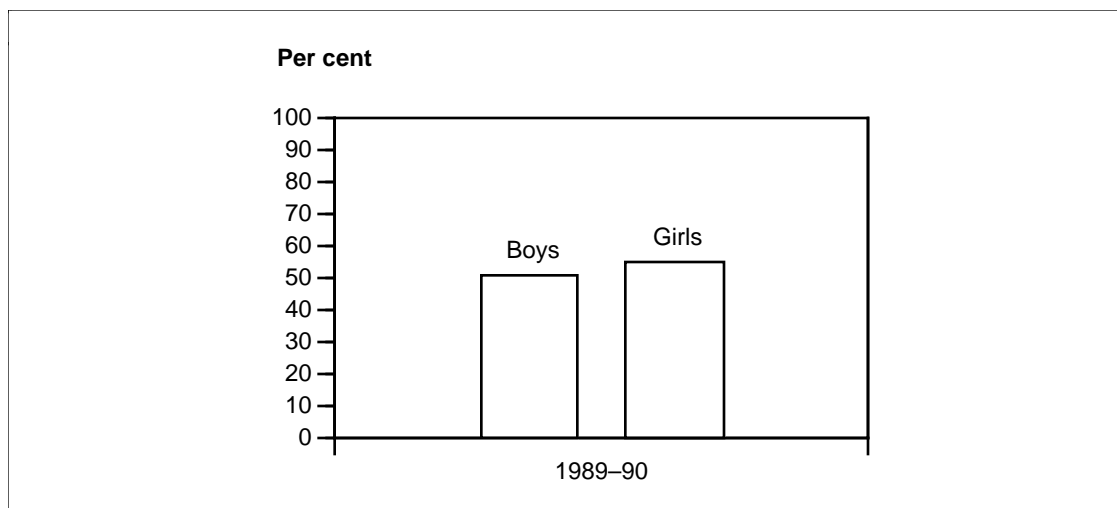
	1989–90
Boys	51.1
Girls	54.8
Total	52.9

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.
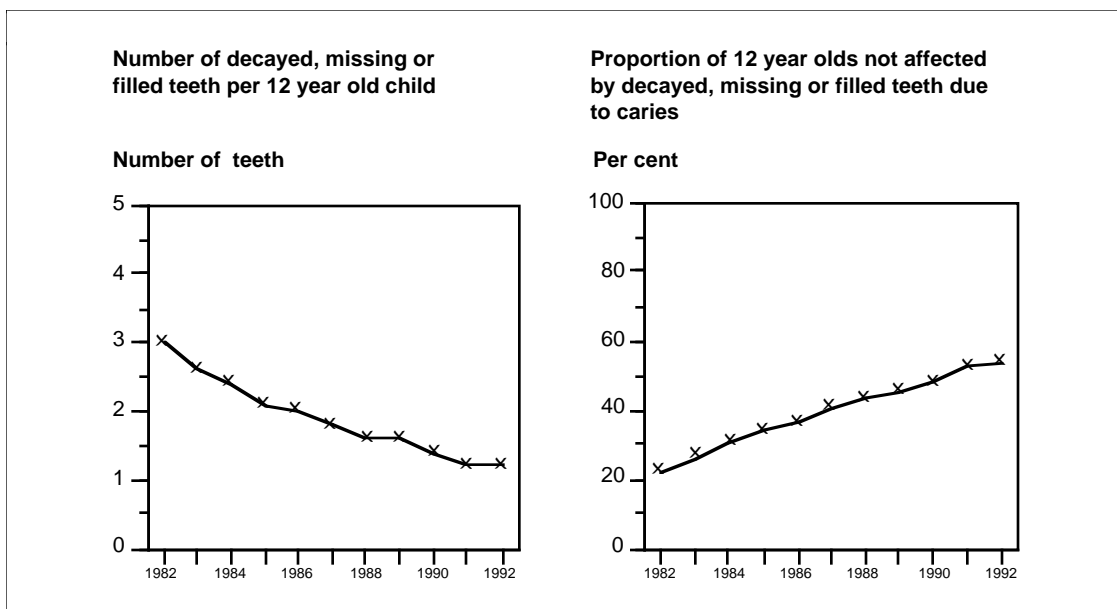
Source: ABS 1989–90 National Health Survey.

- 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 immuni-sation 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 ex-cused 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

Number of decayed, missing or filled teeth per 12 year old child

Number of teeth

Proportion of 12 year olds not affected by decayed, missing or filled teeth due to caries

Per cent

	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

Number of deaths per 100,000 population
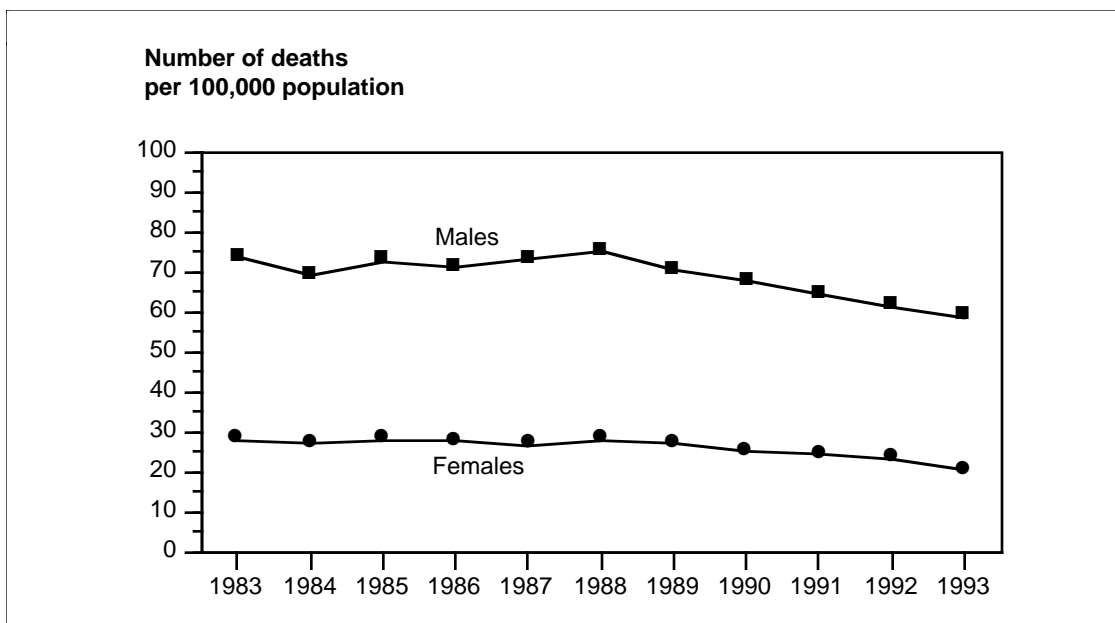
	1983	**1984**	**1985**	**1986**	**1987**	**1988**	**1989**	**1990**	**1991**	**1992**	**1993**
Males	73.8	68.9	72.6	71.2	73.2	75.0	70.4	67.7	64.1	61.3	58.6
Females	28.0	27.1	27.9	27.6	26.6	28.0	26.9	25.2	24.4	23.3	20.2
Total	50.4	47.6	50.0	49.2	49.6	51.1	48.3	46.1	43.9	42.0	39.0

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

Number of deaths per 100,000 population
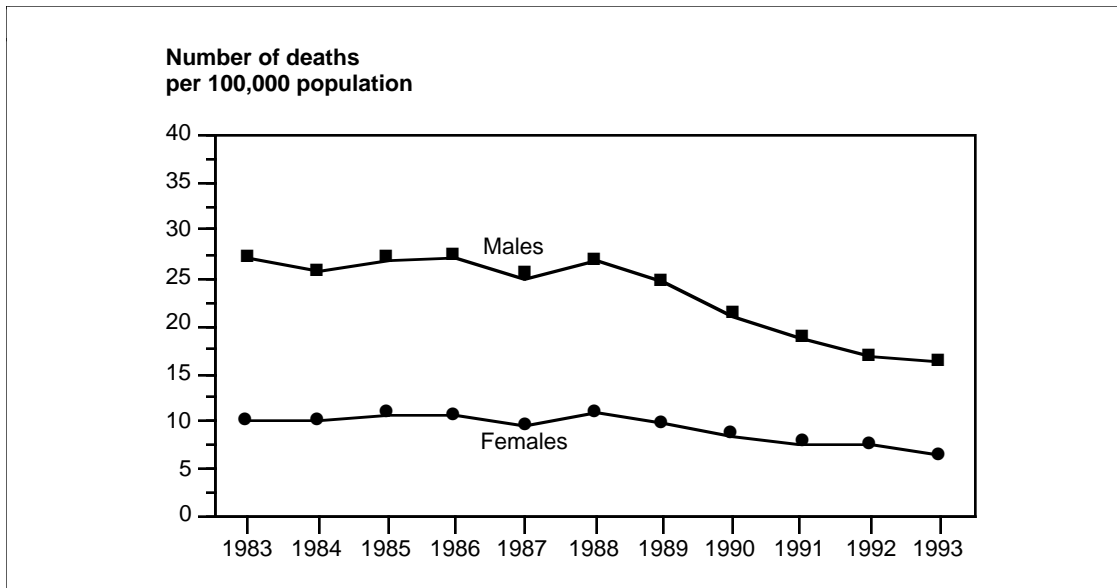
	1983	**1984**	**1985**	**1986**	**1987**	**1988**	**1989**	**1990**	**1991**	**1992**	**1993**
Males	27.2	25.8	27.0	27.3	25.1	26.9	24.4	21.2	18.7	16.7	16.2
Females	10.1	10.0	10.8	10.6	9.7	10.9	9.8	8.6	7.5	7.4	6.4
Total	18.6	17.7	18.8	18.9	17.3	18.8	17.0	14.8	13.0	12.0	11.2

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

**Number of hospital separations
per 100,000 population**
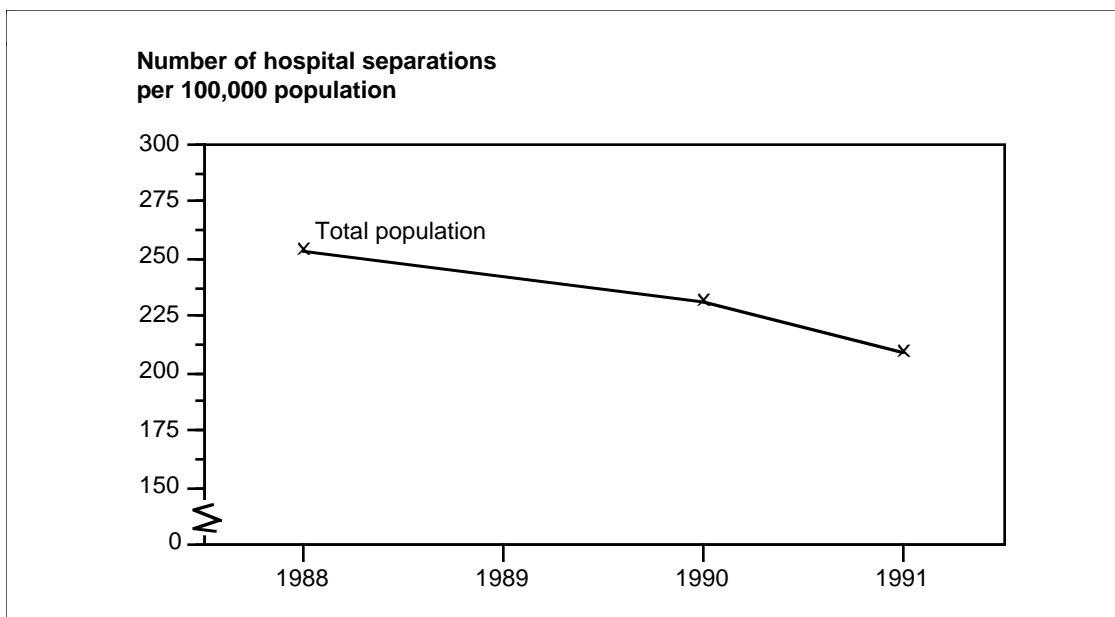
	1988	1990	1991
Males	na	na	276.9
Females	na	na	139.2
Total	253.6	231.0	208.6

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

**Number of deaths
per 100,000 population**
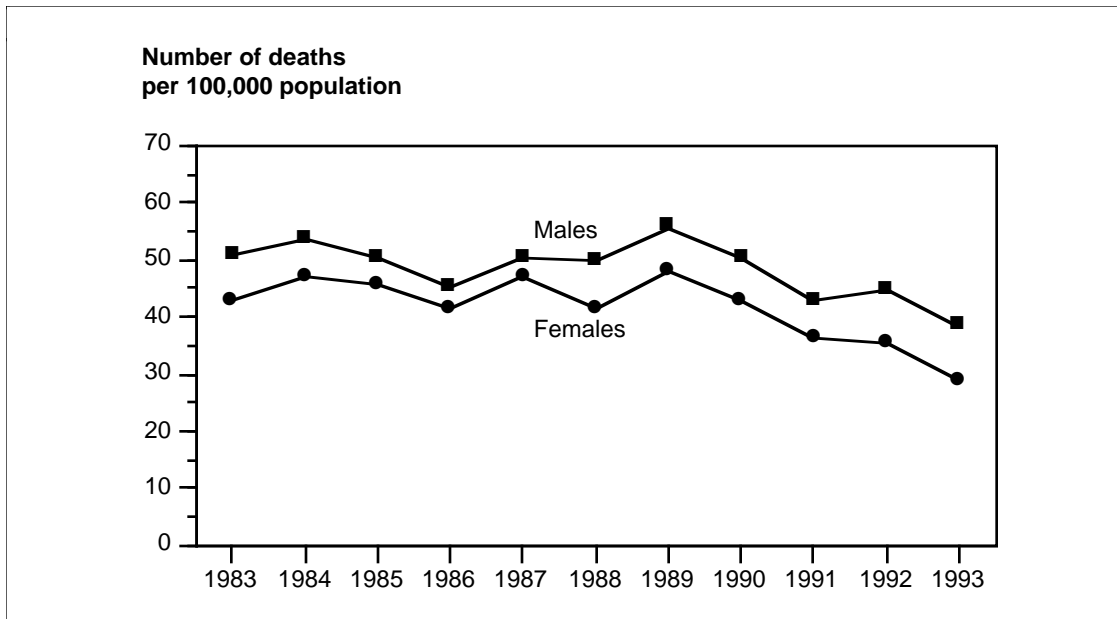
	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993
Males	50.9	53.4	50.4	45.1	50.4	49.9	55.7	50.3	42.9	44.7	38.4
Females	42.9	46.9	45.6	41.3	47.1	41.3	47.9	42.9	36.3	35.3	28.8
Total	45.5	49.4	47.2	43.0	49.0	44.8	51.1	45.4	38.9	39.1	32.3

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

Number of deaths per 100,000 population
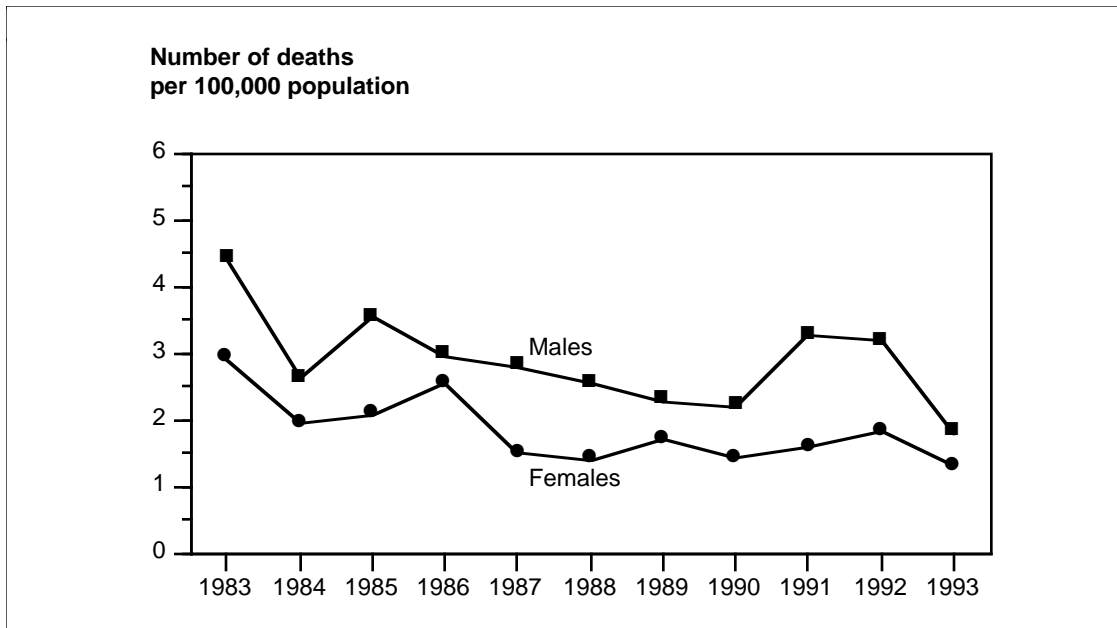
	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993
Males	4.4	2.6	3.5	3.0	2.8	2.5	2.3	2.2	3.3	3.2	1.8
Females	2.9	1.9	2.1	2.5	1.5	1.4	1.7	1.4	1.6	1.8	1.3
Total	3.5	2.3	2.7	2.8	2.1	1.9	1.9	1.8	2.3	2.4	1.5

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

**Number of deaths
per 100,000 population**
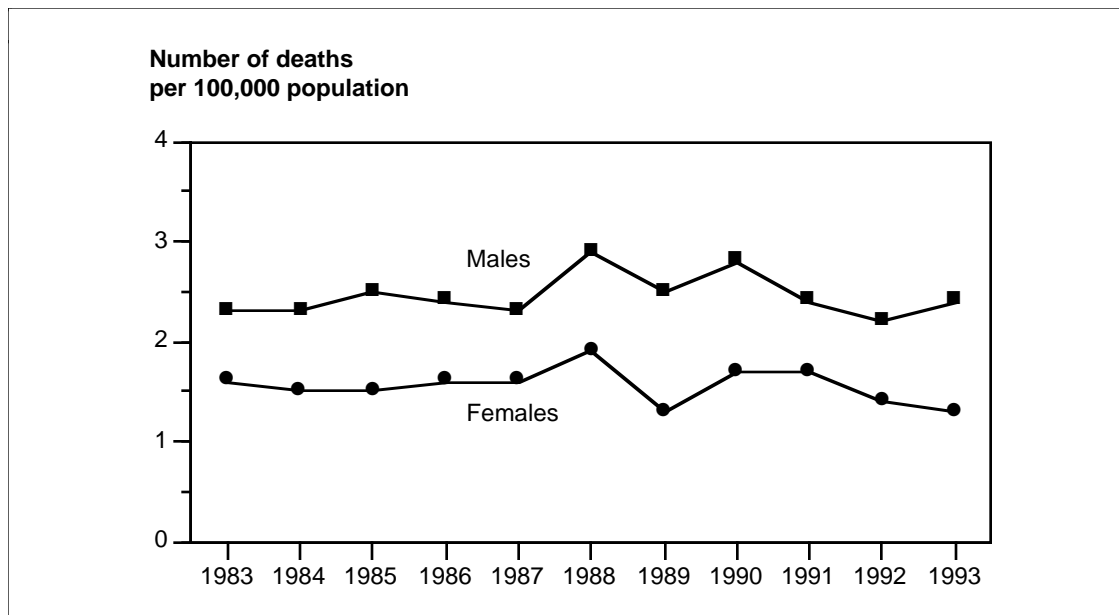
	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993
Males	2.3	2.3	2.5	2.4	2.3	2.9	2.5	2.8	2.4	2.2	2.4
Females	1.6	1.5	1.5	1.6	1.6	1.9	1.3	1.7	1.7	1.4	1.3
Total	2.0	2.0	2.0	2.0	2.0	2.4	1.9	2.3	2.0	1.8	1.9

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 child-hood. 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

**Number of deaths
per 100,000 population**
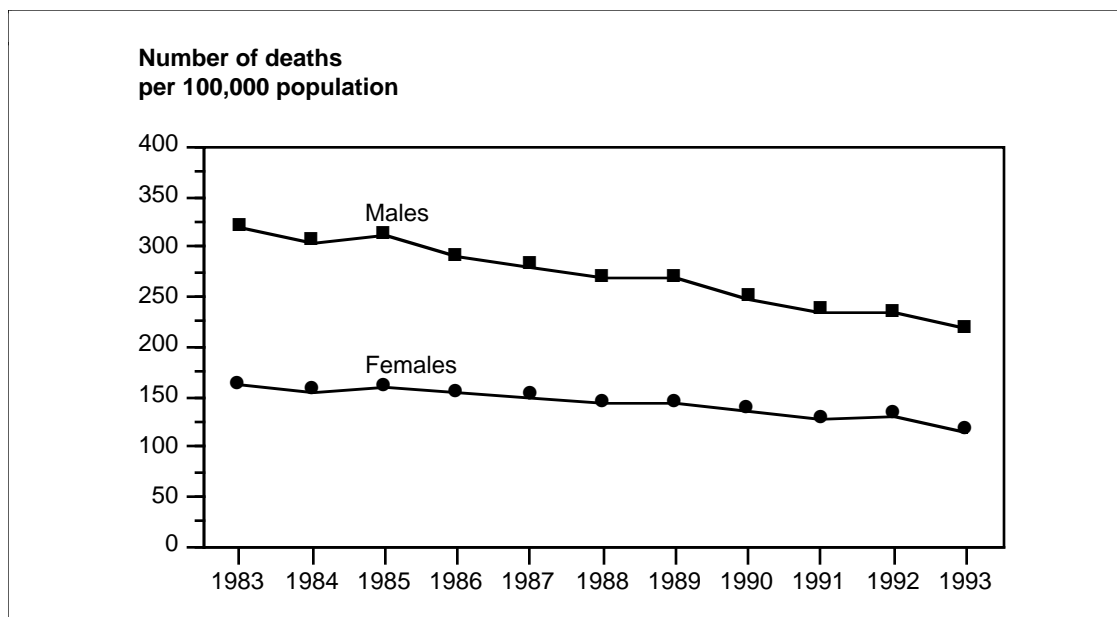
	1983	**1984**	**1985**	**1986**	**1987**	**1988**	**1989**	**1990**	**1991**	**1992**	**1993**
Males	319.0	304.2	310.2	289.5	280.3	268.3	268.6	248.7	235.4	233.5	217.1
Females	161.2	155.3	159.4	153.5	150.0	142.6	144.1	136.7	127.9	131.0	115.1
Total	229.8	220.0	224.8	213.1	207.2	198.1	198.7	186.2	175.4	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

**Number of separations
per 1,000 population**
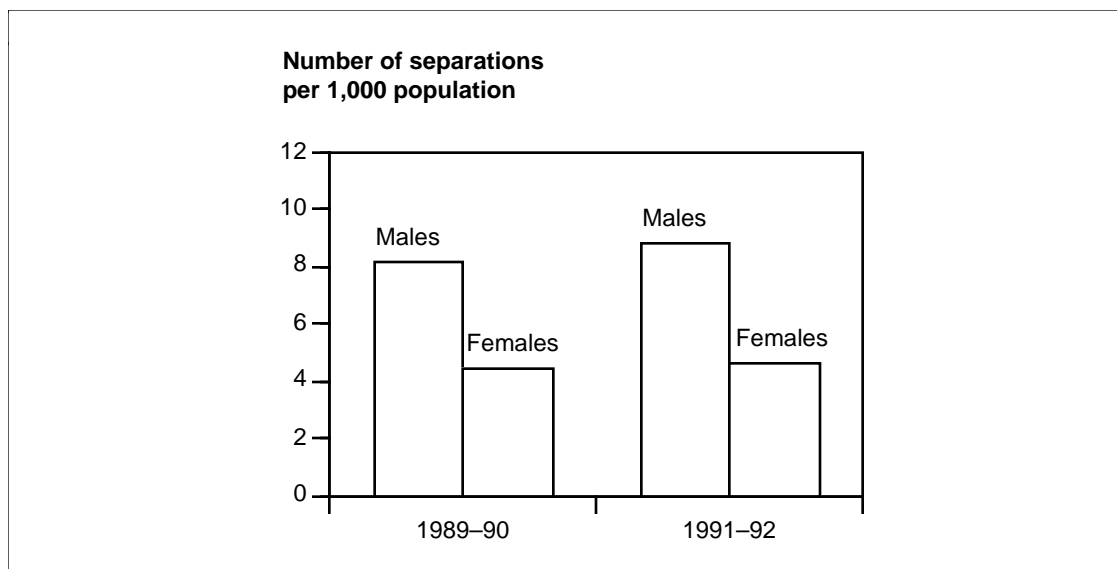
	1989–90			1991–92		
	Public[2]	Private[3]	Total	Public[2]	Private[3]	Total
Males	7.1	1.1	8.2	7.4	1.4	8.8
Females	3.9	0.5	4.4	4.0	0.6	4.6
Total	5.5	0.8	6.3	5.6	1.0	6.6

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

**Number of deaths
per 100,000 population**
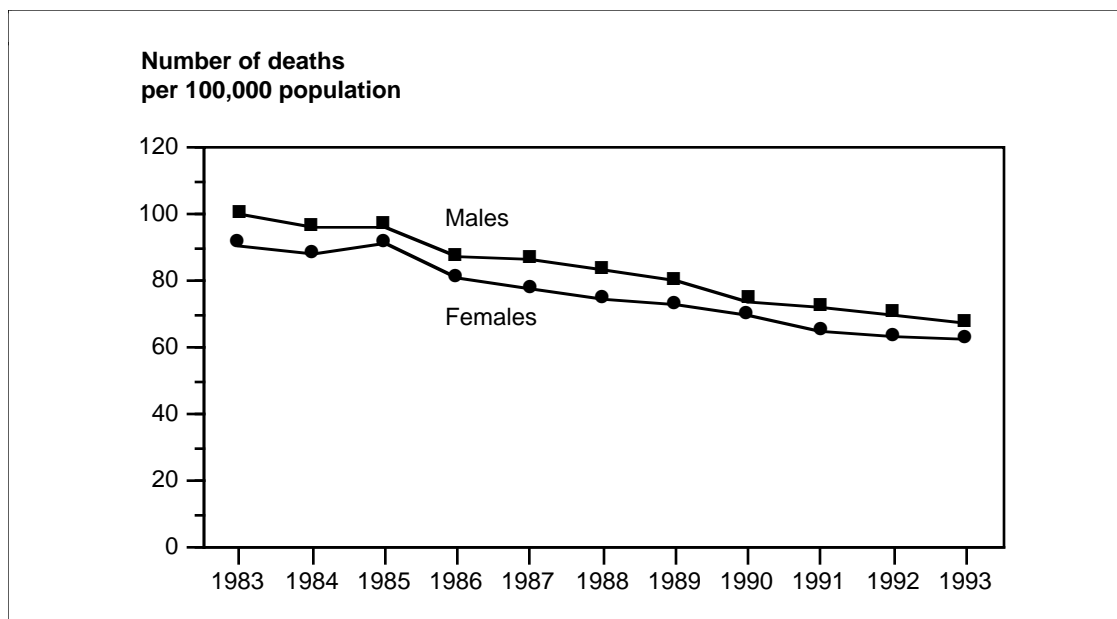
	1983	**1984**	**1985**	**1986**	**1987**	**1988**	**1989**	**1990**	**1991**	**1992**	**1993**
Males	100.2	96.2	96.5	87.6	86.4	83.1	80.4	74.1	72.3	70.2	67.5
Females	91.0	88.3	91.3	80.7	77.7	74.5	72.9	69.5	64.9	63.1	62.4
Total	95.9	92.8	94.6	84.5	82.3	78.8	76.9	72.5	68.8	66.9	65.3

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 con- siderable 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

**Number of new cases and deaths
per 100,000 population**
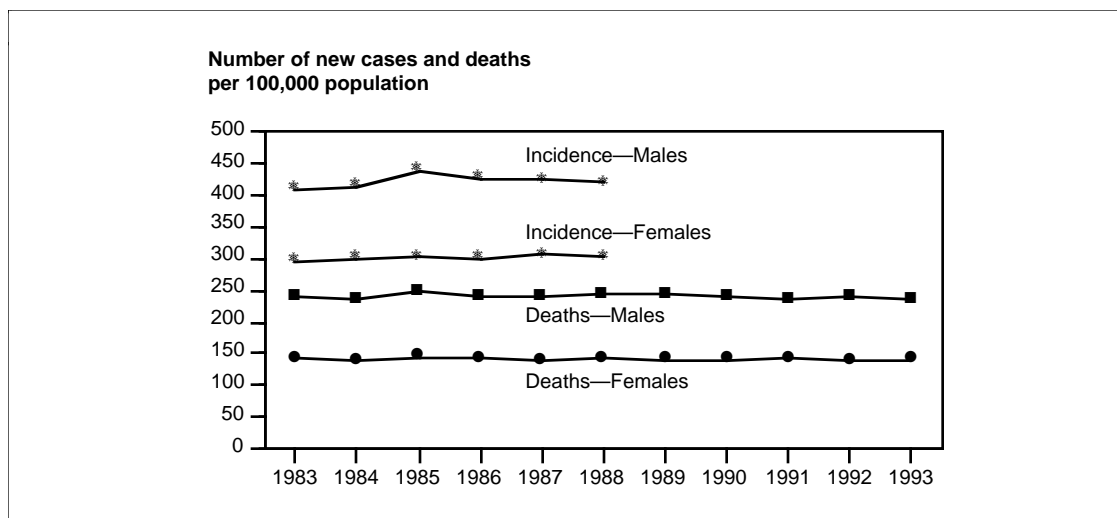
	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993
Incidence rates											
Males	408.6	415.0	438.0	426.4	425.2	421.2	na	na	na	na	na
Females	295.3	299.4	303.7	300.8	305.9	302.5	na	na	na	na	na
Total	339.2	343.7	356.0	349.3	352.0	348.9	na	na	na	na	na
Death rates											
Males	239.3	234.1	246.4	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

**Number of new cases and deaths
per 100,000 population**
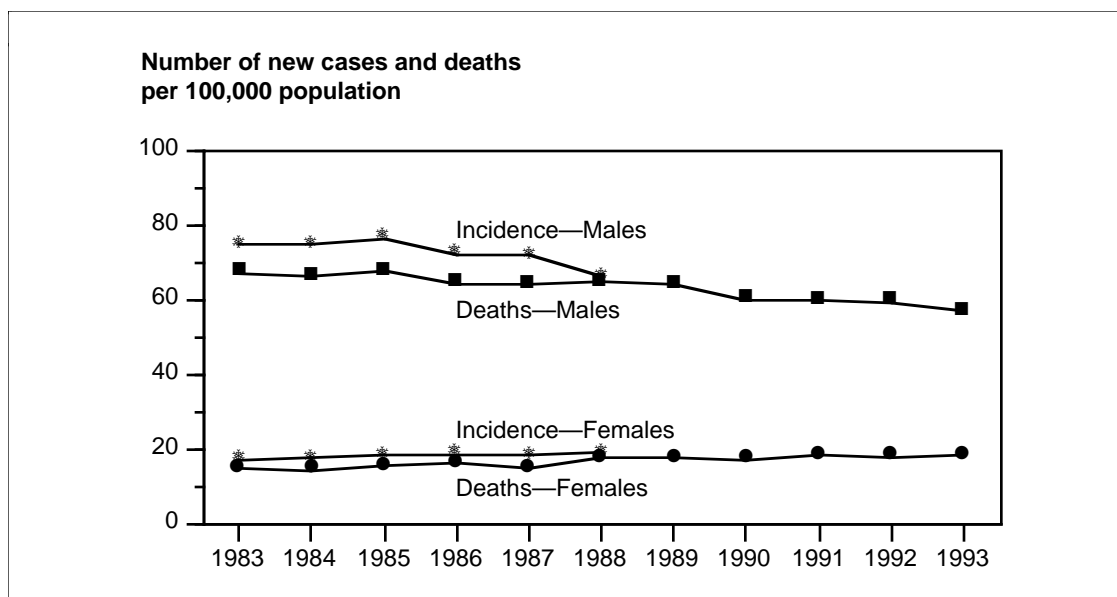
	1983	**1984**	**1985**	**1986**	**1987**	**1988**	**1989**	**1990**	**1991**	**1992**	**1993**
Incidence rates											
Males	74.9	74.7	76.5	72.3	71.7	66.1	na	na	na	na	na
Females	17.2	17.8	18.3	18.6	18.4	19.0	na	na	na	na	na
Total	42.7	42.8	43.6	41.8	41.7	39.7	na	na	na	na	na
Death rates											
Males	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

**Number of new cases and deaths
per 100,000 population**
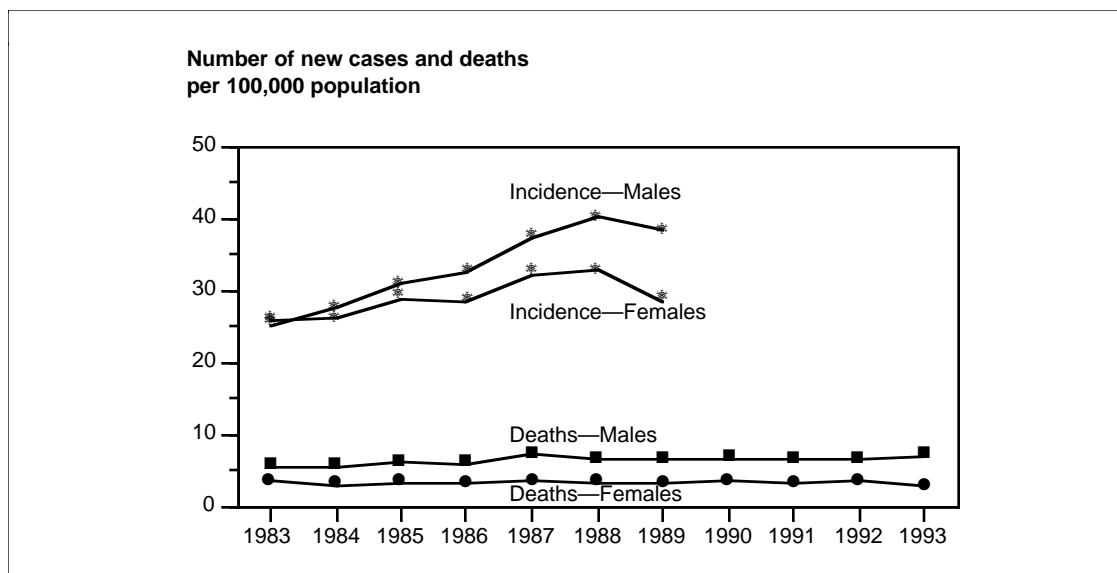
	1983	**1984**	**1985**	**1986**	**1987**	**1988**	**1989**	**1990**	**1991**	**1992**	**1993**
Incidence rates											
Males	25.3	27.5	30.8	32.6	37.3	40.2	38.2	na	na	na	na
Females	26.0	26.2	29.0	28.5	32.3	32.8	28.7	na	na	na	na
Total	25.3	26.5	29.4	30.1	34.4	35.9	32.8	na	na	na	na
Death rates											
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

Death rates for non-melanocytic skin cancers

**Number of deaths
per 100,000 population**
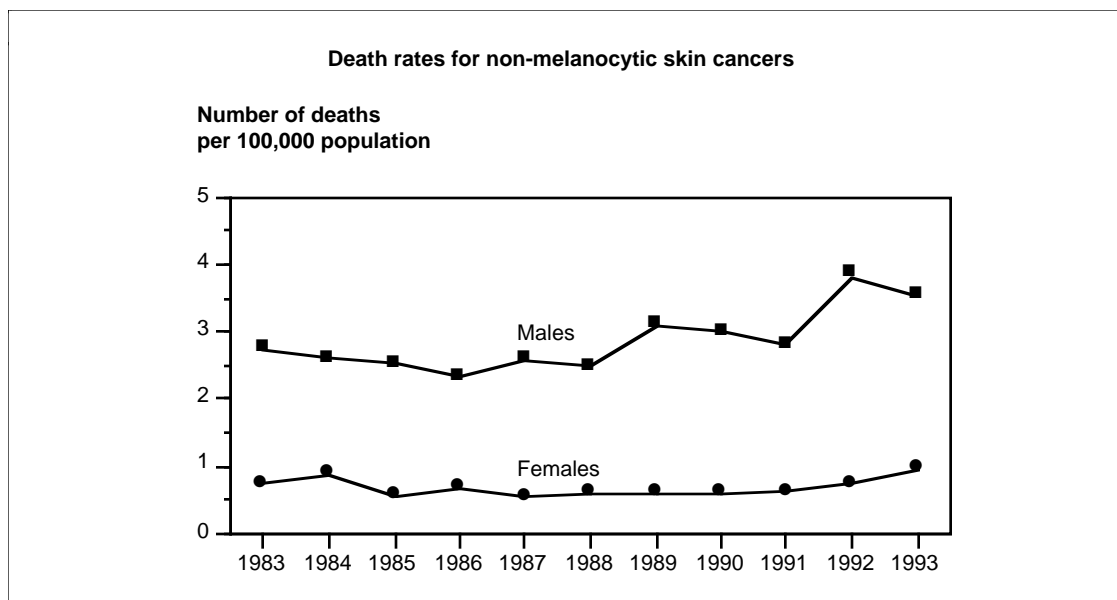
	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993
Incidence rates											
Males	na	na	944	na	na	na	na	1,187	na	na	na
Females	na	na	714	na	na	na	na	769	na	na	na
Total	na	na	823	na	na	na	na	977	na	na	na
Death rates											
Males	2.7	2.6	2.5	2.3	2.6	2.5	3.1	3.0	2.8	3.8	3.5
Females	0.7	0.9	0.6	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

Number of new cases and deaths per 100,000 females
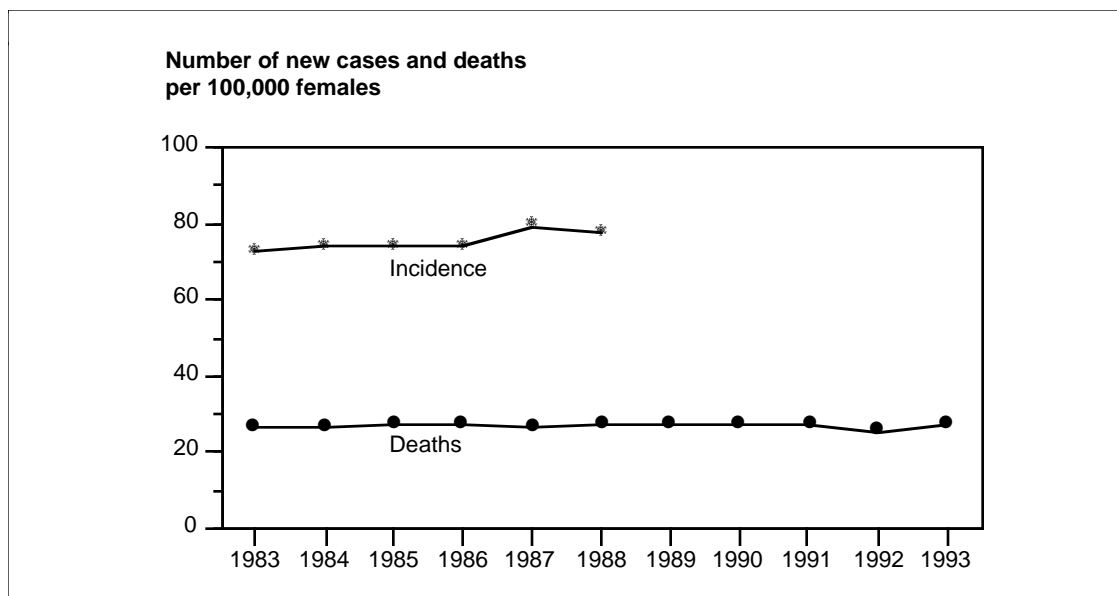
	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993
Incidence rates											
Females	72.6	73.7	73.8	73.8	78.9	76.9	na	na	na	na	na
Death rates											
Females	26.2	26.3	27.3	26.9	26.5	26.9	27.1	26.9	27.0	25.5	26.9

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

Number of new cases and deaths per 100,000 males
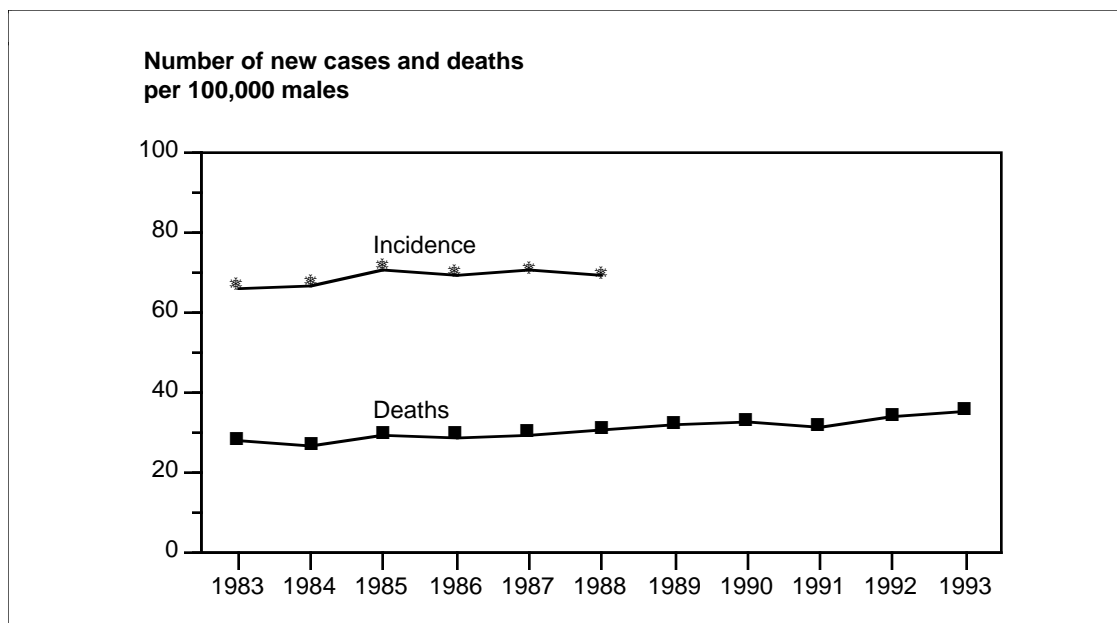
	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993
Incidence rates											
Males	66.0	66.7	70.7	69.4	70.4	69.0	na	na	na	na	na
Death rates											
Males	27.8	26.3	29.2	28.7	29.4	30.5	31.5	32.1	31.2	33.7	35.2

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

Number of new cases and deaths per 100,000 population
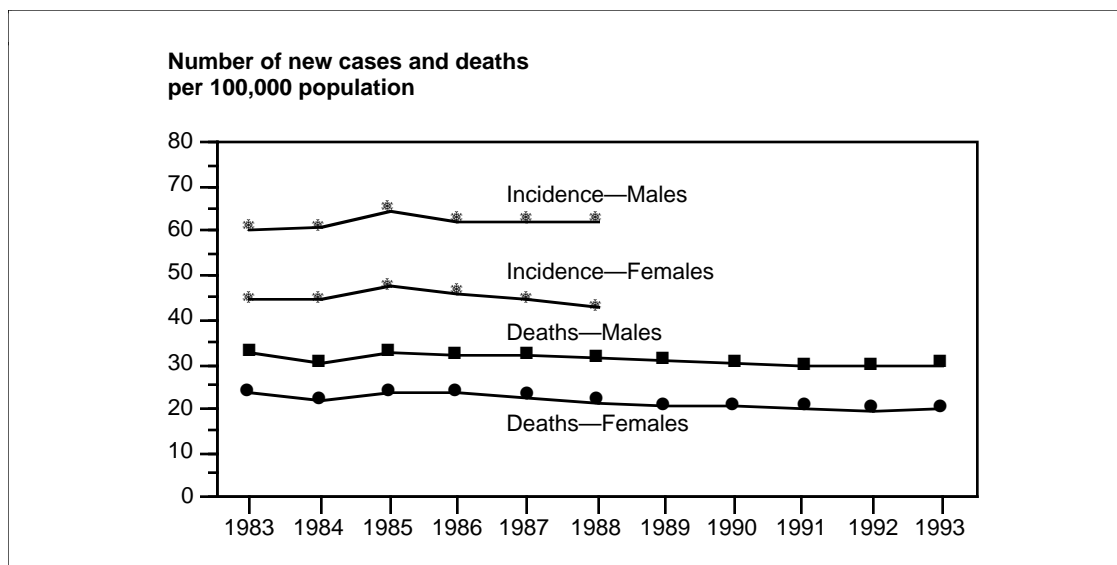
	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993
Incidence rates											
Males	60.2	60.7	64.8	62.4	62.0	62.3	na	na	na	na	na
Females	44.5	44.7	47.5	45.9	44.7	42.8	na	na	na	na	na
Total	51.3	51.5	54.9	53.0	52.1	51.2	na	na	na	na	na
Death rates											
Males	32.4	30.0	32.3	31.8	31.8	31.6	30.8	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

**Number of deaths
per 100,000 population**
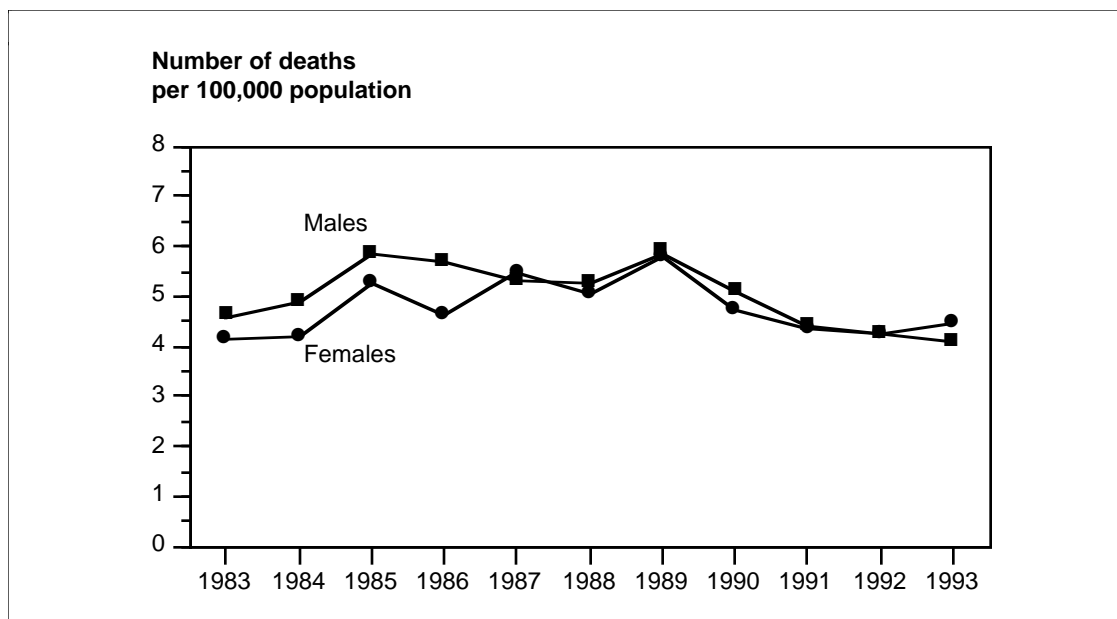
	1983	**1984**	**1985**	**1986**	**1987**	**1988**	**1989**	**1990**	**1991**	**1992**	**1993**
Males	4.6	4.9	5.9	5.7	5.3	5.3	5.9	5.1	4.4	4.2	4.1
Females	4.1	4.2	5.3	4.6	5.5	5.0	5.8	4.7	4.4	4.2	4.4
Total	4.3	4.5	5.4	5.1	5.3	5.1	5.8	4.9	4.3	4.3	4.3

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

Number of deaths per 100,000 population
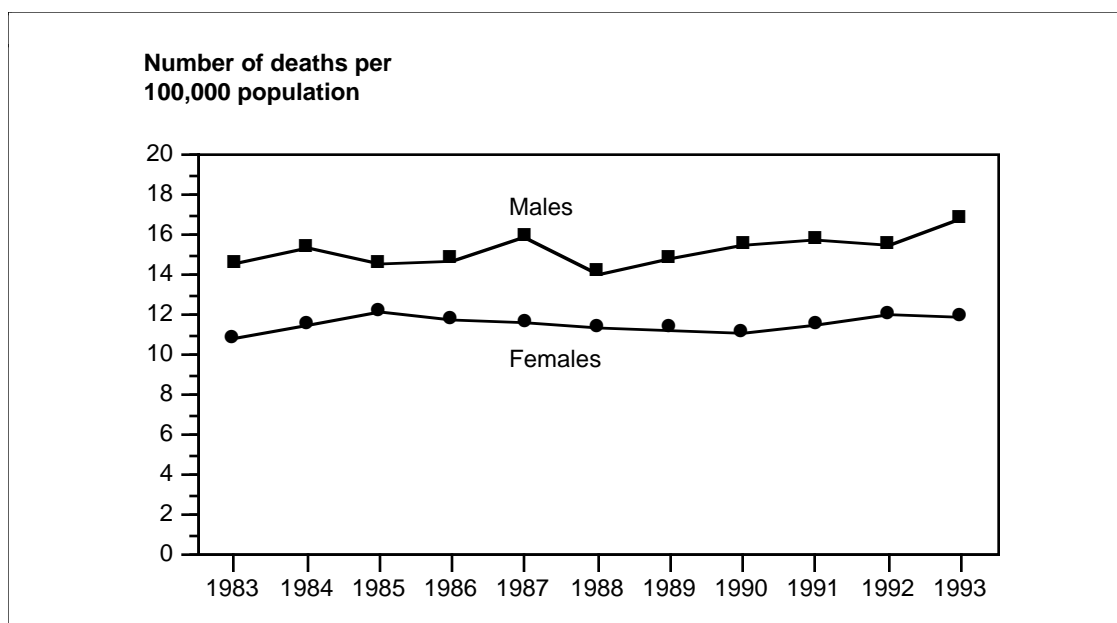
	1983	**1984**	**1985**	**1986**	**1987**	**1988**	**1989**	**1990**	**1991**	**1992**	**1993**
Males	14.6	15.4	14.6	14.8	15.9	14.1	14.9	15.5	15.8	15.5	16.8
Females	10.9	11.5	12.2	11.8	11.6	11.4	11.3	11.1	11.5	12.0	11.9
Total	12.4	13.1	13.2	13.0	13.4	12.6	12.9	13.0	13.2	13.5	14.0

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

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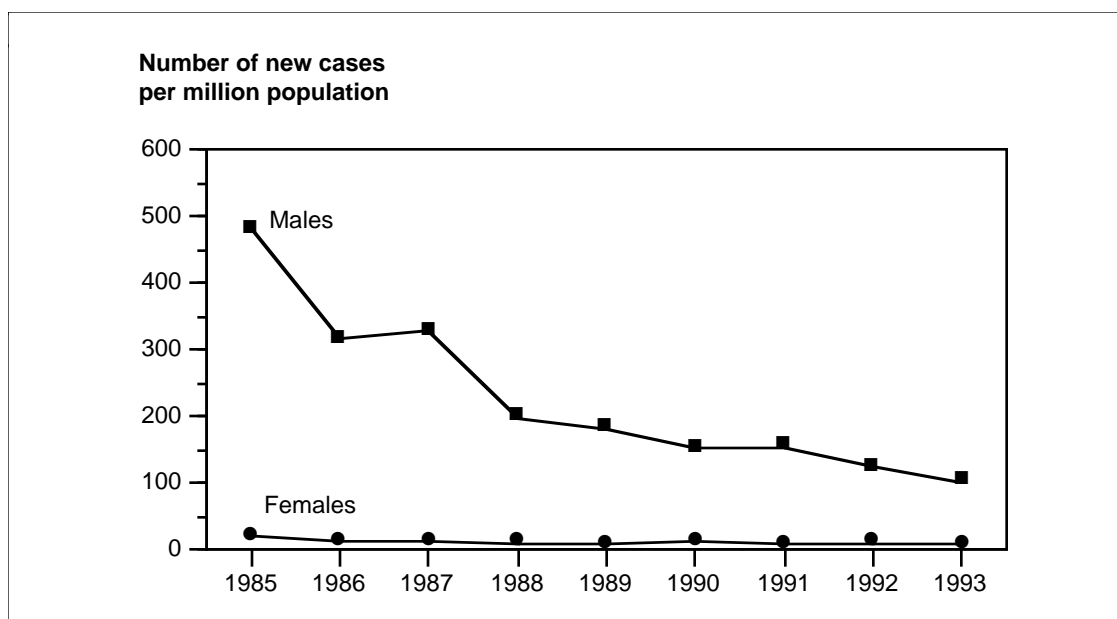
	1985[a]	1986	1987	1988	1989	1990	1991	1992	1993
Males	481.4	316.2	329.9	198.7	183.2	153.9	154.4	125.8	103.2
Females	20.0	14.2	13.4	10.9	10.2	11.9	9.6	10.6	8.5
Total[b]	249.6	164.1	170.4	103.5	95.6	82.3	81.8	69.0	56.5

(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

Number of new cases and deaths per million population
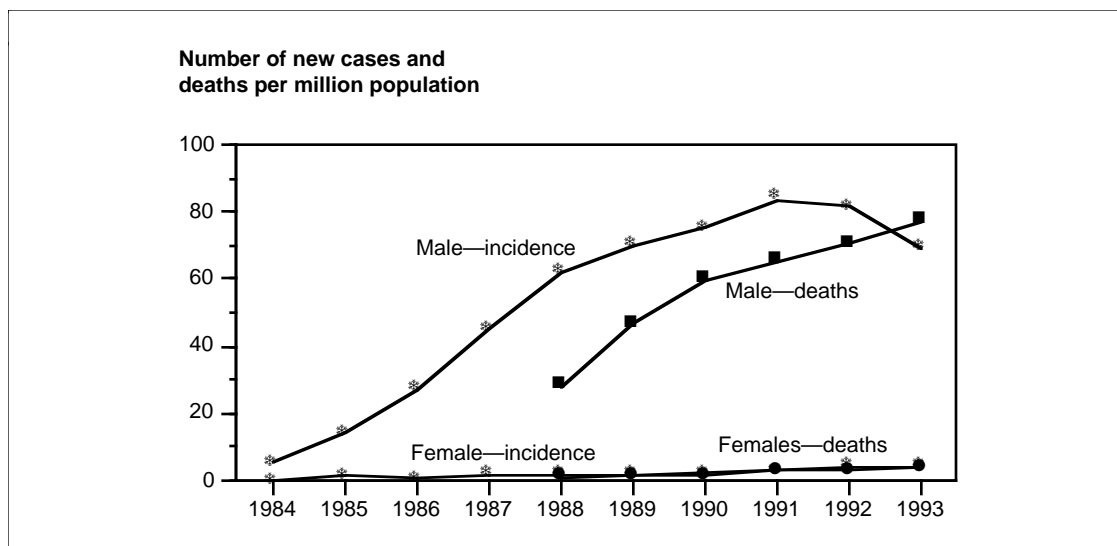
	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993
Incidence rates										
Males	5.8	14.5	27.5	44.7	62.2	69.8	74.7	83.9	81.6	69.1
Females	0.1	1.5	0.9	1.8	1.8	1.7	1.9	2.7	3.9	4.1
Total[(a)]	3.0	8.0	14.3	23.4	32.2	36.0	38.4	45.0	42.7	36.6
Death rates										
Males	na	na	na	na	28.1	46.2	59.7	65.3	70.8	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

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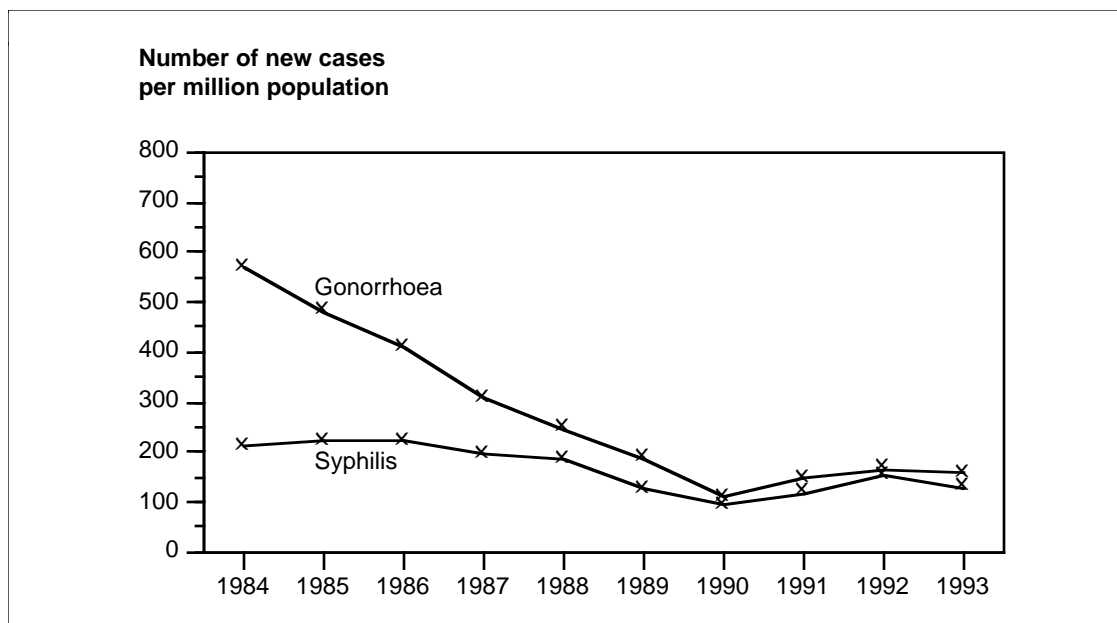
	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993
Chlamydia	na	na	na	na	na	na	na	234.0	359.8	367.7
Gonorrhoea	570.9	481.7	411.1	306.1	246.6	187.3	112.5	146.4	166.3	158.9
Syphilis	213.3	223.1	224.4	196.1	184.8	124.7	96.3	118.8	154.1	129.9

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

Number of new cases (including reactivations) per million population
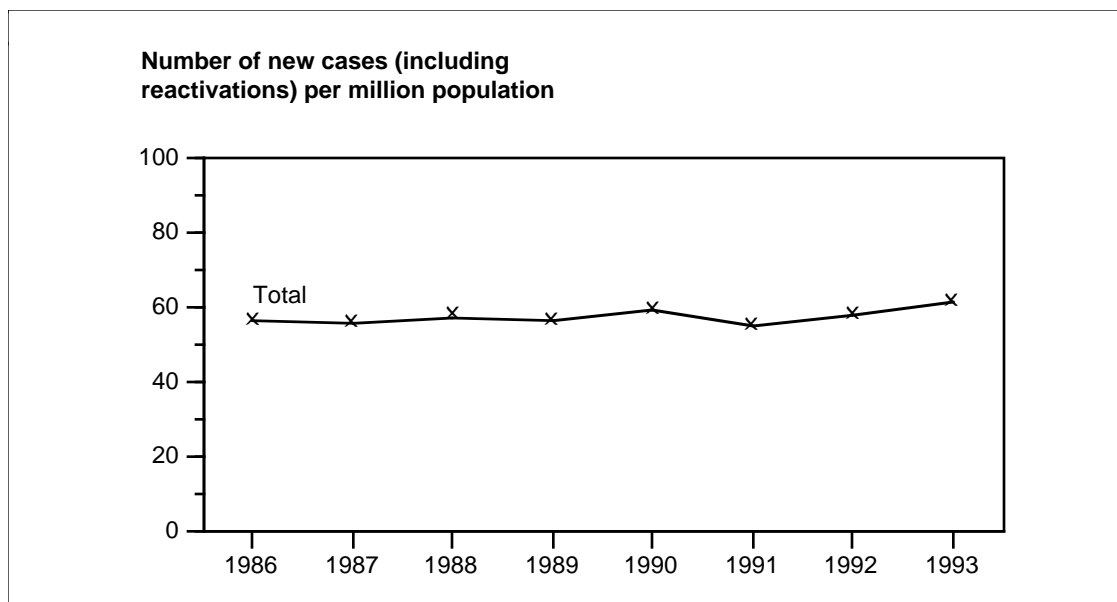
	1986	**1987**	**1988**	**1989**	**1990**	**1991**	**1992**	**1993**
Males	na	na	na	na	na	58.7	62.1	66.3
Females	na	na	na	na	na	45.8	50.0	56.3
Total	56.6	55.8	57.7	56.6	59.5	55.0	57.8	61.4

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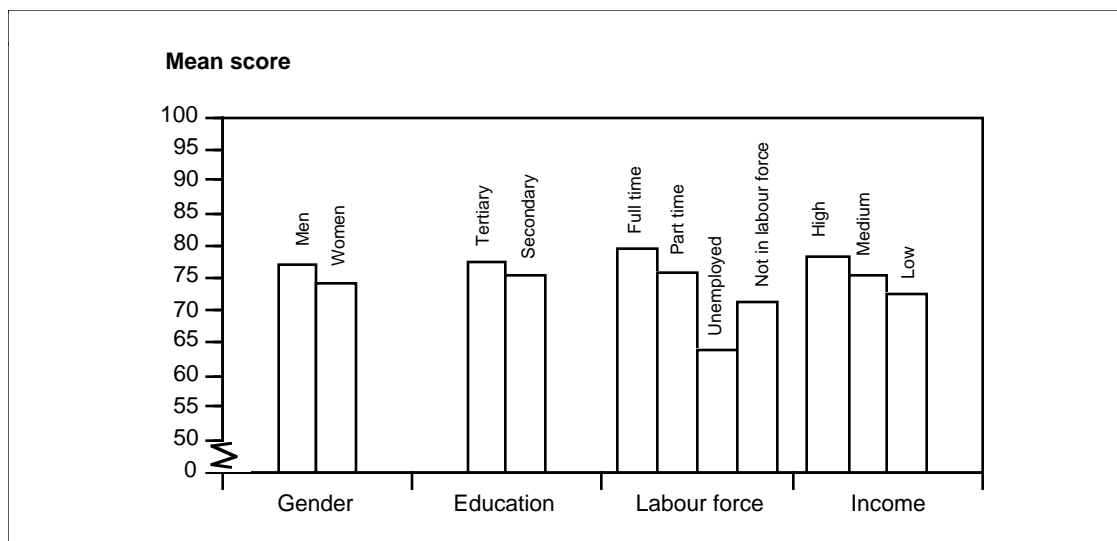
		Mean mental health score
Gender	Men	77.1
	Women	74.5
Education	Tertiary (Bachelor degree or higher)	77.4
	Secondary only	75.6
Labour force status	Employed full-time	79.4
	Employed part-time	75.9
	Unemployed	63.9
	Not in labour force	71.4
Household income	High (Top 30%)	78.3
	Medium (Middle 40%)	75.7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

**Number of deaths
per 100,000 population**
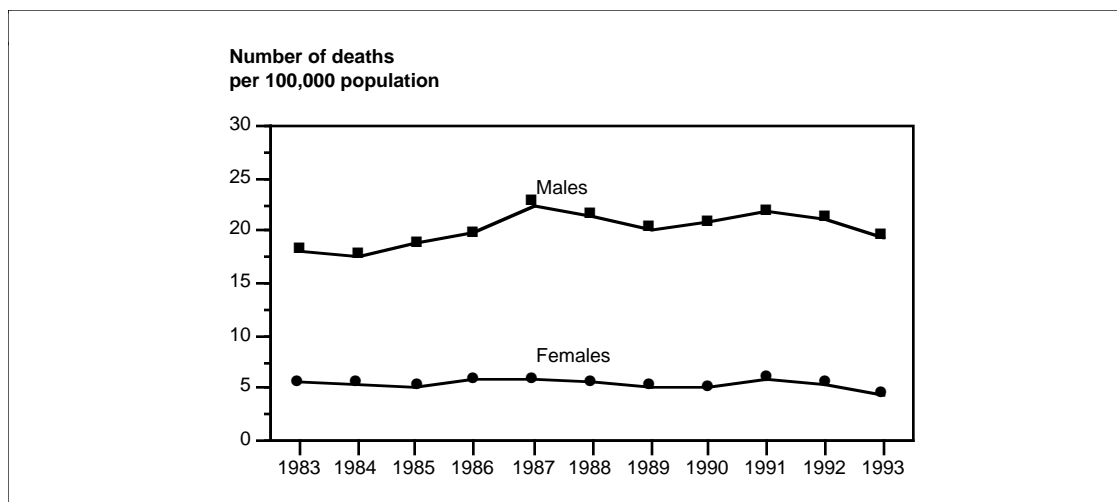
	1983	**1984**	**1985**	**1986**	**1987**	**1988**	**1989**	**1990**	**1991**	**1992**	**1993**
Males	18.0	17.6	18.8	19.8	22.5	21.5	20.1	20.7	21.7	21.1	19.3
Females	5.6	5.3	5.1	5.7	5.8	5.6	5.2	4.9	5.9	5.3	4.4
Total	11.6	11.3	11.8	12.6	13.9	13.4	12.5	12.7	13.7	13.1	11.7

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

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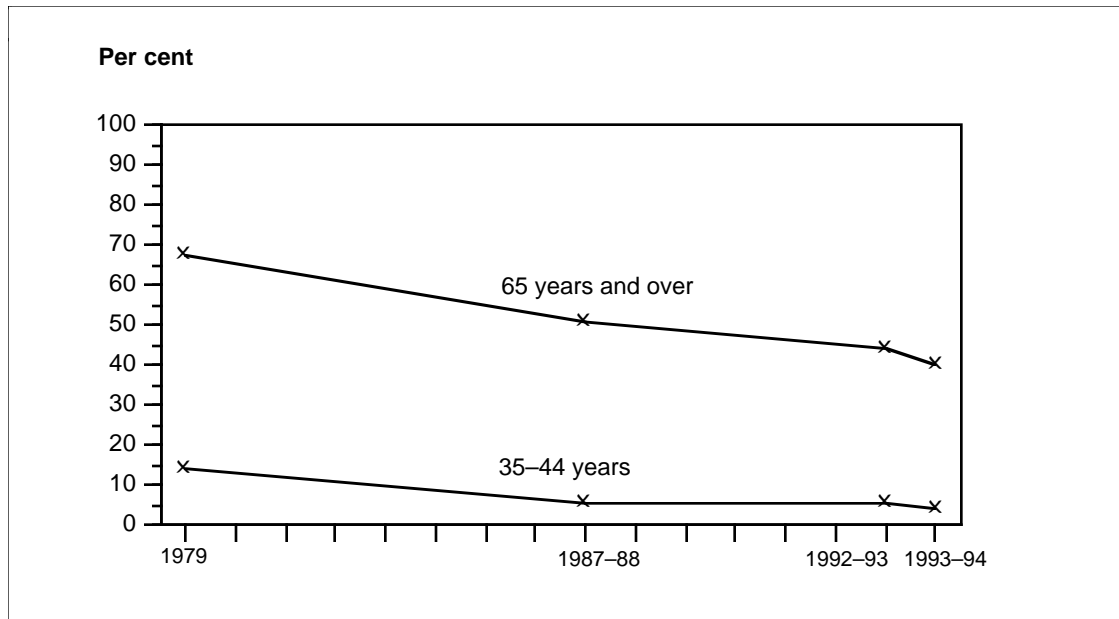
	1979	**1987–88**	**1992–93**[a]	**1993–94**
Age				
35–44 years (%)	14.0	5.7	5.4	4.0
65 years and over (%)	67.7	51.1	44.4	40.3

(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.