

# **AIHW**



The AIHW is a Corporate Commonwealth entity producing authoritative and accessible information and statistics to inform and support better policy and service delivery decisions, leading to better health and wellbeing for all Australians.

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#### Australia's health - how are we faring?

Over the last 100 years, life expectancy in Australia has increased considerably and deaths from infectious diseases have declined. However, for the first time in over 50 years, an infectious disease is in the top 5 causes of death...

A boy and girl born in 2020–2022 can **expect to live** on average to:





- an increase of around **40%** since the start of the 20th century.

#### Leading causes of death in 2022:

- 1. Coronary heart disease
- 2. Dementia
- 3. COVID-19
- 4. Cerebrovascular disease
- 5. Lung cancer

We are seeing great improvements for coronary heart disease and cancer...



The **coronary heart disease** death rate (adjusted for age) has been falling since the late 1960s, and has **fallen** by more than 80% since 1980 – from 428 to 52 deaths per 100,000 population between 1968 and 2022. There was a slight increase between 2021 and 2022.



**7 in 10** (71%)

people **survived** at least 5 years after a **cancer** diagnosis during 2015–2019 – an improvement from **5 in 10** (53%) in 1990–1994. Cancer death rates have **decreased** by 32% over the last 30 years (adjusted for age).

Chronic conditions are an ongoing cause of substantial ill health, disability and premature death...



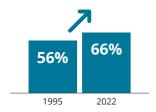
Dementia was one of the leading causes of **disease burden** in 2023, with the number of Australians with **dementia** predicted to **more than double** by 2058 (to 849,300 people).



In 2020–2022, 46% of **females aged 16–24** had a **mental illness** in the last 12 months. This was the highest rate for females, and higher than for males of any age.

We have made improvements for some health risk factors, while rates for others have grown...

A greater proportion of adults are living with **overweight** or **obesity** 





**3 in 10** (31%) people aged 14 and over consumed **alcohol** in ways that put their health at risk in 2022–2023 – down from 4 in 10 (39%) in 2004

Rates of daily tobacco smoking continue to decline, but the proportion of people aged 14 and over using **e-cigarettes** daily has **risen** 



Improvements for the health of our First Nations people, but the health gap remains...



For First Nations people, the age-standardised death rate for cardiovascular disease for those in New South Wales, Queensland, Western Australia, South Australia and the Northern Territory combined has **declined** by 22% – from 323 to 252 per 100,000 between 2006 and 2022.



An estimated 35% of the **health gap** between First Nations and non-Indigenous Australians was due to differences in social determinants of health (such as education and employment) and 30% was due to differences in health risk factors, in 2017–2019.

In recent years, the health system has been tested...



The number of **hospitalisations** was higher in 2022–23 (12.1 million, compared with 11.5 million in 2018–19)

- the rate was slightly lower (415 per 1,000 population in 2022–23, compared with 422 in 2018–19).

**Fewer** people are **seen on time** in the emergency department



Elective surgery rates not back to pre-pandemic levels but telehealth is here to stay...



Elective surgeries were disrupted by the COVID-19 pandemic and rates have not yet returned to pre-pandemic levels.



Changes to delivery of services via **telehealth** show no signs of reverting to pre-pandemic levels.

#### Australia's population

Australia's population was **26.8 million people** as at 30 September 2023 – a 2.5% (659,800 people) increase from the previous year. Most of this growth was due to overseas migration.

Australia's population is projected to reach 30.9 million by 30 June 2034.

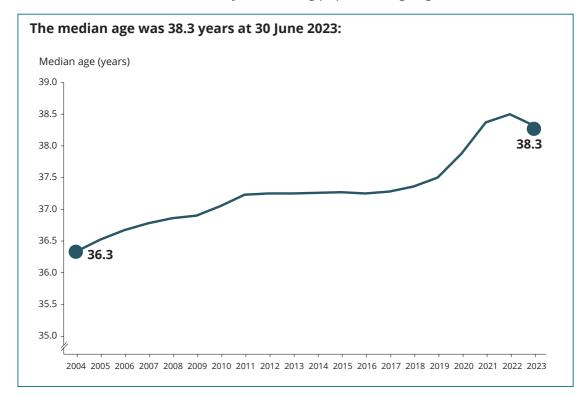
In the year ending 30 September 2023, there were:





In 2022, the **total fertility rate** was 1.63 babies per woman – lower than 2012 (1.93) and has been below the replacement rate (2.1 babies per woman) since the mid-1970s.

Australia's population has generally grown older, reflecting long-running trends of declining fertility and increasing life expectancy. The recent 'catch up' of overseas migrants – who tend to be relatively young – into Australia following the lifting of COVID-19 travel restrictions is likely moderating population ageing in the short term.



At 30 June 2023, **3 in 10** (30.7%) Australians were born overseas; an increase from 29.5% in 2022, and 29.3% in 2021 when COVID-19 travel restrictions meant there were fewer arrivals of people born overseas immigrating to Australia, and fewer people born in Australia leaving to live overseas. This is the first time since 1893 that the proportion has exceeded 30%.

The most common countries of birth for Australians born overseas were England, India, China and New Zealand – people born in these 4 countries made up more than one-third of the overseas born population in Australia as at 30 June 2023.



68% of Australians lived in the 8 capital cities at 30 June 2022 – an increase from 65% in 1992.

For more, see AIHW: Profile of Australia's population

Information is also sourced from the Australian Bureau of Statistics (ABS): Births, Deaths, Australia's Population by Country of Birth, National, state and territory population and the Centre for Population: 2023 Population Statement



# How healthy are we?

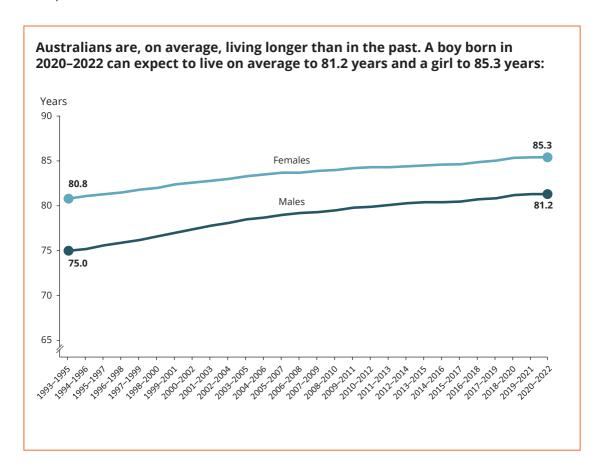
In 2022, 85% of Australians aged 15 and over perceived their health as good/very good. Australia's life expectancy at birth compares well with similar countries; it is fourth highest among 38 Organisation for Economic Co-operation and Development (OECD) countries.

Life expectancy in Australia has increased substantially since the start of the 20th century. Over the last 100 years, deaths from infectious diseases have declined, while deaths from chronic conditions, such as cancers and dementia, have increased. Despite this, COVID-19 was the third leading cause of death in 2022, making it the first time in over 50 years that an infectious disease has been in the top 5 leading causes of death in Australia.

Today, chronic conditions are an ongoing cause of substantial ill health, disability and premature death in Australia.

#### Are we living longer?

Australia has the fourth highest life expectancy among OECD countries. Life expectancy measures how long, on average, a person is expected to live based on current age and sex-specific death rates.



# Life expectancy in Australia has increased substantially since the start of the 20th century

There have been large improvements in life expectancy since the start of the 20th century – mostly due to improved social conditions, advances in medical technology (such as mass immunisation and antibiotics) and health promotion and protection activities.

People born in the early 1900s were expected to live, on average, to around age 55, contrasting markedly with people born after 2010 who are expected to live, on average, to age 80 or more (an increase of over 40% since the start of the 20th century).

As life expectancy has increased over time, so too has the number of years, on average, Australians spend in full health. Between 2003 and 2023:

- males gained a total 2.2 years in full health (from 69.4 to 71.6 years)
- females gained a total 0.8 years in full health (from 72.8 to 73.6 years).

However, there has also been an increase in the number of years, on average, Australians spend in ill health, contributing to growing demands on the health system and other services.

For the first time since the mid-1990s, life expectancy in Australia **decreased** in 2020–2022 (by 0.1 years for males and females from 2019–2021). This is likely to be due to the increase in deaths seen in 2022 of which close to half were due to COVID-19 and the remainder due to increases in other causes. Greater declines in life expectancy were seen in the United States (from 78.9 in 2019 to 76.4 in 2021) and the United Kingdom (from 81.3 in 2019 to 80.4 in 2020).

Australia's life expectancy in 2020–2022 is higher than it was prior to the COVID-19 pandemic by 0.3 years for males and females (life expectancy in 2017–2019 was 80.9 for males and 85.0 for females).

Over the last century there have been substantial decreases in child and infant mortality rates, contributing to increases in overall life expectancy.

For example, death rates for children under 5 declined by 97% between 1907 and 2022.

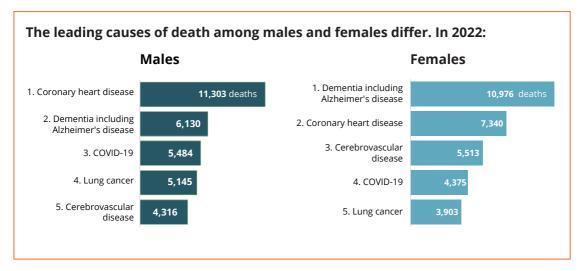
For more, see AIHW: Deaths in Australia, Life expectancy and causes of death, Burden of disease, Measures of health and health care for Australia and similar countries and The ongoing challenge of chronic conditions in Australia

#### What are the main causes of death?

Looking at how many people die and what caused their death can provide vital information about the health of a population. In 2022, the 5 leading causes of death in Australia were:

- 1. Coronary heart disease
- 2. Dementia
- 3. COVID-19
- 4. Cerebrovascular disease
- 5. Lung cancer.

Coronary heart disease and dementia have remained as leading causes of death. However, COVID-19 entered the top 5 in 2022. This was the first time in over 50 years that an infectious disease has been in the top 5 leading causes of death in Australia.



#### Leading cause of death differs by age

Among children aged 1–14, land transport accidents were the leading cause of death. Suicide was the most common cause of death among people aged 15–44, while chronic diseases such as cardiovascular diseases and cancer were common causes of death among people aged 45 and over. Dementia was the most common cause of death among people aged 85 years and over.

for more, see AIHW: Life expectancy and causes of death

#### What are the leading causes of disease burden?

Burden of disease is a way of measuring the impact of diseases and injuries on a population. It combines the years of healthy life lost due to living with ill health (non-fatal burden) with the years of life lost due to dying prematurely (fatal burden).

In 2023, it was estimated that Australians lost 5.6 million years of healthy life due to:

- living with illness (non-fatal): 54% of total burden
- dying prematurely (fatal): 46% of total burden.

### In 2023, the 5 leading disease groups that caused the most burden overall were mostly chronic, or long-lasting, conditions:

	Cancer	Mental health & substance use	Musculoskeletal	Cardiovascular	Neurological
% of total DALY	17	15	13	12	8
% of total DALY that was fatal	91	2	3	74	49
Change in age-standardised rates between 2003 and 2023 <sup>(a)</sup>	Decreased	Increased	Decreased	Decreased	Increased

Note: DALY = Disability adjusted life year

(a) Based on the rate difference; that is, the absolute difference between the age-standardised rate of burden from 2003 to 2023.

When considering burden from individual diseases, COVID-19 ranked 30th in 2023. The burden from COVID-19 was predominantly fatal (83%) and was highest in those aged 75–84.

# Long-term improvements in fatal burden but recent increases in non-fatal burden

There was an 11% decline in total burden (after adjusting for population ageing) between 2003 and 2023. This was driven by a 27% decrease in the rate of fatal burden, while the non-fatal burden rate increased by 6.3%.

#### Leading causes of disease burden differ for males and females

Overall and for most age groups, males experienced more total burden than females. This was driven by males having higher rates of fatal burden.

In 2023, the leading causes of total burden among males were coronary heart disease, back pain and problems and suicide and self-inflicted injuries. Among females, the leading cause was dementia, followed by anxiety disorders and back pain and problems.

#### Disease burden differs over the life course

- Respiratory diseases caused burden throughout the life course, especially in children and the elderly.
- Mental health conditions and substance use disorders cause the greatest burden
  in the **first half** of the life course (ages 5–44), while musculoskeletal conditions,
  cardiovascular diseases and cancer are leading causes in the **latter part** of the life
  course (ages 45–84).
- Neurological conditions (namely dementia) are a leading cause of burden in older
   Australians (aged 65 and over) along with cancer and cardiovascular diseases.
- for more, see AIHW: Burden of disease

#### How has COVID-19 affected our health?



From early 2020 to late 2023, an emergency response to COVID-19 was in place in Australia. A range of public health measures were implemented – including lockdowns – which changed over time and differed across states and territories.

There have been nearly 12 million confirmed or probable COVID-19 cases in Australia, as at March 2024

Of these, most cases (95%) were notified during 2022. Reported cases have been underestimated since late 2022 due to changes to testing and reporting requirements.

In the early stages of the pandemic, Australia had a relatively low number of COVID-19 cases compared with other OECD countries. By 31 December 2022, the total number of COVID-19 cases since the beginning of the pandemic (per million people) placed Australia lower than several European countries, similar to New Zealand and higher than Canada and Japan.



At May 2024, 2.0 million Australians (aged 18 years and over) had received a COVID-19 vaccination in the last 6 months

#### In 2022–23, there were 182,780 hospitalisations for COVID-19

Of all hospitalisations, those involving a COVID-19 diagnosis represented:

	2019–20	2020-21	2021–22	2022-23
Per cent of all hospitalisations	<0.1%	<0.1%	2.3%	1.5%

See also: COVID-19 and the health system in Chapter 3.



# Since the start of the pandemic to 29 February 2024, more than 22,000 people in Australia have died from or with COVID-19.

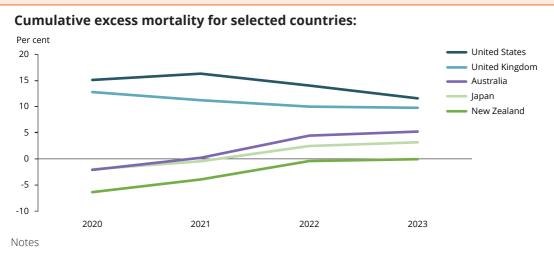
Of these, COVID-19 was the underlying cause of death for 79%.

**Excess mortality** shows the difference between the actual number of deaths and the expected number of deaths (based on previous trends) in a defined time period.

The ABS has developed estimates of excess mortality that provide an indication of how many additional deaths have occurred since the beginning of the pandemic that would not have occurred without the pandemic. From the start of the pandemic to December 2023, there was a net total of 13,259 excess deaths in Australia. However, the pattern of excess mortality was different by year. In 2020 there were 1,854 less deaths than expected. In 2021, 2022 and 2023 there were more deaths than expected, with 369 in 2021, 11,558 in 2022 and 3,186 in 2023 (based on deaths above and below usual variation).

These excess deaths are reflected in the small decline in life expectancy observed for Australia from 2019–2021 to 2020–2022.

Since the beginning of the pandemic Australia has had one of the lowest excess mortality rates compared with other countries with available data. Australia has had lower excess mortality than the United States, the United Kingdom and most European countries, similar excess mortality to Canada and higher excess mortality than Japan and New Zealand.



- 1. Data are the percentage difference between the cumulative number of deaths since 1 January 2020 and the cumulative expected number of deaths based on previous years (2015–2019).
- 2. Data for 2023 are based on deaths until 25 June 2023.

#### Post-COVID-19 condition is an emerging health issue

'Long COVID' or 'post-COVID-19 condition' is a condition in people with a history of probable or confirmed COVID-19, usually 3 months from the onset of COVID-19, with symptoms that last for at least 2 months and cannot be explained by an alternative diagnosis.

Estimates on the prevalence of post-COVID-19 condition in Australia range from 5% to 10% of people who have had COVID-19. However, these estimates are based on limited data capturing self-reported symptoms.



To help us learn more, the AIHW has developed a **COVID-19 Register** that uses linked data to explore the health outcomes of Australians diagnosed with COVID-19 and the effect that COVID-19 has had on the health system and broader community.

# Levels of psychological distress were very variable during the COVID-19 pandemic

Pre-pandemic (February 2017), the average level of psychological distress (based on average K6 score) for adults (aged 18 and over) was 11.2. There were notable peaks in average levels between April and October 2020 (11.9 and 11.8, respectively) and again in October 2021 (11.7). In August 2022 average psychological distress was 11.3, increasing well above pre-pandemic levels again in April 2023 (to 11.8), remaining at that level in August 2023. As at January 2024, the average level of psychological distress for adults was 11.4.

Average levels of psychological distress rose for younger people (aged 18–44) during the pandemic, while people aged 55 and over experienced improvements since the start of the pandemic. Increases were greatest for people aged 18–24.

For more, see AIHW: COVID-19, Burden of disease, Enhancing communicable disease monitoring through data linkage and Australia's welfare 2023: in brief Information is also sourced from the ANU Centre for Social Research Methods: Taking stock: Wellbeing and political attitudes in Australia at the start of the post-COVID era; the Department of Health and Aged Care: COVID-19 vaccination rollout

update and the ABS: Provisional Mortality Statistics

#### At a glance: long-term health conditions

In 2022, an estimated:



6 in 10

4 ir

(61%, or 15.4 million) people were living with **at least 1** selected long-term health condition

(38%, or 9.7 million) people were living with **2 or more** selected long-term health conditions

#### **The 5 most common** – of 72 selected long-term health conditions – were:

- anxiety (4.8 million people, 18.9%)
- back problems (4.0 million people, 15.7%)
- depression (3.2 million people, 12.4%)
- asthma (2.8 million people, 10.8%)
- deafness or hearing loss (2.4 million people, 9.6%)



Living with chronic conditions can have a substantial impact on a person's health and requires investment in the health system

The 5 leading causes of **disease burden** in Australia in 2023 were chronic conditions:

- 1. coronary heart disease
- 2. dementia
- 3. back pain and problems
- 4. anxiety disorders
- 5. chronic obstructive pulmonary disease

The 3 condition groups associated with the **highest spending** in Australia in 2020–21 were chronic conditions:

- 1. musculoskeletal conditions
- 2. cancer and other neoplasms
- 3. cardiovascular diseases

Chronic conditions contributed to between 89 and 92 per cent of all deaths each year from 2002 to 2022.

for more, see AIHW: Chronic conditions, Multimorbidity and The ongoing challenge of chronic conditions in Australia

#### Leading causes of ill health in Australia

The following overview of selected health conditions provides an insight into how the health of Australians is faring. Some are leading causes of ill health and death, while others cause considerable burden for Australians.

#### Cancer

Cancer is a major cause of illness in Australia. In 2023, an estimated 165,000 new cases of cancer were diagnosed – an average of over 450 every day.

In 2023, the most commonly diagnosed cancers:

- in **males** were prostate cancer (25,500 cases), melanoma of the skin (10,600 cases) and colorectal cancer (8,100 cases)
- in **females** were breast cancer (20,500 cases), melanoma of the skin (7,600 cases) and colorectal cancer (7,200 cases).

Consistent with Australia's growing and ageing population, between 2000 and 2023, the number of:

- new cancer cases increased by 88%
- deaths from cancer increased by 41%.

However, adjusted for age, the rate at which new cancer cases were diagnosed increased by only 8%, while the rate at which people died due to cancer decreased by 25% (and by 32% over the last 30 years from 1994 to 2023). This decrease in the death rate reflects reductions in the death rate for common cancers such as lung (33% decline between 2000 and 2023), colorectal (43% decline), prostate (31% decline), and female breast cancer (27% decline), amongst others.

From 2000 to 2023, the cancer death rate fell for all 10-year age groups up to the age of 84. For example, the rate at which people aged 45–54 died from cancer fell by 36%. For those aged 85 and over there was an increase; largely due to people living longer, meaning an increasing average age of this population group over time.

Cancer accounted for around 3 out of every 10 deaths in Australia in 2023.

#### The rate of cancer diagnosis for younger people has increased over time

The age-standardised rate of cancer diagnosis for 0–49-year-olds increased by 12% over the last 20 years (2004 to 2023) and by 1% for people aged 50 and over in the same period. The larger increase for people aged 0–49 could be due to various reasons including more or better surveillance, testing and examination to detect cancer; changes in cancer testing/diagnosis criteria; and changes in the definition of cancer – not just changes in the risk of developing cancer.

Of note, between 2004 and 2023, cancer death rates decreased by 30% to 40% for almost all 5-year age groups younger than 50.

An example is, young people aged 15–24 have tended to have increasing cancer incidence rates, but decreasing cancer death rates. Between 2004 and 2023, cancer:

- incidence rates increased from 35 to an estimated 37 cases per 100,000
- death rates decreased from 4.3 to an estimated 2.7 deaths per 100,000.

#### Cancer survival

On average, **people are more likely to survive** for at least 5 years after a cancer diagnosis than they were in the past – 5-year relative survival rates for cancer are up from 53% in 1990–1994 to 71% in 2015–2019. This means that people with cancer had a lower (71%) chance of surviving for at least 5 years after diagnosis compared with their counterparts in the general population.

Between 1990–1994 and 2015–2019, survival for the two most common cancers improved substantially, with 5-year relative survival for prostate cancer increasing from 66% to 96% and 5-year relative survival for breast cancer in females increasing from 78% to 92%.

#### Survival rates vary by cancer types

For the period 2015–2019, cancers such as testicular, thyroid and prostate cancer had 5-year relative survival rates over 95% while cancers such as pancreatic cancer and mesothelioma had 5-year relative survival rates of less than 20%.

Five-year relative survival rates were highest for cancers diagnosed at earlier stages.

#### Burden of disease and expenditure

Cancer contributed to 17% of the total burden of disease in 2023, which was more than any other disease group.



42% of the total cancer burden is attributable to personal and behavioural risk factors such as smoking, alcohol use, overweight and obesity, insufficient physical activity and UV exposure.

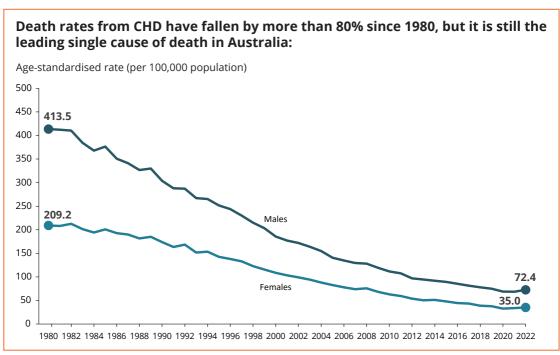
In 2020–21, cancer and other neoplasms (tumours) was the disease group with the second greatest health system expenditure (\$14.6 billion), accounting for 9.7% of the \$150 billion disease-specific expenditure.

For more, see AIHW: Cancer and Cancer data in Australia

#### Heart, stroke & vascular conditions

Heart, stroke and vascular disease – also known as cardiovascular disease or CVD – is a broad term that describes the many different diseases and conditions that affect the heart and blood vessels.

An estimated 1 in 15 (6.7%, or 1.3 million) adults were living with heart, stroke and vascular disease in 2022 which has not changed since 2001 after taking age into account. **Coronary heart disease** (CHD), such as heart attack and angina, was most common (an estimated 600,000 adults in 2022, 3%).



While CHD mortality continued to decline in 2020 – the first year of the pandemic – and remained stable in 2021, the age-standardised death rate increased by 4.3% in 2022. This increase should be interpreted in the context of higher overall mortality in 2022, with two-thirds of excess deaths being associated with COVID-19. Chronic cardiac conditions (including coronary heart disease) were the most common pre-existing diseases among those who died from the virus.

People with pre-existing chronic conditions such as cardiovascular disease (CVD) are at higher risk of cardiac complications from COVID-19 and more severe outcomes. In 2022–23, of all COVID-19 hospitalisations with a recorded comorbid diagnosis of CVD, 7.3% of these hospitalisations ended with the patient's death in hospital; compared with 3.6% of all COVID-19 hospitalisations where the patient died in hospital.

Increasing age is the single most important factor for risk of severe COVID-19 disease, and people with CVD are more likely to be older and therefore more likely to have severe COVID-19.

Continued monitoring will assess the evolving impact of COVID-19 on CHD mortality. The historical decline in CHD death rates has been linked to reductions in some risk factor levels (including tobacco smoking) and better treatment, care and prevention, and despite high rates of other risk factors like overweight and obesity.



In 2021, there were an estimated 40,700 stroke events – where blood supply to the brain is blocked, ruptured or bleeds suddenly. In 2022, stroke accounted for 5.1% of all deaths. Stroke was the 13th leading specific cause of disease burden in 2023.

**f** For more, see AIHW: Australian Burden of Disease Study 2023, Deaths in Australia and Heart, stroke and vascular disease

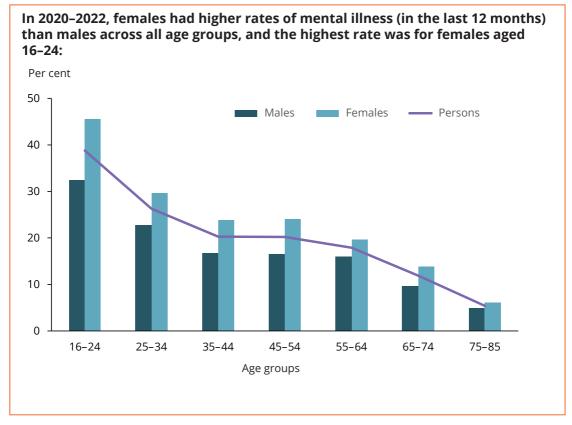
#### Mental health

In 2020–2022, an estimated **8.5 million Australians** aged 16–85 had experienced a mental disorder at some time in their life (43% of the population).

While the prevalence of a 12-month mental disorder (had a mental disorder in the past 12 months) remained broadly similar, compared with the 2007 estimates for people aged 25–85, there was a large increase among young adults. In 2007, 26% of 16–24-year-olds had a 12-month mental disorder compared with 39% in 2020–2022. This change is almost entirely driven by an increased prevalence among females in this age group: 46% of females aged 16–24 had a 12-month illness in 2020–2022, compared with 30% in 2007 (the prevalence for males of this age group increased from 23% to 32%).

Of the 4.3 million people who had experienced a mental disorder in the last 12 months (21.5%), the most common conditions were:

- Anxiety disorders (3.4 million people, or 17.2% of the population)
- Affective disorders (1.5 million, or 7.5%)
- Substance Use disorders (650,000, or 3.3%).



# People with a mental health condition, particularly females, are more likely to experience high or very high psychological distress

In 2020–2022, an estimated two-thirds (64%) of females aged 16–85 with a mental health condition experienced high/very high psychological distress, compared with 36% without a mental health condition.

#### Burden of disease

Mental health conditions and substance use disorders was the second leading disease group causing burden in 2023 (behind cancer), responsible for 15% of total disease burden. Anxiety disorders was the fourth leading specific cause of disease burden in 2023 (second for females). Most of the burden from mental and substance use disorders was non-fatal (98.3%).

for more, see AIHW: Mental health, Stress and trauma and Burden of disease

#### Chronic musculoskeletal conditions

Over 1 in 4 (29%, or an estimated 7.3 million) Australians reported they were affected by chronic musculoskeletal conditions in 2022 – consistent with 2017–18.

#### In 2022:

- 4.0 million (16%) people were living with back problems
- 3.7 million (15%) were living with arthritis
- 854,000 (3.4%) were living with osteoporosis or osteopenia.



Females and older people were more likely to be living with chronic musculoskeletal conditions.

Musculoskeletal conditions accounted for 12.8% of total disease burden in 2023 and were the **second leading disease group causing non-fatal burden** (after mental health conditions and substance use disorders).

For more, see AIHW: Chronic musculoskeletal conditions

#### Chronic kidney disease

Chronic kidney disease is the presence of impaired or reduced kidney function lasting at least 3 months. An estimated 11% of adults (1.7 million Australians) had biomedical signs of chronic kidney disease in 2011–12. The prevalence of this condition increases rapidly with age, affecting around 44% of people aged 75 and over.



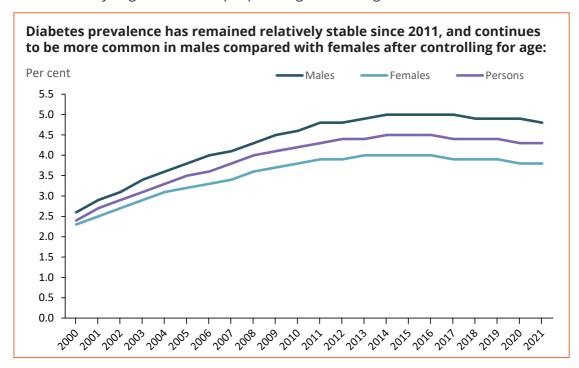
The number of people receiving kidney replacement therapy more than doubled from around 11,700 in 2000 to 28,500 in 2021 – an increase in the age-standardised rate from 61.5 to 96.9 per 100,000 population.

Chronic kidney disease was involved in:

- 18% of all hospitalisations (2 million) in 2021–22
- 11% of deaths (22,000) in 2022 as underlying or associated cause.
- for more, see AIHW: Chronic kidney disease

#### **Diabetes**

Diabetes is a chronic condition marked by high levels of sugar in the blood. In 2021, an estimated 1 in 20 (5.1%, or 1.3 million) people were living with diagnosed diabetes (prevalence) - type 1, type 2 and other diabetes (excluding gestational diabetes). There are likely large numbers of people living with undiagnosed diabetes.



#### New cases of diabetes diagnosed in 2021:



type 1: 11.7 per 100,000 people



type 2: 178.1 per 100,000 people.

#### Type 2 diabetes prevalence and disease burden

The number of people living with type 2 diabetes in Australia increased almost 3-fold between 2000 and 2021, from around 400,000 to almost 1.2 million. There has been a steady decline in the age-standardised incidence rate for type 2 diabetes between 2000 and 2021, with an overall drop of 43%. This may be due to improved preventive measures.

The prevalence of type 2 diabetes increases with increasing age: 3.1% of people living with type 2 diabetes in 2021 were aged under 40 while 59% were 65 or over. Type 2 diabetes is most common among people aged 80-84 (22% and 17% for males and females, respectively).

In 2023, type 2 diabetes was responsible for 124,000 years of healthy life lost – 62% of this burden was attributed to living in poor health (non-fatal burden), with 38% attributed to premature death (fatal burden).



For more, see AIHW: Diabetes

#### **Dementia**

The AIHW estimates there were 411,100, or 15 per 1,000, Australians living with dementia in 2023; nearly two-thirds (63%) were women. With an ageing and growing population, AIHW predicts that the number of Australians with dementia will more than double by 2058 to 849,300 people.

Dementia is more prevalent in older age – 84 per 1,000 people aged 65 and over were living with dementia in 2023.



The exact number of people with dementia in Australia is currently not known. However, there is ongoing work to improve dementia data.

In 2023, dementia was the **second leading cause of disease burden** overall, and the leading cause of burden for people aged 65 and over.

In 2022, dementia was the **second leading cause of death** (9.0% of deaths).

• For more, see AIHW: Dementia and Improving Australia's dementia data for national action

#### **Respiratory conditions**



In 2022, an estimated 8.5 million (34%) Australians self-reported chronic respiratory conditions such as hayfever, asthma and coronary obstructive pulmonary disease (COPD) (excludes COVID-19 which is included under infectious diseases).

The prevalence of asthma and COPD was relatively stable between 2001 and 2022, after adjusting for differences in age structure. In 2022, asthma was more prevalent among females than males for those aged 15 and over. COPD prevalence was similar for males and females.

For more, see AIHW: Chronic respiratory conditions

#### **Endometriosis**

Endometriosis is an inflammatory condition that can be painful, affect fertility and lead to reduced participation in school, work, and social activities. While treatments are available to manage the symptoms, there is no known cure for endometriosis.

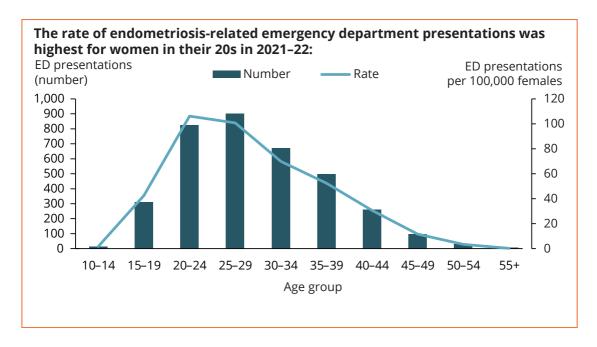


Around 1 in 7 (14%) women born in 1973–78 were estimated to have been diagnosed with endometriosis by age 44–49

#### Hospitalisations for endometriosis have doubled for younger females

There were 40,500 endometriosis-related hospitalisations in 2021–22. The rate of hospitalisations for endometriosis has doubled among females aged 20–24 in the past decade – from 330 hospitalisations per 100,000 females in 2011–12 to 660 per 100,000 in 2021–22.

There were more than 3,600 endometriosis-related emergency department presentations in 2021–22 – around 28 presentations per 100,000 females.



for more, see AIHW: Endometriosis

#### Oral, eye and ear health



On average, people aged 15 and over have 11.2 decayed, missing or filled teeth, as at 2017–18

The average number of decayed, missing or filled teeth per person increases with age:

15-34	35-54	55–74	75+
4.1	10.3	19.4	24.4

**\$5.3 billion** was spent on dental caries (tooth decay) in 2020–21; the highest health spending among specific conditions.

See also: Dental care in chapter 3



In 2022, an estimated 14.4 million Australians (over half the population, 56.7%) were living with a long-term eye condition

The most common eye conditions include:

- long-sightedness an estimated 7.7 million people
- short-sightedness an estimated 7.2 million people
- astigmatism an estimated 1.9 million people.

Chronic eye conditions vary in their presentation, treatment and consequences, but almost all are more common in older people. In 2022, chronic eye conditions affected 91.5% of people aged 75 and over, compared with 13.9% among people aged 0–14.



In 2022, an estimated 3.9 million Australians were living with a long-term ear problem (15.5% of the population). Deafness (complete or partial) was the most common ear condition, experienced by an estimated 2.4 million people

Long-term ear conditions are more common among older people: half (49.5%) of people aged 75 and over self-reported having these conditions, compared with 2.8% of those aged 0–14.

• For more, see AIHW: Eye health, Oral health and dental care and Australia's dental data landscape

Information is also sourced from the ABS: National Health Survey

#### **Injuries**

Injuries are the leading cause of death for people aged 1–44. Across all age groups, males had higher rates of injury death than females, and were more likely to be hospitalised for an injury up until age 65.

In 2022–23, injuries caused **549,000 hospitalisations** (2,100 per 100,000 population). Falls were the most common cause of both injury hospitalisations and injury deaths in Australia. **Falls**:

- accounted for 20% of the total injury burden
- ranked highest in terms of health spending (\$4.7 billion).
- **f** For more, see AIHW: Injury and Extreme weather related injuries in Australia over the last decade

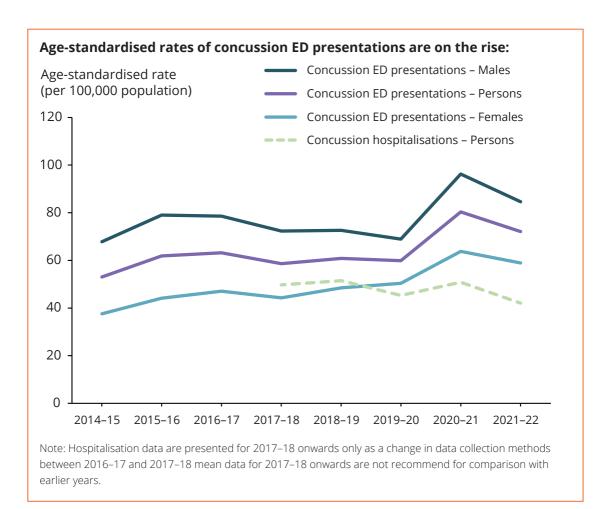
#### Concussion



A concussion is a brain injury typically caused by trauma to the head. There is rising global concern surrounding the permanent impacts of concussion on cognitive, behavioural and social functioning.

In 2021–22, there were 17,700 emergency department (ED) presentations and 10,800 hospitalisations for concussions. Falls were the leading cause of concussion hospitalisations (50%). Regarding the activity undertaken at the time of the injury, sport was involved in just over 1 in 5 concussion hospitalisations, although this is likely an underestimate owing to underreporting.

In 2021–22, **males** accounted for up 60% of concussion hospitalisations and 59% of concussion ED presentations. **People aged 15–24** had the highest rates of concussion hospitalisations and ED presentations.



While ED presentations for concussions are on the rise, this is not being reflected in hospital admissions.

for more, see AIHW: Concussions in Australia over the last decade

#### Suicide and intentional self-harm

**Some readers may find this content distressing**. If the following content raises any concerns for you, you can contact Lifeline on **13 11 14**.

Suicide and intentional self-harm are complex and can have multiple contributing factors. While complex, they can be prevented.

Suicide is an action taken which deliberately ends one's own life. Intentional self-harm is a deliberately caused physical harm to oneself, which can be done with or without the intention of dying.

In 2022, there were 3,249 deaths by suicide in Australia – a rate of 12.3 deaths per 100,000 population. From 1907 to 2022, age-standardised suicide rates have ranged from a low of 8.4 deaths per 100,000 population per year (in 1943 and 1944) to a high of 18.4 in 1963.

Despite initial concerns, data do not indicate an increase in overall suicide deaths in Australia during the COVID-19 pandemic. Overall, the age-standardised death rate for suicide did not increase during 2020, 2021 and 2022 (remained around 12 per 100,000 population).

#### Males have higher rates of suicide than females

Males	<b>2,455 suicide deaths in 2022</b> (76% of total suicide deaths)	<b>18.8 deaths</b> per 100,000 population
Females	<b>794 suicide deaths in 2022</b> (24% of total suicide deaths)	<b>5.9 deaths</b> per 100,000 population

#### More than half of deaths by suicide occur during mid-life

In 2022, half (54.6%) of all deaths by suicide occurred in people aged 30–59 (1,774 deaths), a rate of 17.2 per 100,000 population.

# The number of deaths by suicide is highest for middle-aged men, but the rate is highest among older men

In 2022, the highest:

- **number** of deaths by suicide was among men aged 45–49 (262 deaths)
- **rate** of suicide deaths was among men aged 85 and over (32.7 deaths per 100,000 population). The second highest was men aged 45–49 (32.6).

The highest suicide rate for women was also among those aged 85 and over (10.6 deaths per 100,000 population).

# Females have higher rates of intentional self-harm hospitalisations than males

There were around 26,900 cases of intentional self-harm hospitalisations in 2021–22. The rate of intentional self-harm hospitalisations was twice as high for females (139 per 100,000 population) as males (69 per 100,000).

# Young females have the highest rates of hospitalisation for intentional self-harm

In 2021–22, the age and sex-specific rate of hospitalisation for intentional self-harm was highest for females aged 15–19 (637 hospitalisations per 100,000 population), followed by females aged 20–24 (342 per 100,000). Among males, those aged 15–19 had the highest rates (153 per 100,000 population).

In 2021–22 females made up two-thirds (67%) of intentional self-harm hospitalisations. Rates of ambulance attendances for suicide attempt and self-injury are also higher for females than males.

For more, see AIHW: Suicide and intentional self-harm



# 2 What influe

# What influences our health?

There are many factors or 'determinants' that influence health. There is a close relationship between people's health and the circumstances in which they grow, live, work, play and age.

Health determinants include general socioeconomic, cultural and environmental conditions; living and working conditions; social and community networks; and individual health factors.

Factors influencing health may be **risk** or **protective factors**, and they interact to influence the health of individuals and communities and can also impact on our access to and use of health care.

#### How does the environment affect health?

Our health and wellbeing are affected by the environment around us.

The **natural environment**, including the land, air and water, underpins human health, but is under pressure from human activity. Some elements of our natural environment have direct implications for our health, causing illness or injury. An example of this is air pollution, which can worsen a range of respiratory and other chronic diseases (such as coronary heart disease and chronic obstructive pulmonary disease), and increase mortality.

The **built environment** includes the houses we live in, public spaces, and transport, water and energy networks. It can:

- be supportive of good physical and mental health for example by providing opportunities for physical activity, and access to healthy food options
- create challenges to health and expose people to illness and injury for example, inadequate housing conditions, such as cold, damp and mouldy housing, can put people at risk of respiratory conditions.
- for more, see AIHW: Built environment and health and Natural environment and health

#### Socioeconomic factors affect our health

Socioeconomic factors – such as income, employment, education, housing, and social connections and support – influence health. They also influence other health determinants like health behaviours and biological factors. Regardless of national income levels, health and illness follow a social gradient in all countries: that is, the lower an individual's socioeconomic position, the poorer their health is.

Income, employment or occupation type and educational attainment are important economic and social conditions contributing to socioeconomic position. In Australia:

- around 10.5% of people lived in low-income households (households where the equivalised disposable household income was less than 50% of the national median) in 2017–18
- an estimated 69% of 25–64-year-olds held a non-school qualification at Certificate III level or above in 2023, up from 60% in 2014.
- for more, see AIHW: Social determinants of health

## Family, domestic and sexual violence

Although people of all socioeconomic and demographic backgrounds can experience family, domestic and sexual violence, it predominantly affects women and children.

In 2021–22, an estimated **3.8 million Australian adults** (20% of the population) reported experiencing physical and/or sexual family and domestic violence since the age of 15.

1 in 6 women and 1 in 18 men have experienced physical and/or sexual violence by a current or previous cohabiting partner since the age of 15.

# Women were more likely than men to experience violence and/or abuse from their partner (since the age of 15). As at 2021–22:

	Women (%)	Men (%)
Physical and/or sexual violence from partner	16.9	5.5
Physical violence from partner	14.9	5.3
Sexual violence from a partner	6.2	n.p.
Emotional abuse from a partner	22.9	13.8
Economic abuse from a partner	16.3	7.8

In 2021–22, there were around 20,100 hospitalisations due to assault – 3 in 10 (32% or 6,500) were due to family and domestic violence (FDV). In 2021–22, 9 in 10 hospitalisations for FDV-related injury by a partner were for females (about 3,550 hospitalisations).

In 2018, intimate partner violence contributed to 1.4% of the total burden of disease and injury among Australian women.

In 2022–23, there were 84 domestic homicide victims, 46 female and 38 male. Since 1989–90, the domestic homicide victimisation rate has more than halved, with the female victimisation rate falling from 0.90 to 0.34 per 100,000 females, and the male victimisation rate falling from 0.59 to 0.29 per 100,000 males.

For support, information and counselling contact **1800RESPECT on 1800 737 732** or visit the **1800RESPECT website**.

For more, see AIHW: Family, domestic and sexual violence

## Which risk factors impact our health?

Many serious health issues, including some chronic conditions, are related to health behaviours and **risk factors** that could be prevented or modified.

In 2018, **over one-third of disease burden was potentially preventable** – that is, it could have been prevented had Australians reduced or avoided exposure to certain risk factors.

The 5 risk factors that caused the most disease burden in Australia in 2018 were:



tobacco use (8.6% of total burden)



overweight and obesity (8.4%)



dietary risks (5.4%)



high blood pressure (5.1%)



alcohol use (4.5%).

Detail on some risk factors is provided in the following pages.

## Tobacco and e-cigarettes

Tobacco use is responsible for more deaths in Australia than alcohol and illicit drugs combined and causes more deaths than any other behavioural risk factor. Successful policies over many decades have resulted in a long-term downward trend in daily tobacco smoking rates (8.8% of adults aged 18 and over smoked daily in 2022–2023 compared with 20% in 2001). However, the popularity of e-cigarettes has grown since around 2007. E-cigarettes usually contain flavourings, a range of toxic chemicals, and some contain nicotine. While long-term effects of vaping are currently unknown, short-term effects can include inhalation toxicity (including seizures), nicotine dependence, increased blood pressure, lung injury, throat irritation and nausea.

#### Tobacco smoking continues trending down, but vaping is trending up

In 2022–2023, for people aged 14 and over, an estimated:



1.8 million (8.3%)

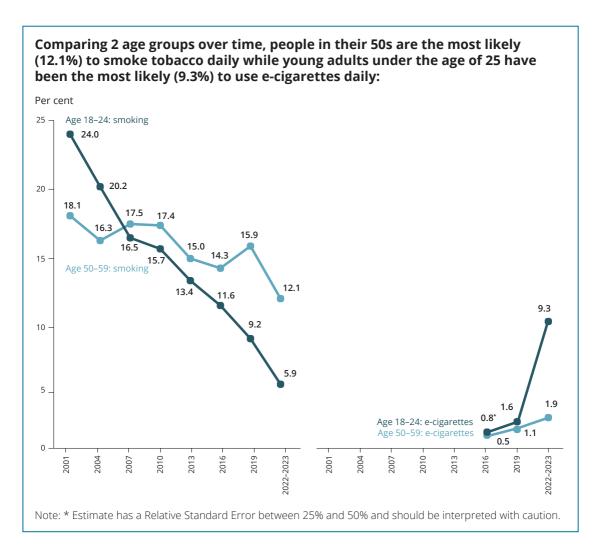
were smoking **tobacco** daily – down from 12.2% in 2016



700,000 (3.5%)

were using **e-cigarettes** daily – up from 0.5% in 2016

Most age groups experienced a substantial decline in tobacco smoking between 2019 and 2022–2023. In contrast, the use of e-cigarettes increased for most age groups between 2019 and 2022–2023 and the increase was much more substantial among younger age groups.



#### In 2022-2023:

- **females** aged 18–24 were more likely to use e-cigarettes daily compared with males (10.3% of females and 8.5% of males)
- **males** aged 18–24 were more likely to smoke tobacco daily compared with females (6.9% of males and 5.0% of females).

People living in the most disadvantaged socioeconomic area (out of 5 quintile areas) were the most likely to smoke tobacco daily (13.4% in 2022–2023), while people living in the most advantaged socioeconomic area were the least likely (4.1%). This is the opposite for e-cigarettes, where people living in the most advantaged socioeconomic areas had the highest rates of daily e-cigarette use (4.1% in 2022–2023), and those in the most disadvantaged areas had the lowest (2.8%).

for more, see AIHW: Tobacco and e-cigarettes and Electronic cigarette use (vaping) in Australia in 2022–2023

## Alcohol



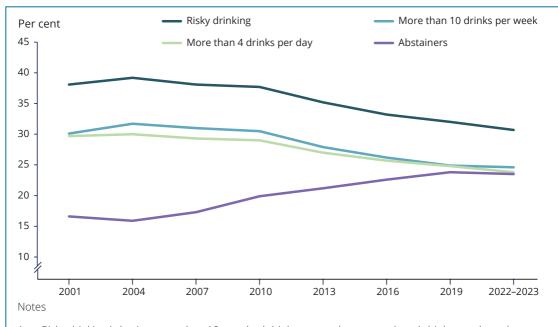
Harmful levels of alcohol consumption are associated with increased risk of chronic conditions, injury and premature death. In 2022–2023, the majority (77%) of Australians aged 14 and over had consumed a full serve of alcohol in the previous 12 months.

#### Long-term decline in risky drinking

In December 2020, the National Health and Medical Research Council (NHMRC) released revised Australian guidelines to reduce health risks from drinking alcohol. Consuming more than 10 standard drinks per week, or more than 4 in a single day is likely to increase the risk of harm from alcohol-related disease or injury.

Between 2004 and 2022–2023, the proportion of people aged 14 and over:

- drinking alcohol in ways that put their health at risk declined from 39% to 31%
- putting their health at risk by drinking more than 10 standard drinks per week on average declined – from 32% to 25%
- putting their health at risk by drinking more than 4 standard drinks in a single day at least once a month declined from 30% to 24%.



- 1. Risky drinking is having more than 10 standard drinks per week, or more than 4 drinks per day at least once a month, on average.
- 2. Abstainers refer to people who have not consumed alcohol in the previous 12 months.

for more, see AIHW: Alcohol

## Illicit drug use

Illicit drug use can cause health related harm (such as disease, injury and death), social harm (such as violence, crime and trauma) and have economic impacts (such as cost of health care and law enforcement). Illicit use of drugs covers use of illegal drugs, and the use of pharmaceuticals and other psychoactive substances for non-medical purposes.

Illicit drug use contributed to 3% of the total burden of disease and injury in 2018.

In 2022–2023, among people aged 14 and over, it is estimated that:



#### 10.2 million (47%)

people had illicitly used a drug at some point in their life; up from 38% in 2007



#### 3.9 million (18%)

had illicitly used a drug in the previous 12 months; up from 13% in 2007. The most common drugs used were cannabis (11.5%) followed by cocaine (4.5%)



#### 1.1 million (5.3%)

people used a pharmaceutical drug for non-medical purposes in the previous 12 months.

#### Some illicit drugs are used more often than others

The health risks of illicit drug use increase with the frequency, type, and quantity of drugs used. While cocaine and ecstasy were used by more people in the previous 12 months than many other drugs, most people used cocaine and ecstasy infrequently with 58% of people who used cocaine and 59% of people who used ecstasy reporting they only used the drug once or twice a year in 2022–2023. Conversely, monthly or more frequent drug use was more commonly reported among people who had used cannabis (51%) or methamphetamine and amphetamine (37%).

Cannabis is the most widely used illicit drug in Australia. Among those aged 14 and over who used cannabis in the last 12 months, 18% reported using it daily in 2022-2023 - up from 14% in 2019.

#### There has been a recent increase in the use of illicit drugs among young women

Women aged 18-24 were more likely to have used cannabis and cocaine in the previous 12 months in 2022-2023 than they were a few years earlier in 2019. Over the same period, use of illicit drugs did not increase for 18–24-year-old males. For the first time in 2022–2023, 18–24-year-old women were just as likely as men of the same age to have recently used illicit drugs (both 35%). Among women, this was an increase from 27% in 2019.

For more, see AIHW: Illicit drug use

## Diet and physical activity



A healthy diet and regular physical activity helps to prevent and manage health risk factors such as overweight and obesity.

#### In 2022:

- the average number of serves of **fruit** consumed have decreased for children aged 9–11 and people aged 14 and over, and **vegetables** consumed have decreased in children aged 9–11 and adolescents aged 14–17 but not adults, when compared with 2017–18.
- fewer people are meeting the Australian Dietary Guidelines for daily serves of fruit
   56% of adults 18 and over did not meet the guideline, an increase from 49% in
   2017–18.
- very few are meeting the Australian Dietary Guidelines for daily serves of vegetables
   94% of adults aged 18 and over did not meet the guideline, which has remained
   stable since 2007–08.



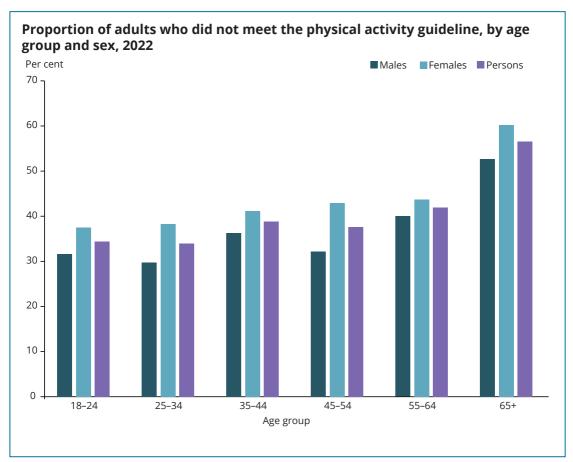
Physical activity levels vary with age. There are different physical activity recommendations for different age groups. This is because there are different amounts of physical activity required at various stages of life for maximum health benefits.

More people are physically active, with fewer not meeting physical activity guidelines compared with around 5 years ago

#### In 2022:

- 83% of young people aged 15–17 did not meet the physical activity guideline, a decrease from 89% in 2017–18
- 37% of adults aged 18–64 did not meet the physical activity guideline, a decrease from 51% in 2017–18
- 57% of people aged 65 and over did not meet the physical activity guideline, a decrease from 72% in 2017–18.

The proportion of people who did not meet the physical activity guideline generally increases with increasing age.



1 For more, see AIHW: Diet and Physical activity

## Overweight and obesity



Overweight and obesity is a risk factor for many chronic conditions and is associated with higher rates of death.

In 2022, 2 in 3 (66%) Australian adults aged 18 and over were living with overweight or obesity (based on measured height and weight) – 34% were living with overweight but not obesity, and 32% were living with obesity. This is similar to the rate in 2017–18 (67%).

Looking over a longer time period, the proportion of adults living with overweight or obesity has increased (up from 56% in 1995), mainly driven by an increase in people living with obesity (from 19% in 1995 to 32% in 2022). This change does not simply reflect population ageing, it still holds after controlling for age.

Data based on measured waist circumference also supports this upward trend.

#### Males had higher rates of overweight or obesity than females



In 2022, 71% of men and 61% of women were living with overweight or obesity. The proportion of men and women living with overweight or obesity generally increases with age.

- For men, the proportion increases steadily from 42% of those aged 18–24 to a peak of 81% in those aged 65–74.
- For women, the proportion increases from 41% of those aged 18–24 to a peak of over 69% for those aged 55–64 and 65–74.

#### Australia has the 10th highest rate of overweight or obesity



Australia had the 10th highest proportion of people aged 15 and over who are living with overweight or obesity (64% in 2022), out of the 21 Organisation for Economic Co-operation and Development (OECD) countries that reported measured height and weight data. This was higher than the OECD average of 59%, and below the highest of 74% for Chile (2016).

For more, see AIHW: Overweight and obesity and Measures of health and health care for Australia and similar countries

## Biomedical risk factors

High blood glucose, high blood pressure and high blood lipids (cholesterol) are 3 biomedical risk factors directly linked to specific health outcomes (such as heart, stroke and vascular diseases, chronic kidney disease and diabetes).

High blood glucose	In 2011–12, <b>3.1%</b> of adults were at risk of <b>diabetes</b> (measured impaired fasting glucose).  Using self-reported estimates from 2022, 0.6% of adults (without reported diabetes) self-reported having high glucose levels measured in their blood or urine, placing them at risk of diabetes – similar to 0.5% in 2017–18.
High blood pressure	In 2022, <b>23.3%</b> of adults had measured <b>high blood pressure</b> – higher than 21.5% in 2011–12. After adjusting for the effects of age, the rate of measured high blood pressure has remained similar over the last decade.
	In 2022, of those adults who had measured high blood pressure, 74.5% did not report having hypertension or high blood pressure – meaning a large proportion of people with high blood pressure were unaware they had out-of-range levels.
High	In 2011–12, <b>32.8%</b> of adults had <b>high cholesterol</b> measured.
cholesterol	Using self-reported estimates, in 2022, 10.7% of adults self-reported having high cholesterol – higher than 7.8% of adults in 2017–18.

#### In 2018:

- high blood pressure was responsible for 5.1% of the total disease burden in Australia and was the fourth leading risk factor contributing to disease burden
- high blood plasma glucose was responsible for 4.3% of total disease burden and was the fifth leading risk factor contributing to disease burden
- high cholesterol levels were responsible for 2.7% of total disease burden and contributed to 37% of the total coronary heart disease burden and 16% of the total burden from stroke.
- For more, see AIHW: Biomedical risk factors



# Our health system

Every day, many Australians come into contact with the health system. It may be through a school-based vaccination, a visit with a general practitioner (GP), picking up a prescription at the pharmacy, or a more complex interaction, such as being admitted to hospital for surgery. A key role of the health system is to respond to individual needs by providing safe, effective, accessible and appropriate treatment and other services.

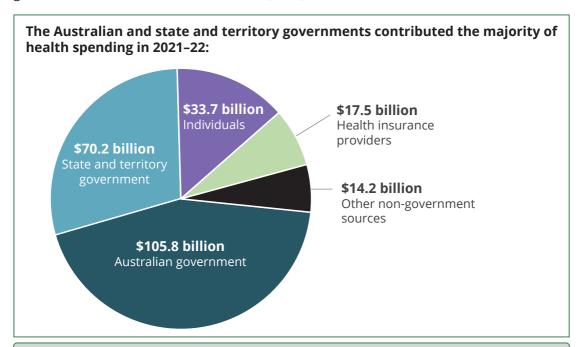
Most health services are funded by the Australian or state and territory governments, with the majority of health services provided by privately owned businesses such as GP surgeries, specialist clinics, pharmacies, dental clinics and private hospitals. Services are delivered and supported by a range of health professionals including doctors, nurses, dentists, allied health professionals, and administrative staff.

## How much do we spend on health?



In 2021–22, Australia spent an estimated \$241.3 billion on health goods and services, an average of \$9,365 per person.

In real terms (adjusted for inflation, that is, in 2021–22 dollars), this was an increase of 6.0% (\$13.7 billion) or \$484 per person from 2020–21; larger than the average yearly growth rate over the decade to 2021–22 (3.4%).



In 2021, Australia had the 15<sup>th</sup> highest health spending as a proportion of gross domestic product (GDP) out of 38 Organisation for Economic Cooperation and Development (OECD) countries. Australia's health spending to GDP ratio was 10.5% – higher than the OECD median (9.5%). The United States had the highest health spending to GDP of all OECD countries (17.4%), followed by Germany (12.9%), the United Kingdom (12.4%) and Canada (12.3%).

In 2021–22, total government spending on COVID-19 was an estimated \$24.9 billion. This included \$12.8 billion on the National Partnership on COVID-19 Response (NPCR) and \$12.1 billion through specific COVID-19 Department of Health and Aged Care programs (outside the NPCR).

for more, see AIHW: Health expenditure and Health system spending on disease and injury in Australia

## The health workforce

The health workforce in Australia is large and diverse, comprising many occupations.

In 2022, there were almost 689,000 healthcare professionals actively working in their registered professions (as registered with the Australian Health Practitioner Regulation Agency).



Between 2013 and 2022, the number of registered healthcare professionals actively working in their field in Australia increased by 37% (184,000 professionals). This was faster than growth in the total number of people who were employed over the same period (21%).

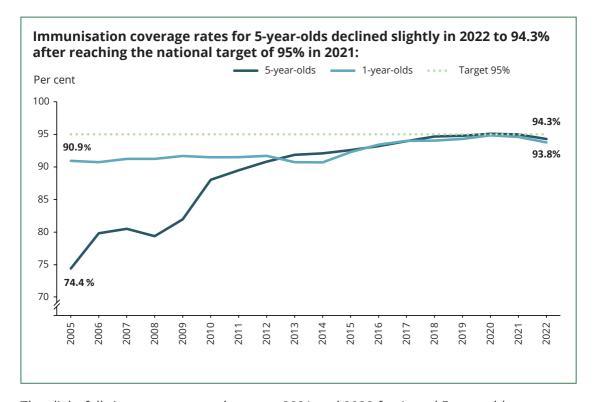
#### In 2022:

- nearly three-quarters (74%) of the health workforce was female
- one-third (33%) of health professionals were aged between 20–34, up from 28% in 2013
- professions with higher income levels had a lower representation of females such as general practitioners (48% female) and specialists (36% female)
- specialists, specialists-in-training, and hospital non-specialists worked the longest hours of any of the medical practitioners.
- for more, see AIHW: Health workforce

## Preventive health services

#### Immunisation and vaccination

Immunisation is a safe and effective way to protect against harmful infectious diseases and prevent the spread of these diseases among the community. Several vaccine preventable diseases are now rare in Australia due to high immunisation rates. Certain vaccines are free to eligible people through Australian Government funded programs, with specific immunisations by certain ages recommended for children.



The slight falls in coverage rates between 2021 and 2022 for 1- and 5-year-olds may reflect the impact of COVID-19 on routine childhood vaccination.

Among young people turning 15 in 2022, **85.3% of girls** and **83.1% of boys** had received at least one dose of vaccination against Human papillomavirus (HPV).

HPV is a common, sexually transmitted viral infection that can cause cancers and Australia has **a national HPV vaccination program** for school-aged people.

#### **COVID-19 vaccinations**

COVID-19 vaccinations continue to play a key role in reducing the proportion of deaths and hospital admissions for people with COVID-19.

At May 2024, 2.0 million Australians (aged 18 years and over) had received a COVID-19 vaccination in the last 6 months.

For more, see AIHW: Immunisation and vaccinations and The burden of vaccine preventable diseases in Australia

Information is also sourced from: the Department of Health and Aged Care website

## Cancer screening

Cancer screening aims to reduce illness and death from certain cancers by allowing for early detection, intervention, and treatment. Australia has national population-based screening programs for breast, cervical and bowel cancers.

#### Breast cancer screening

Over the 2 years 2021–2022, more than 1.8 million participants aged 50–74 were screened through BreastScreen Australia – 50% of the target population.

The age-standardised participation rate was between 53% and 54% from 2014–2015 to 2018–2019 and decreased to 49% and 47% in 2019–2020 and 2020–2021, respectively, during the time of the COVID-19 pandemic.

In 2021, almost 5,600 participants aged 50–74 had an invasive cancer detected through BreastScreen Australia; 59% were small cancers ( $\leq$ 15 mm) which generally have more treatment options and improved survival.

#### **Cervical screening**

Over the 5 years 2018–2022, more than 5.2 million participants aged 25–74 were screened through the National Cervical Screening Program – 77% of the eligible population.

In 2022, for every 1,000 participants screened, 14 had a high-grade abnormality detected, providing opportunity for treatment before possible progression to cervical cancer.

Cervical cancer mortality (adjusted for age) has halved in women aged 25–74 since the introduction of the National Cervical Screening Program in 1991– from 5.6 deaths per 100,000 women in 1990 to 2.4 deaths per 100,000 in 2002. Mortality remained steady at between 2.0 and 2.5 deaths per 100,000 between 2004 and 2021.

#### Bowel cancer screening

Over the 2 years 2021–2022, 6.0 million people aged 50–74 were invited to participate in the Bowel Cancer Screening Program; just over 2.4 million people (40%) participated – with participation rates higher for women (42%) than men (38%).

In 2022, 6% of participants aged 50–74 who returned a valid kit had a positive test which may indicate a bowel abnormality, such as an adenoma or cancer. Of those with a positive result, 86% had record of a diagnostic assessment (colonoscopy) to follow up the positive screening result. For participants with outcome data available from their diagnostic assessment in 2022:

- 4.1% were diagnosed with a confirmed or suspected bowel cancer
- 14% were diagnosed with an adenoma (pre-cancerous tumour)
- 42% of assessments recorded no bowel issues (such as polyps, adenomas, cancers or other diagnoses).
- **1** For more, see AIHW: Cancer screening, Bowel cancer screening and Cervical screening

## Primary care, specialist and diagnostic services

Primary care is often the first contact a person has with the health system and can be delivered in a range of settings, by a range of providers. This includes general practice (GP), nursing, midwifery, pharmacy, dentistry, Aboriginal health services and allied health.

#### Most of us saw a GP

In 2022–23, 86% of Australians had at least one Medicare-subsidised GP attendance.

The attendance rate for GP services (average number of GP visits per person) has increased over time – from 3.8 attendances per person in 1984 to 6.8 attendances per person in 2022. Looking at more recent years, GP attendance rates have been steadily increasing since 2005, with a one-time peak in 2021 (7.4) due to increased demand for GP attendances related to COVID-19 vaccine suitability assessments and telehealth.

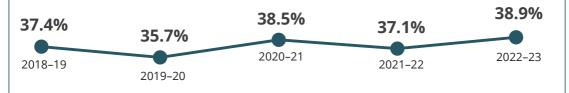
The GP services attendance rate in *Major cities* was almost twice that of *Very remote* areas (7.0 and 3.5, respectively) in 2022, however this gap has narrowed over time.

**The GP subsidy rate** (the percentage of total GP fees subsidised through the Medicare Benefits Schedule (MBS)) has varied over time due to various policy changes and reforms but has been relatively stable since its inception. Between 1984 to 2001 the GP subsidy rate was over 90%. It reached a low of 87% in 2003 and 2004. Policy reforms led to a rate increase to around 91% in 2005, where it remained at this level until 2022 (89%) though with peaks in the early months of the COVID-19 pandemic (95% in April 2020). Temporary changes to Medicare in response to the pandemic contributed to high bulk billing rates at this time. The subsidy rate has fallen from its peak in 2020, sitting at around 85% in 2023, declining again in the early months of 2024 (84% in March 2024).

Bulk billing is when a medical practitioner bills Medicare directly for a patient's health service and patients do not pay at all. The GP bulk billing rate (the percentage of GP service fees fully covered by Medicare) for the March quarter 2024 was 77.1%, an increase from 76.5% in the December quarter 2023.

#### 2 in 5 people used subsidised allied health

In 2022–23, 39% of Australians had at least one Medicare-subsidised allied health attendance.





## Over half of us saw a dentist

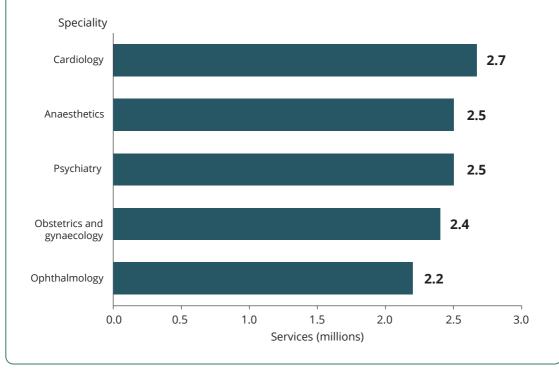
#### In 2022-23:

- 1 in 2 (52.3%) Australians saw a dental professional, up from 49.4% in 2021–22.
- 3 in 10 (30%) people experienced barriers to accessing dental care, reporting delaying or not seeing a dental professional when needed; down from 33% in 2021–22.
- 1 in 10 (10%) people who saw a dental professional reported receiving public dental care in the last 12 months.

#### One-third of us had a Medicare-subsidised specialist attendance

#### In 2022-23:

- 8.6 million Australians (33% of people) had a Medicare-subsidised referred medical specialist attendance – an average of 4.0 specialist attendances per patient
- there was an average 133 Medicare-subsidised referred medical specialist attendances per 100 people an increase from 121 in 2012–13
- 10% of attendances were provided by telephone and videoconferencing, 21 times the service volume prior to the COVID-19 pandemic (2018–19)
- the 5 specialties with the highest number of consultations subsidised by Medicare within the year were:



For more, see AIHW: General practice, allied health and other primary care services, Referred medical specialist attendances, Oral health and dental care, Australia's dental data landscape, Medicare Benefits Scheme funded services: monthly data, Medicare funding of GP services over time and Medicare Benefits Scheme funded services over time

Information is also sourced from the ABS: Patient Experiences



# Two-thirds of Australians used Medicare-subsidised pathology, imaging and other diagnostic services

In 2022–23, 17.4 million (67%) people accessed 196.9 million Medicare-subsidised pathology services, imaging scans or a range of diagnostic services – an average of 11.3 services per patient. Medicare subsidised:

- 160.1 million pathology services (tests, specimen collection and transport services) and paid \$3.6 billion in benefits.
- 29.7 million diagnostic imaging services and paid \$4.6 billion in benefits.

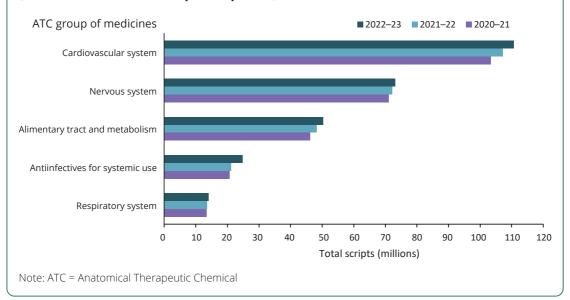


#### Two-thirds of Australians had a prescription dispensed

#### In 2022-23:

- 17.8 million (67%) people had a prescription dispensed
- 335.8 million prescriptions were dispensed under the Pharmaceutical Benefits Scheme (PBS) and the Repatriation Pharmaceutical Benefits Scheme (RPBS)
- there were 10.93 prescriptions per person (age-standardised) a 0.4% decrease from 2017–18, when adjusting for differences in population age structure.

# Medicines used to treat cardiovascular conditions were the most dispensed (33% of all PBS and RPBS prescriptions):



• For more, see AIHW: Pathology, imaging and other diagnostic services and Medicines in the health system

## Hospitals and hospital activity

Hospitals play an important role in Australia's health care system, providing care to millions of Australians each year.

#### In 2021-22:

- there were 697 public hospitals in Australia (and 657 private hospitals in 2016–17)
- hospitals accounted for 40% of all health expenditure (\$96.0 billion of \$241.3 billion);
   \$77.2 billion was spent on public hospitals and \$18.8 billion on private hospitals
- there were 2.5 public hospital beds available per 1,000 population, down by an average of 0.6% each year since 2017–18.



Hospitals provide care to people as admitted patients on a same-day or overnight basis or as non-admitted patients through outpatient clinics and emergency departments. Hospital services are provided by both public and private hospitals.

#### Admitted patient care (including for elective surgery)

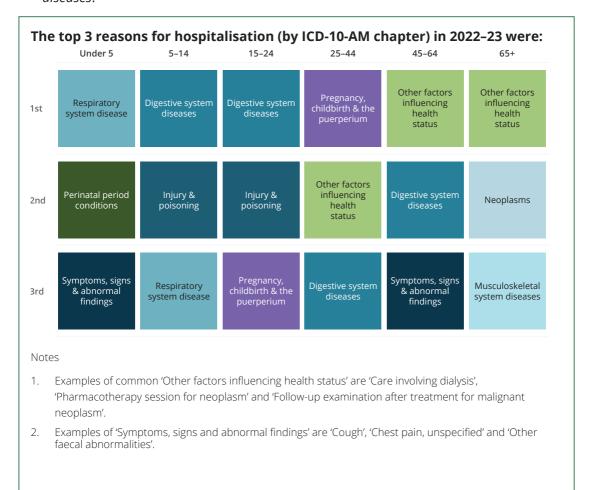
A person's admission to hospital follows a doctor's decision about the need for treatment of their condition or assessment of their needs. Admissions can be planned in advance (for example, for elective surgery), or be unplanned (for an emergency admission).

#### In 2022-23:

- there were 12.1 million hospitalisations, in which 33.2 million days of patient care were provided
- there were 415.2 hospitalisations per 1,000 population a decrease from 421.7 per
   1,000 population in 2018–19
- around 6 in 10 (63%) patients were treated on a same-day basis, and the remainder stayed in hospital for one or more nights
- where relevant information was available, over two-thirds of hospitalisations (69%)
  were elective admissions and 31% were emergency admissions. For hospitalisations
  involving surgery, 82% were elective admissions and 13% were emergency
  admissions; the remaining were not assigned
- 91% of hospitalisations were classified as episodes of *Acute care* (care in which the intent is to perform surgery, diagnostic or therapeutic procedures in the treatment of illness or injury). The remainder of hospitalisations were for rehabilitation, palliative, or other types of care.

People experience different health issues at different times of their lives, so the main reasons for hospitalisation in 2022–23 vary by age. For example:

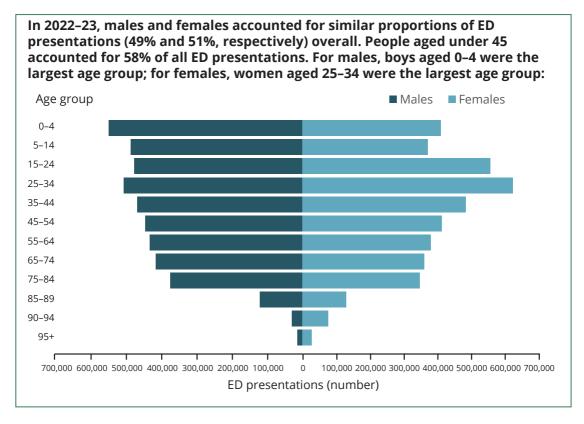
- babies and children under 5 were hospitalised most often for Respiratory system diseases
- people aged 5–14 and 15–24 were most likely to be hospitalised for *Digestive system*



#### **Emergency department care**

In 2022-23:

- there were 8.8 million presentations to EDs in public hospitals, up from 8.4 million presentations in 2018–19
- the rate of ED presentations increased to 334 presentations per 1,000 population from 330 presentations per 1,000 population in 2018–19
- the most common triage categories assigned (and the recommended timeframes within which the patient should be seen) were *Urgent within 30 minutes* (40%), *Semiurgent within 60 minutes* (36%) and *Emergency within 10 minutes* (16%).



• For more, see AIHW: Hospitals and MyHospitals

## Health system safety and access

A safe and high-quality health system provides the most appropriate and best-value care, while keeping patients safe from preventable harm in the delivery of care. Safety and quality of care provided can be measured in several ways, such as healthcare-associated infections or patient experiences.

In 2022–23, for people who saw a GP or a medical specialist, most reported positive experiences of the care provided:

	Always listened carefully	Always spent enough time with them	Always showed respect
GP	71%	71%	80%
Medical Specialist	78%	79%	83%



In 2022–23 the rate of golden staph (*Staphylococcus aureus*) **bloodstream infection** acquired as a result of care received in hospital was below the national benchmark of 1 case per 10,000 patient days.

Nationally there were 1,668 cases of golden staph occurring during 22.5 million days of patient care in public hospitals. This was a rate of 0.74 cases per 10,000 patient days in 2022–23 – down from 1.09 in 2010–11.

Health system accessibility can be influenced by factors such as the number and location of hospitals, hospital beds and waiting times.



## 2 in 3 people were seen on time in the emergency department

#### In 2022-23:

- 65% of patients were 'seen on time' for their triage category (including 100% of resuscitation patients and 64% of emergency patients), a decrease from 67% in 2021–22 and from 71% in 2018–19
- 50% of patients were seen within 20 minutes, consistent with the median waiting time for 2021–22 and longer than in the 3 years prior to that
- 29% of people presenting to ED were admitted to the hospital.



#### Wait times for elective surgery have grown

Access to surgical services can be affected by issues such as the person's geographical location, the availability of other healthcare services, and how many people are on public hospital elective surgery waiting lists.

In 2022–23, for patients admitted from a public hospital elective surgery waiting list:

- 50% of patients were admitted for elective surgery within 49 days of being placed on the waiting list, an increase from 40 days in 2021–22 and 41 days in 2018–19
- 9.6% of patients waited longer than 365 days to be admitted for elective surgery, an increase from 6.3% in 2021–22 and 2.1% in 2018–19.
- for more, see AIHW: Health care safety and quality and MyHospitals

# Use of hospitals and other Medicare-subsidised services differs by levels of disadvantage

Medicare provides a range of health and hospital services at reduced or no cost to people. For example, costs are fully covered for a public patient in a public hospital. A wide range of medical services are subsidised under Medicare through the Medicare Benefits Schedule (MBS) – including GP and specialist consultations, mental health services, health checks, some dental services, pathology tests, imaging and scans.

Generally, the greater the disadvantage, the more likely people are to use public hospitals (and not private hospitals) and GPs and to pay a lower out-of-pocket cost when visiting the GP or using other Medicare-subsidised services.

- In 2022–23, people living in the lowest socioeconomic areas (areas of most disadvantage, out of 5 quintile areas) had the **highest public hospitalisation** rates (329 hospitalisations per 1,000 population). People living in the highest socioeconomic areas (or areas of least disadvantage) had the **highest private hospitalisation** rates (235 hospitalisations per 1,000 population).
- In 2022, the lowest socioeconomic area had the **lowest MBS services rates** (including all MBS services, not just GP services) at 16.9 per person (18.1 per person in the highest socioeconomic area), but the **highest MBS subsidy rates** (83.8% compared with 72.0% in the highest socioeconomic area).
- With Medicare, some or all of the costs of seeing a doctor can be covered.
   People living in the lowest socioeconomic area had a higher GP service attendance rate (7.1 attendances per person) in 2022 and paid lower out-of-pocket costs (\$39.14 per attendance) compared with those living in the highest socioeconomic area (6.5 attendances per person; \$45.11 out-of-pocket cost per attendance).
- Medicare-subsidised referred medical specialist consultations are less common among people living in areas with more disadvantage. In 2022–23, 25% of people living in the lowest socioeconomic area had at least one specialist consultation, compared with 43% of people living in the highest socioeconomic areas.
- **1** For more, see AIHW: Medicare Benefits Scheme funded services over time, Medicare funding of GP services over time, Hospitals and Access to hospitals

## Mental health services

In 2022–23, 2.7 million Australians accessed 13.2 million Medicare-subsidised mental health-specific services. Between 2013–14 and 2022–23, the proportion of people accessing Medicare-subsidised mental health-specific services increased, from 8% to 10%.

## Of people receiving Medicare-subsidised mental health-specific services in 2022–23:

- females accessed services at a higher rate (13%) than males (8%)
- people aged 18–24 had the highest rate (16%), with females of this age (22%) accessing services at a higher rate than males (11%).

#### In 2022-23:

- 49% of services were provided by psychologists, 27% by GPs, 20% by psychiatrists and 5% by other allied health providers
- 22% of services were delivered via telehealth
- 4.8 million people (18% of Australians) filled a mental health-related prescription.

People with mental illness can access a variety of healthcare and other support services, provided across a range of settings. These include:



**Public sector specialised community mental health care services**, which were accessed by 468,800 patients during 2021–22 at a rate of 18 people per 1,000 population. The patient rate was steady over the period 2011–12 to 2021–22, ranging between 17 and 19.



**Public sector specialised residential mental health care services** were accessed by 7,100 residents during 2021–22 at an average rate of 4 episodes of care per 10,000 population. The episode rate increased slightly over the period 2011–12 and 2021–22, from 3 to 4.



Hospitals provided mental health services including:

- 287,400 public hospital emergency department presentations during 2022–23. The presentation rate increased from 108 per 10,000 population in 2014–15 to 122 in 2019–20 before reducing to 109 in 2022–23.
- 262,200 overnight admitted patient hospitalisations in public and private hospitals during 2021–22. The hospitalisation rate (for public and private hospitals combined) increased from 91 per 10,000 population in 2012–13 to 109 in 2020–21 before reducing to 102 in 2021–22.
- 52,100 same day admitted patient hospitalisations in public hospitals during 2021–22. The hospitalisation rate increased from 22 per 10,000 population in 2012–13 to 27 in 2016–17 before reducing to 20 in 2021–21.

Mental health services accounted for around 7% (\$11.6 billion) of total government health expenditure in 2021–22.

for more, see AIHW: Mental health services

## Palliative care



Palliative care aims to prevent and relieve suffering and improve the quality of life of people (adults, children, and their families) facing life-limiting illness.

#### Palliative care specialist services

In 2022–23, 13,900 people received 66,300 MBS-subsidised palliative medicine attendance and case conference services provided by palliative medicine physicians or specialists. The average services per person was 4.8 – declining at an average annual rate of 2.2% since 2013–14 (5.8 services per person).

#### In 2022-23:



3 in 4 (77%) services were provided to people aged 65 and over, including 21% for those aged 85 years and over



4 in 5 services (83% or 55,200) were attendances in a consulting room or hospital; a small proportion (3.8% or 2,500) were attendances in other settings (such as a person's place of residence).

# There were 94,800 palliative care-related hospitalisations in public and private hospitals in 2021–22

Between 2015–16 and 2021–22, the rate of palliative care-related hospitalisations increased from 31 to 37 per 10,000 population. When adjusting for changes in the age structure of the population over this period, the change in the hospitalisations rates were considerably smaller (from 26 to 28 per 10,000 population).

In 2022, among 61,100 patients who received palliative care from 180 palliative care services voluntarily participating in the Australian Palliative Care Outcomes Collaboration (PCOC) program:

- 9 in 10 palliative care phases that started with absent/mild patient pain remained absent/mild at the end of the phase
- 3 in 5 palliative care phases that began with moderate/severe patient pain **reduced to absent/mild** by the end of the palliative care phase.

With an ageing and growing population, more Australians are in need, and in receipt, of palliative care services. The AIHW is working with stakeholders to help address data gaps in palliative care reporting.

for more, see AIHW: Palliative care services

## COVID-19 and the health system



The COVID-19 pandemic changed the way Australians use health services. During the pandemic, some services were suspended or access restricted, some services changed, people who work in health services had additional burden and extra demands were put on hospitals when COVID-19 admissions were higher.

# Elective surgeries were disrupted by the pandemic, and admissions from public hospital waiting lists have not returned to pre-pandemic levels

There were substantial reductions in the number of **elective surgeries** undertaken in both public and private hospitals in 2019–20 and 2021–22 coinciding with national restrictions and other disruptions to the health system as a result of the COVID-19 pandemic.

In particular, admissions for **elective surgeries** from public hospital waiting lists, which were generally increasing each year before the COVID-19 pandemic, were heavily affected by disruptions to hospital services in 2019–20 and subsequent years.

The number of admissions for elective surgeries from public hospital waiting lists in 2022–23, while higher than the numbers for some of the preceding years, was still lower than in 2016–17.

#### Admissions from public hospital elective surgery waiting lists:

	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23
Number of admissions	725,279	748,091	748,778	758,136	688,302	754,600	622,988	735,460
Rate per 1,000 population <sup>(a)</sup>	30.2	30.7	30.2	30.4	27.2	29.4	24.3	28.3

(a) Crude rate based on the estimated resident population as at 30 June at beginning of the reference period.

Note: Admissions from public hospital elective surgery waiting lists includes private patients treated in public hospitals, and may include public patients treated in private hospitals (under contract).

By jurisdiction, the largest increases in admissions from public hospital elective surgery waiting lists between 2021–22 and 2022–23 were in Victoria (29% increase) and New South Wales (23.5% increase). Despite these increases, the number of admissions from elective surgery waiting lists in these states in 2022–23 (and the corresponding rate per 1,000 population) was lower than the number of admissions prior to the pandemic in 2018–19.



# Fewer overall hospitalisations coincided with elective surgery and workforce disruptions

Numbers of **hospitalisations** for admitted patients in public and private hospitals were generally increasing each year before the COVID-19 pandemic. The total number of hospitalisations was lower than in the previous year in both 2019–20 (2.8% lower than the previous, pre-pandemic year) and 2021–22 (2.1%). Hospitalisation rates in 2019–20 and 2021–22 were lower than the rate in 2018–19, prior to the pandemic.

The reduction in 2019–20 coincided with the introduction of elective surgery restrictions, and reductions in 2021–22 coincided with workforce disruptions during periods of increased COVID-19 case numbers in Australia – which further impacted the delivery of elective surgery.

The number of hospitalisations in 2022–23 was higher than in 2018–19 (prior to the pandemic), but the rate was still slightly lower.

	2015- 16	2016- 17	2017– 18	2018- 19	2019- 20	2020- 21	2021- 22	2022- 23
Number of hospitalisations (million)	10.5	10.9	11.2	11.5	11.1	11.8	11.6	12.1
% change from previous year	n.a.	3.9	2.2	2.6	-2.8	6.3	-2.1	4.6
Rate of hospitalisations per 1,000 population	413	420	419	422	401	418	405	415
Number of patient days of care (million)	29.8	30.9	30.2	30.9	30.2	31.2	31.8	33.2

While hospitalisation numbers were lower, the number of patient days of care provided in hospitals has generally increased each year during the pandemic; the only reduction was seen in 2019–20 when the number of patient days of care was 2.2% lower than the previous year.



## There were missed or delayed cancer screenings early in the pandemic

A number of data sources provide evidence of delayed or missed cancer screening due to the COVID-19 pandemic. For example, there:

- were falls in the number of screening mammograms performed through BreastScreen in 2020 and 2021 and a 13% decline in the age-adjusted participation rate between 2018–2019 and 2020–2021, coinciding with COVID-19 restrictions
- was a disproportionate drop in the number of cervical screening tests in April 2020
- was a small decline in participation rates for the National Bowel Cancer Screening Program early in the pandemic (from 44% in 2019–2020 to 41% in 2020–2021 for people aged 50–74).

#### There is a lasting impact of the pandemic on telehealth

Use of telehealth has been high since the pandemic started in 2020 compared with the pre-pandemic years, due to the introduction of COVID-19 temporary telehealth Medicare items in March 2020 (many temporary items are now permanent). Although the usage dropped in 2023, it remains much higher than pre-pandemic years.

	2017	2018	2019	2020	2021	2022	2023
Total number of Medicare-subsidised telehealth attendances	176,797	217,710	275,375	45,334,090	46,466,491	45,571,933	33,695,208
Number of Medicare- subsidised telehealth attendances per person	0.01	0.01	0.01	1.77	1.81	1.75	1.26

Specific arrangements for telehealth varied over the pandemic period, including bulk billing requirements. For example, telehealth services were initially required to be bulk billed for concessional, COVID-19 vulnerable patients or children under 16. This requirement for bulk billing was removed incrementally and ceased entirely in October 2020.

# GP attendances and pathology services were higher in 2021 and 2022 due to the pandemic

Total numbers of Medicare Benefits Schedule (MBS)-subsidised services (such as GP attendances, pathology services, specialist attendances and obstetrics services) and the number of services per person were generally increasing prior to 2021, but the pandemic saw higher than previous increases in 2021 and 2022. Use in 2023 was similar to pre-pandemic levels.

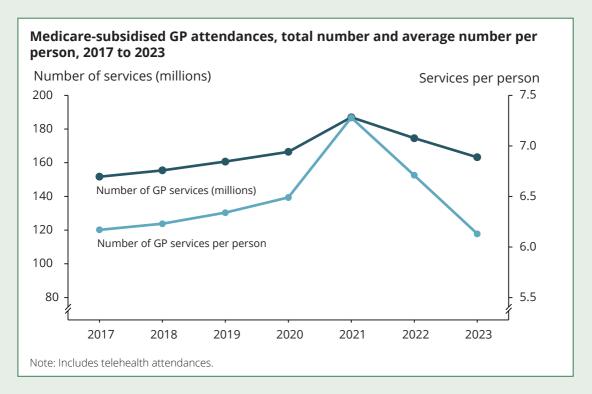
In pre-pandemic years, the proportion of people receiving at least one Medicare-subsidised service each year was fairly stable at 90–91% (2017 to 2019). During the COVID-19 pandemic years, the rate was more variable year to year, with a peak in 2021 (93%).

	2017	2018	2019	2020	2021	2022	2023
Total number of MBS services (millions)	405.0	418.0	431.9	440.6	508.2	464.8	447.8
Number of MBS services per person	16.47	16.75	17.05	17.18	19.79	17.87	16.81
Percentage of people receiving any MBS service (%)	90.43	90.18	90.64	89.07	92.95	91.41	87.71

Source: AIHW analysis of MBS data maintained by the Department of Health and Aged Care

**GP attendances** in 2021 and 2022 were higher than in previous years and in 2023, and the increase was driven by attendances for assessment of suitability for a COVID-19 vaccination. These assessments were new items introduced to MBS in February 2021, and are claimable where a patient receives the vaccination immediately after the assessment, is deemed clinically unsuitable for the vaccination or declines to receive the vaccination. There were 19.5 million GP attendances for COVID-19 vaccine suitability assessment in 2021, which represented 10.5% of all GP attendances. This number fell to 9.6 million (5.5%) and 2.4 million (1.5%) attendances in 2022 and 2023 respectively.

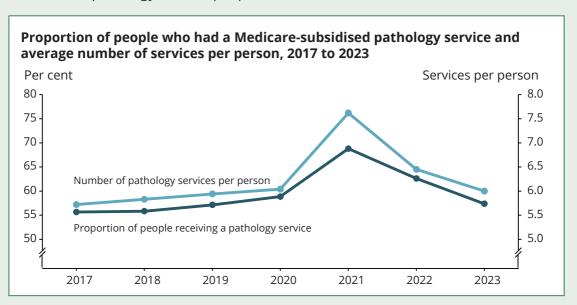
In 2023, the number of GP attendances per person was slightly lower than all previous years since 2017.



**Pathology services** were higher in 2021 and 2022 compared with earlier years, driven by the COVID-19 polymerase chain reaction testing (better known as PCR testing).

Pathology items to support COVID-19 PCR tests first appeared in the MBS on 13 March 2020. In 2020, there were only a small number of COVID-19 PCR tests provided to patients. PCR testing accounted for 11.5% of Medicare-subsidised pathology services in 2021 and 5.8% in 2022 – compared with 3.4% in 2020 and 1.3% in 2023.

Utilisation of pathology services per person in 2023 was similar to 2019 and 2020.



From 2017 to 2023, numbers of **specialist attendances** followed a trend of slight increases each year, except for a jump in 2021. From 2018 to 2020, growth in specialist attendance numbers each year from the previous year were 1–2%. In 2021, there was a 5% growth from the previous year. The proportion of people receiving Medicare-subsidised specialist services has shown very little change since 2017.

	2017	2018	2019	2020	2021	2022	2023
Total number of Medicare- subsidised specialist attendances (millions)	31.6	31.9	32.7	33.1	34.8	33.2	33.7
Percentage of people receiving a Medicare-subsidised specialist service (%)	31.81	32.09	32.36	31.45	32.94	32.18	32.23

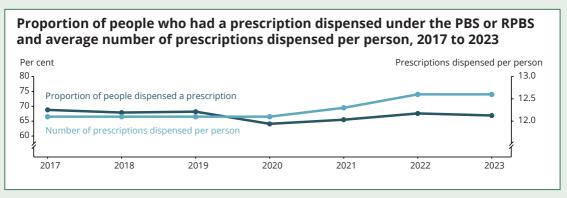


## The proportion of people who had medicines dispensed dropped in the first year of COVID-19, despite a spike in dispensing in March 2020

The volume of prescriptions dispensed under the Pharmaceutical Benefits Scheme (PBS) and Repatriation Pharmaceutical Benefits Scheme (RPBS) have been steadily increasing each year from 2017 (297 million dispensed) to 2023 (335 million). Early in the COVID-19 pandemic there were initial concerns and reports of medicine shortages and in March 2020 there was a 23% increase in the number of prescriptions dispensed (31.0 million compared with 25.2 million in March 2019) due to consumer stockpiling.

Despite this spike in March 2020, the proportion of the population who had at least one prescription dispensed in a calendar year dipped in the first year of the pandemic (64% in 2020) – compared with 68–69% the 3 years leading up to the pandemic (2017 to 2019) and 66–68% the following 3 years (2021 to 2023).

From 2017 to 2020 the number of prescriptions dispensed per person each year was steady (12.1 per person), increasing slightly in 2021 (12.3) and then again in 2022 to 2023 (both 12.6).



## During the COVID-19 pandemic:

- The number of medicines dispensed for the respiratory system increased from the previous year in 2020 and 2022, by 6% and 7%, respectively; the number had been declining slightly year to year prior to the pandemic (2017 to 2019).
- The arrival of COVID-19 antivirals contributed to increased dispensing of all
  antiinfectives for systemic use from 2022 onwards. These COVID-19 antivirals had
  peaks in use coinciding with Omicron waves of COVID-19 and the winter influenza
  season in July 2022 and 2023.

## Growth rates for health professions were affected by the pandemic

The health workforce had been growing steadily over time across all professions. The number of practitioners registered with the Australian Health Practitioner Regulation Agency, and who were currently in the labour force was just under 689,000 in 2022, a 37% increase from 504,000 in 2013. During the COVID-19 pandemic (data are available for 2020–2022), the annual growth rate for the number of medical practitioners decreased, while the growth rate for nurses and midwives was similar – compared with pre-pandemic trends:

	2013-2019	2020-2022
Compound annual growth rate in number of nurses and midwives (%)	2.6	2.6
Compound annual growth rate in number of medical practitioners (%)	3.6	3.2

Source: Department of Health and Aged Care

The COVID-19 pandemic exacerbated the impact of work and the work environment on the mental health and overall wellbeing of healthcare workers. The pandemic highlighted the importance of prioritising the wellbeing of healthcare workers for the effective functioning of a sustainable and quality health system.

Understanding the full impact of COVID-19 on individuals and the health system in Australia was difficult during the height of the pandemic. The AIHW has developed the COVID-19 Register – a linked data asset – that can be used to develop a deeper level of understanding of the health outcomes and health service use of COVID-19 cases, and monitor health system needs over time.

For more, see AIHW: COVID-19, Enhancing communicable disease monitoring in Australia through data linkage and Cancer screening programs: quarterly data Information is also sourced from: AIHW analysis of data maintained by the Department of Health and Aged Care

# Digital health



Digital health offers improved health for Australians through enhanced sharing and use of information by healthcare users and providers. Digital tools and services in the Australian health system continue to evolve.

Today, many Australians use digital health tools to monitor their own health and engage in their health care.

For example, they might:

- consult with a health professional using telehealth or use electronic prescribing for their medication
- use tools such as the my health app to securely access their My Health Records (for example for pathology test results)
- wear a fitness device.



For healthcare provider organisations and health professionals, digital health tools can provide opportunities to improve communication with colleagues and patients, and ensure continuity of care.

#### Examples include use of:

- secure messaging to exchange clinical information between health professionals involved in the care of an individual
- real-time decision support and medication alerts to underpin best practice care.

Work in areas such as access, interoperability, data citizenship, privacy and data security is key to ensuring the future of digital health in Australia.

for more, see AIHW: Digital health



# Health of Aboriginal and Torres Strait Islander people

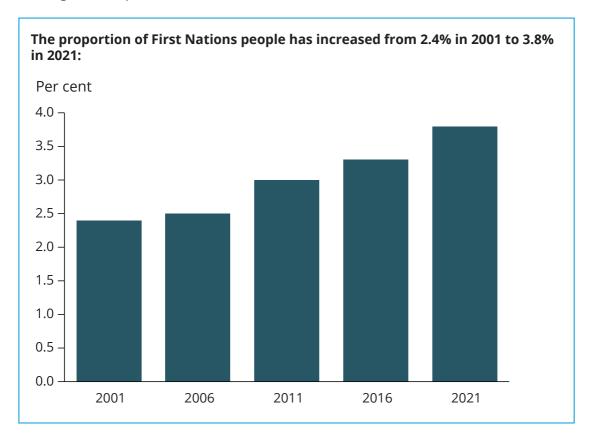
Aboriginal and Torres Strait Islander (First Nations) people are the first peoples of Australia. They comprise hundreds of groups that have their own distinct set of languages, histories and cultural traditions.

For First Nations people, good health is more than the absence of disease or illness; it is a holistic concept that includes physical, social, emotional, cultural, spiritual and ecological wellbeing, for both the individual and the community.

## Population profile

In 2021, there were an estimated 984,000 First Nations people living in Australia, representing 3.8% of the total Australian population. This was an increase of 23% (185,600 people) from 30 June 2016 (798,400 people).

The increase in Australia's First Nations population is due to demographic factors (births, deaths and emigration) and non-demographic factors (including changes in how people self-identify in the census and throughout their lives, and changes in the census coverage and response).



Among First Nations people in 2021:



**41%** (401,700) lived in *Major cities* 



**44%** (431,000) lived in *Inner* and outer regional areas



**15%** (150,900) lived in *Remote* and very remote areas.

## Language and culture

First Nations communities pass on knowledge, tradition, ceremony and culture from one generation to the next through language, performance, protection of significant sites, storytelling and the teachings of Elders.

In 2021, almost 1 in 10 (9.5% or around 77,000) First Nations people reported that they spoke an Aboriginal and Torres Strait Islander language at home, with over 150 different languages being spoken.

In 2018–19, among First Nations people aged 18 and over:



74% (357,800 people) recognised an area as a homeland/traditional country



65% (314,200 people) identified with a tribal group, language, clan, mission or regional group



27% (130,500 people) lived on their homeland.



for more, see AIHW: Profile of First Nations people

# Health and wellbeing

There have been some notable improvements in the health and wellbeing of First Nations people in recent years - including a decrease in the age-standardised death rate for cardiovascular diseases, reduced rates of smoking (including during pregnancy), and improved attendance at antenatal care.

## Life expectancy and deaths

Death rates among First Nations people have been falling in most age groups over the past 10 years. However, there has been no significant change in infant and child death rates over this time.



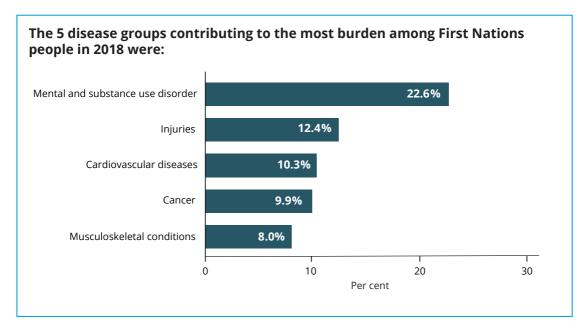


First Nations males born in 2020-2022 could expect to live 71.9 years, and females 75.6 years.

Cancers are the most common group of diseases causing deaths among First Nations people, overtaking cardiovascular diseases as the most common group in recent years. Between 2006 and 2022, the age-standardised death rate for cardiovascular disease among First Nations people in New South Wales, Queensland, Western Australia, South Australia and the Northern Territory combined fell by 22%, from 323 to 252 per 100,000, while the cancer death rate rose by 31%, from 205 to 269 per 100,000.

## **Burden of disease**

One way to understand the impact of diseases and injuries on a population is to assess the burden of disease. This looks at years of healthy life lost due to living with ill health (non-fatal burden) and years of life lost due to dying prematurely (fatal burden).

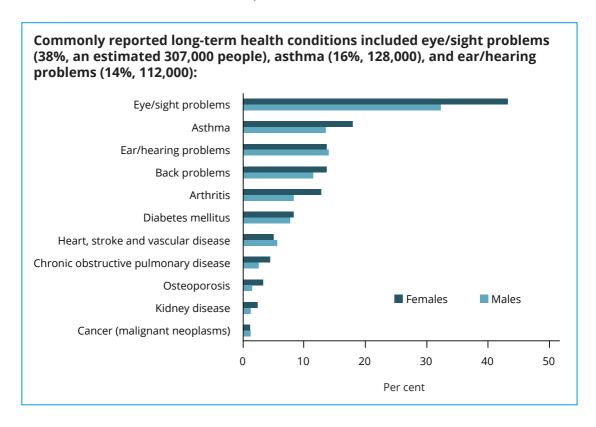


After adjusting for population growth and ageing, there was a 15% decrease in total burden for First Nations people between 2003 and 2018, and the gap in disease burden between First Nations and non-Indigenous Australians narrowed over this period.

#### **Chronic conditions**

Chronic conditions are long-term health conditions (that is, lasting for at least 6 months) that contribute to ill-health and may lead to premature death.

In 2018–19, 2 in 3 (67%) First Nations people self-reported having at least one long-term health condition. Over 1 in 3 (36%) reported 3 or more conditions.



## Social and emotional wellbeing

Social and emotional wellbeing is vital to physical and mental health for First Nations people. It is a holistic concept that focuses on the importance of connection to land, culture, spirituality and ancestry.

In 2018–19 an estimated:

- 24% of First Nations people reported having a diagnosed mental health or behavioural condition
- 31% of First Nations adults reported 'high or very high' levels of psychological distress.
- for more, see AIHW: Health and wellbeing of First Nations people

## Factors influencing health

For First Nations people, cultural identity, family, participation in cultural activities and access to traditional lands can also influence overall health and wellbeing. Colonisation and the forcible removal of First Nations children from their families and communities have had a fundamental impact on the disadvantage and poor physical and mental health of indigenous people (worldwide).

#### Socioeconomic and environmental factors

A person's educational qualifications can influence their health status and health outcomes. Education is also linked with employment, which also has well established benefits to physical and mental health.

- Levels of educational attainment among First Nations people have improved substantially over the past decade:
  - Between 2011 and 2021, the proportion of First Nations people aged 20–24
     who had attained at least a Year 12 or equivalent qualification increased from 52% to 68%.
- The employment rate the number of employed people as a proportion of the working age population for First Nations people has increased in the last 5 years:
  - Between 2016 and 2021, the employment rate for First Nations people aged 25–64 increased by 4.7 percentage points from 51.0% to 55.7%.

Adequate housing is also essential to good health. There have been improvements in overcrowding, home ownership and a reduction in homelessness for First Nations people.

#### Health risk factors

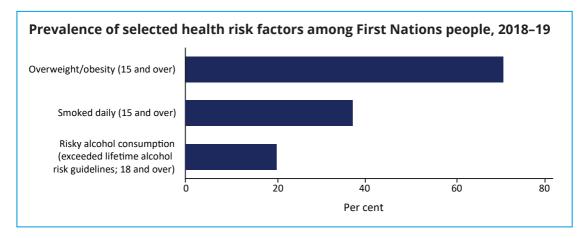
Many serious health issues, including some chronic conditions, are related to health risk factors that could be prevented or modified.

Some recent improvements have been made:

- smoking is declining the proportion of First Nations people aged 15 and over who reported smoking every day decreased from 45% in 2008 to 37% in 2018–19
- abstaining from alcohol is increasing the proportion of First Nations people aged 18 and over who reported they 'had not consumed alcohol in the last 12 months or have never consumed alcohol' rose from 19% in 2001 to 26% in 2018–19.

But weight is a concern:

• the proportion of overweight or obese First Nations people aged 15 and over has increased – from 66% in 2012–13 to 71% in 2018–19.



for more, see AIHW: Determinants of health for First Nations people

## Health system

Access to appropriate, high-quality and timely health care throughout life is essential for improving health outcomes for First Nations people. Barriers affecting their access remain, as observed in the disparity in First Nations people's level of access compared with non-Indigenous Australians. Barriers to access for First Nations people include services not being available in their area (especially for those living in remote areas), services being too far away, lack of transport, cost, waiting times, and the availability of culturally safe and responsive health services.

## A culturally safe and responsive health system

Improving the cultural safety and cultural responsiveness of the health system can improve access to, and the quality of, health care for First Nations people. A culturally safe health system is one that respects the cultural values, strengths and differences of First Nations people, and addresses racism and inequity. It is a system where health professionals and health services are culturally responsive, take action to overcome racism and power imbalances, and have active engagement with First Nations people to ensure that the system meets their needs.

## Health system performance

There have been some improvements in health system performance over the last decade including:

- an increased proportion of First Nations women who accessed antenatal care in their first trimester of pregnancy from 2012 to 2020 (from 50% to 71%)
- a decrease in the age-standardised proportion of hospitalisations for First Nations people ending in discharge at own risk between 2011–12 and 2020–21 (from 4.6% to 3.8%)
- an increase in the rate of First Nations people aged 15 and over employed in healthrelated occupations – from 255 to 309 per 10,000 population between 2011 and 2021. Increased numbers of nurses and midwives accounted for 54% of this growth.
- For more, see AIHW: First Nations people and the health system and Aboriginal and Torres Strait Islander Health Performance Framework

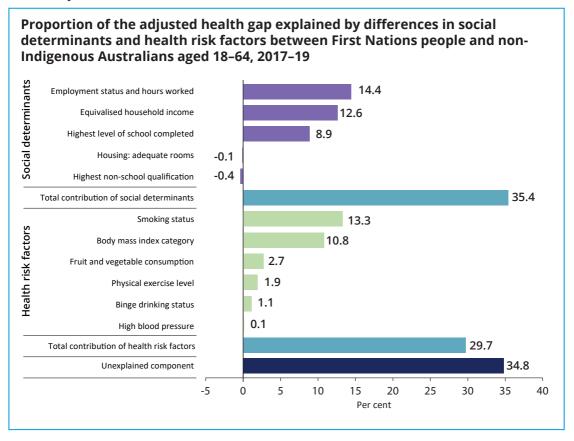
## The health gap

Although there have been improvements in a range of health and social indicators for First Nations people, disparities remain in many health outcomes between First Nations and non-Indigenous Australians. This is referred to as the 'health gap'.

After accounting for the differences in the average age, sex, marital status, and regional factors (remoteness and state/territory of residence) between First Nations and non-Indigenous Australians, an adjusted, overall, health gap of 24 percentage points was estimated in 2017–2019. This represents a slight decline in the adjusted health gap since 2011–13 (a gap of 27 percentage points).

Of the health gap between First Nations and non-Indigenous Australians:

- 35% was due to differences in the social determinants of health (such as education and employment) between First Nations and non-Indigenous Australians
- 30% was due to their differences in health risk factors
- 35% remained unexplained that is, 35% of the gap remained even after accounting for all the factors considered in the modelling analysis; and this unexplained component can be related to other factors for which data were not available in the surveys used, such as differences in access to health services and discrimination.



If First Nations adults had the same average equivalised household income, average employment rate and hours worked, and the same average smoking rate as non-Indigenous adults, the health gap would be reduced by more than one-third.

for more, see AIHW: Size and sources of the health gap for Australia's First Nations people 2017–2019



5

# How does health vary?

Most Australians can expect to enjoy long and relatively healthy lives, however, some have different experiences of health than others. Health can change over the life-course and vary by geographic location and socioeconomic position, for example. Despite many achievements in improving health in Australia, some population groups and communities experience barriers accessing health services and information, and experience poorer health.

## Children

Good health influences how children feel and go about their daily lives, and it can affect participation in family life, schooling, social and sporting activities.



In 2022, an estimated 2 in 5 (45%) children aged 0–14 had one or more chronic condition.

Hay fever and allergic rhinitis (13% of 0–14-year-olds) was the most common condition, followed by asthma (8.2%).

The leading causes of total burden of disease vary by age group. In 2023:

- **for infants and young children aged under 5**: infant and congenital conditions, and heart conditions
- **among children aged 5–14**: asthma followed by autism spectrum disorders, anxiety disorders, depressive disorders and conduct disorders.

94% of 1-year-olds, 92% of 2-year-olds and 94% of 5-year-olds were fully immunised in 2022. Coverage rates moderately declined in 2022 and 2023, possibly reflecting the impact of COVID-19 on routine childhood vaccination.

## Fewer children are meeting fruit and vegetable intake recommendations.

In 2022, 4.3% of children aged 2–17 met both the fruit and vegetable recommendations, a decrease from 6.0% in 2017–18.



The proportion of 5-17-year-olds living with overweight or obesity increased from 25% in 2017-18 to 28% in 2022.

In 2022, almost 1 in 5 (19.5%) 5–17-year olds were overweight and 8.3% were obese.

Australian children aged 5–10 had an average of 1.5 decayed, missing and filled deciduous teeth, as at 2012–14.

For more, see AIHW: Health of children, Oral health and dental care, Overweight and obesity and Immunisation and vaccination

## Young people

A young person's health is important for participation in education, social and recreation activities and can also influence success in later life.



Mental health conditions are the leading cause of disease burden for young people

In 2023, mental health conditions & substance use disorders and injuries contributed the most burden for young people aged 15–24. The leading causes varied between males and females with suicide and self-inflicted injuries more common among males, and anxiety disorders among females.



Young people have the highest rates of hospitalisation for intentional self-harm, and it is increasing

In 2021-22:

- young people aged 15–19 had a hospitalisation rate for intentional self-harm of 389 hospitalisations per 100,000 population, the highest of all age groups
- the rate of intentional self-harm hospitalisations for females aged 0–14 increased from 41 hospitalisations per 100,000 population in 2019–20 to 72 in 2021–22.

In 2021, injuries were the **leading cause of death** among young people, accounting for 809 (69%) of the 1,200 deaths for 15–24-year-olds. Half (50%) of all injury deaths were caused by intentional self-harm (suicide), followed by land transport accidents (28%) and accidental poisoning (8%)

## Fewer young people are smoking, but vaping is increasing

In 2022-2023, among people aged 18-24:

- 83% had never smoked tobacco an increase from 80% in 2019
- half (49%) had used an e-cigarette at least once in their lifetime (the highest of any age group) – almost a doubling since 2019 (26%)
- almost 1 in 10 (9.3%) used e-cigarettes daily, the highest rate across all age groups.
- for more, see AIHW: Health of young people

## Mothers and babies



About 311,400 Australian females gave birth to around 315,700 babies in 2021. This is the **highest number of births** on record within a calendar year, and about 20,000 more than in 2020 (an increase of 6.7%).

In 2021, the rate of women of reproductive age (15–44) giving birth also increased (to 61 per 1,000 women, up from 56 per 1,000 in 2020), representing the first increase after a decade of the rate decreasing but lower than the most recent peak in 2007 (66 births per 1,000 women).

## Most mothers access antenatal care and fewer mothers are smoking

For mothers who gave birth in 2021:

- most accessed antenatal care
  - 80% had antenatal care in the first trimester of their pregnancy
  - 95% had 5 or more antenatal care visits
- less than 1 in 10 (8.7%) reported smoking at some time during their pregnancy a decrease from 13% in 2011
- almost 2 in 5 (38%) had a caesarean section birth an increase from 32% in 2011
- around 1 in 3 (34%) had induced labour an increase from 26% in 2011.

## Most babies are born at term and at a healthy weight

In 2021:

- 91% of babies were born at term.
- 92% of babies had a normal birthweight
- around 1 in 6 (17%) babies required admission to a special care nursery or neonatal intensive care unit
- there were over 3,000 perinatal deaths (9.6 perinatal deaths for every 1,000 births).



In 2022, 9 in 10 (90.6%) infants (aged 0-3) were breastfed at least once.

for more, see AIHW: Australia's mothers and babies

Information is also sourced from the ABS: Breastfeeding

# Older people

As the number of older people in Australia continues to grow, supporting their health and wellbeing is becoming even more important.



In 2022, 3 in 4 (74%) people aged 65 and over reported their health as good, very good or excellent.

In 2018, almost 1 in 5 (18%) people aged 65 and over had a severe or profound disability.

## Older Australians can expect to live longer

One way to measure life expectancy is through the 'remaining life expectancy' at a given age. In 2020–2022:

- **men aged 65** could expect to live another 20.2 years (to age 85.2)
- women aged 65 could expect to live another 22.8 years (to age 87.8).

These life expectancies at age 65 are greater than in the past. In 1970–72, men and women aged 65 could expect to live another 12.2 and 15.9 years, respectively.

Most older people visit their GP (96% of those aged 85 and over saw their GP at least once in 2022–23). The rate of Medicare-subsidised GP services was highest among those aged 80 and over compared with any other age group (17.3 services per person) in 2022–23.

# Dementia is the leading cause of death among Australians aged 65 and over, closely followed by coronary heart disease

However, there were differences in the leading cause of death across older age groups in 2022:

Age group	Leading causes of death	
65-74	<ol> <li>Coronary heart disease (2,800 people)</li> <li>Lung cancer (2,700)</li> </ol>	
75-84	<ol> <li>Coronary heart disease (4,500)</li> <li>Dementia (4,300)</li> </ol>	
85 and over	<ol> <li>Dementia (11,900)</li> <li>Coronary heart disease (8,700)</li> </ol>	

• For more, see AIHW: Health of older people and General practice, allied health and other primary care services

Information is also sourced from the ABS: Patient Experiences

## Rural and remote health

Around 7 million people – or 28% of the Australian population – live in rural and remote areas, which encompass many diverse locations and communities. These Australians can face unique challenges due to their geographic location and often have poorer health outcomes than people living in metropolitan areas. This is especially the case for people living in *Remote* and *Very remote* areas in Australia (2% of the population).

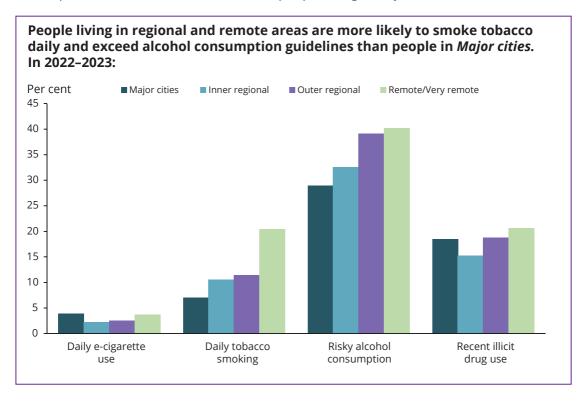
People living in rural and remote areas are more likely to die at a younger age and have higher death rates than their counterparts in *Major cities*. In 2022, people living in *Very remote* areas had:

- · a death rate 1.5 times as high as all of Australia
- higher rates of potentially avoidable deaths (261 per 100,000 in *Very remote areas*).
   This was nearly 3 times as high as for those living in *Major cities* (88.7 per 100,000).



The rate of dying due to land transport accidents was nearly 3 times as high for people living in *Remote* areas and nearly 4 times as high for those living in *Very remote* areas, compared with Australia overall

People living in *Remote and very remote* areas experienced a fatal burden rate (years lost due to premature death) 1.8 times that of people living in *Major cities*, in 2018.



## People living in:

- Very remote areas had the highest rates of hospitalisations in public hospitals 678
  hospitalisations per 1,000 population compared with 224 per 1,000 population in
  Major cities, in 2022–23.
- *Very remote communities* had the **lowest numbers** per person of non-hospital non-referred attendances, such as GP visits 3.4 GP non-referred attendances per person compared with 6.6 per person in *Metropolitan areas*, in 2022–23.
- for more, see AIHW: MyHospitals, Mortality Over Regions and Time books, Rural and remote health and Life expectancy and causes of death

# People from culturally and linguistically diverse backgrounds

Australia's culturally and linguistically diverse (CALD) population is diverse in its composition of cultures, languages, and migration trajectories. Some people from CALD backgrounds can be at greater risk of poorer quality health care, and poorer health outcomes compared with other Australians; they may face greater challenges dealing with the health system due to language barriers, lower health literacy, and different cultural norms and expectations.



# People born overseas generally have lower prevalence of long-term health conditions

Of the 20 most common overseas countries of birth: people born in Iraq had the highest age-standardised prevalence of at least one long-term health condition (29%) among the non-main English-speaking countries, and people born in China (15%) and Nepal (15%) had the lowest prevalence. People born in Australia had the highest prevalence of at least one long-term health condition (36%).



# The health status of newly arrived people from CALD backgrounds is generally good

For first generation immigrants, in the early years following migration, some people have better health than the Australian-born population (known as the 'healthy migrant effect') due to the combination of health screening checks and strict migration eligibility requirements.

In 2021, compared with the rest of the Australian population and after taking into account age, humanitarian entrants had a:

- lower rate of self-reported arthritis, asthma, cancer, chronic lung conditions and mental health conditions
- higher rate of self-reported diabetes, kidney disease, stroke, heart disease and dementia.

## Mental health conditions are less common among humanitarian entrants

After standardising for age, self-reported mental health conditions were 50% lower for humanitarian entrants than the rest of the Australian population.

# Humanitarian entrants had higher rates of GP attendances and lower specialist attendances

GP attendances were around 40% **higher** for humanitarian entrants in 2021 (8,600 services per 1,000 people compared with 6,000 per 1,000 people for the rest of the Australian population). Specialist attendances were around 25% **lower** for humanitarian entrants (790 services per 1,000 people compared with 1,100 per 1,000 people).

#### Humanitarian entrants had lower overall death rates

After standardising for age, the humanitarian entrant death rate due to any cause was lower than the rest of the Australian population (312 deaths per 100,000 person years compared with 554 deaths per 100,000).

Causes of death that were more common among humanitarian entrants than the rest of the Australian population were accidental drowning and liver cancer, after adjusting for age.

• For more, see AIHW: Culturally and linguistically diverse Australians

## People in prison

# People in prison are generally more disadvantaged than the general population, with higher health care needs

People who spend time in prison experience higher rates of homelessness, unemployment, mental health disorders, chronic physical health conditions, communicable disease, tobacco smoking, high-risk alcohol consumption, and illicit drug use than the general population.

# Based on self-reported data from the 2022 National Prisoner Health Data Collection:



half (52%) of prison entrants had a history of a chronic physical health condition



around 2 in 5 (42%) prison entrants had a current chronic physical health condition



51% of prison entrants reported having been told they had a mental health condition at some point during their lives.

for more, see AIHW: Health of people in prison

## Veterans



Around 581,000 Australians have previously served or are currently serving in the Australian Defence Force (ADF). This veteran population represents 2.8% of Australians aged 15 years and over.

Male veterans have similar risk factors for ill health compared with male nonveterans, but higher rates of several long-term health conditions

Based on self-reported data from the 2020-21 National Health Survey, male veterans had similar risk factors for ill health compared with male non-veterans. This included similar rates of daily smoking, excessive alcohol consumption, insufficient fruit and vegetable consumption, and insufficient physical activity.

However, they had a higher prevalence of several long-term health conditions compared with male non-veterans. This included higher rates of:

- arthritis (33% compared with 12%)
- back problems (31% compared with 19%)
- heart, stroke and vascular disease (15% compared with 5.9%)
- diabetes (14% compared with 6.9%)
- cancer (6.7% compared with 2.6%).

As these health conditions are related to age, this higher prevalence may be explained by the older age of Australia's male veteran population.

Deaths by suicide in the veteran population remains an issue of high concern, particularly among ex-serving veterans who have a higher rate of suicide than all Australians.



**f** For more, see AIHW: Health of veterans

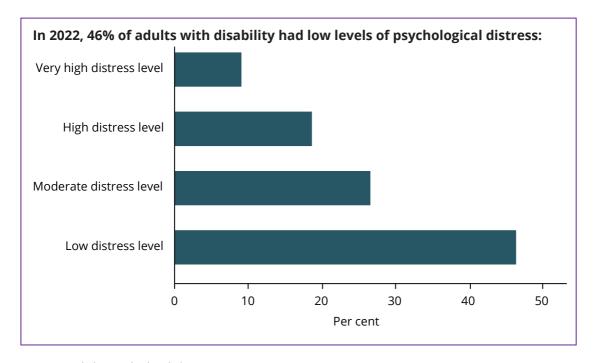
Information is also sourced from the ABS: Australian Defence Force service

## People with disability

4.4 million Australians were estimated to have disability in 2018. While the number of people with disability increased since 2009 (from an estimated 4.0 million), the prevalence rate decreased (from 18.5% of the population in 2009 to 17.7% in 2018).

In 2018, 1 in 3 (32%) people with disability had severe or profound disability (about 1.4 million). This means sometimes or always needing assistance or supervision with self-care, mobility, and/or communication. Among adults (aged 18 and over) with severe or profound disability in 2022:

- 12% assessed their health as excellent or very good
- 21% assessed their health as good
- 68% assessed their health as fair or poor.



Among adults with disability in 2022:

- 72% were living with overweight or obesity
- 14% reported daily tobacco smoking
- 29% had uncontrolled high blood pressure.
- For more, see AIHW: Health of people with disability

# How does Australia compare?



Australia's life expectancy at birth was **fourth highest** (83.3 years) among 38 Organisation for Economic Co-operation and Development (OECD) countries – Japan was the highest at 84.5 years.

Using the latest available data for people aged 15 and over, Australia had the:

Fifth lowest proportion of daily tobacco smokers

16th highest amount of alcohol consumed per person 10th highest
proportion of people
living with overweight
or obesity



among 38 OECD countries



among 21
OECD countries

among 38
OECD countries

**1** For more, see AIHW: Measures of health and health care for Australia and similar countries



# Health data in Australia

The health information landscape in Australia comprises data collected about health care practice, health status and the health system.

Health information comes from:

- data collected from health service use (for example clinical records)
- surveys and population censuses
- clinical trials and other research
- emerging data sets, including surveillance monitoring systems (for example the National Ambulance Surveillance System).

High quality information supports a sound understanding of health behaviours, health care and outcomes, and can identify possible areas for improvement.

Health data can be used to:

- provide clinical care
- generate population health insights
- undertake resource planning
- develop policy and programs.

## Ongoing improvements in health data

Health data need to be accurate, consistent, have good coverage and be both accessible and timely. Across the health system, data development activities are underway to:

- accurately and consistently identify priority population groups, for example:
  - work to ensure the inclusion of ABS Standard for Sex, Gender, Variations of Sex Characteristics and Sexual Orientation Variables in data sets is intended to improve the collection of information about sex and gender diversity and reporting of the health of the diverse population who identify as LGBTIQ+.
- improve the quality, coverage and depth of information about people's health and wellbeing, for example, via:
  - data linkage a process combining information from multiple sources, while preserving privacy. Some examples include:
    - The National Health Data Hub (NHDH) and the ABS Person Level Integrated Data Asset (PLIDA), which enable better insights into the interactions between social determinants and health, and a person's journey through the health system.
    - A pilot study to link data on people with dementia accessing behavioural support services as well as clinical diagnosis data from the dementia clinical quality registry to the NHDH.
    - The development of a National Disability Data Asset which combines information from different government data sources. It will support a person-centred view of the experiences of people with disability and the interactions between social determinants and outcomes.
  - working with Commonwealth and/or state and territory governments to develop and refine national data standards, for example through the registry for metadata standards, METEOR
  - developing the National Primary Health Care Data Collection, with an initial focus on GP activity data, to provide a better understanding of people's managed health conditions and outcomes
  - using area level data from different sources (such as ABS Census, liquor licencing authorities and the National Drug Strategy Household Survey) to improve understanding of access to alcohol in an area to inform public health and urban planning decisions to reduce the harms from alcohol consumption.

- improve data accessibility and timeliness, for example the AIHW:
  - has supported a number of data dashboards that provide timely monitoring of health system and service activity including mental health; Medicare Benefits Scheme funded services; family, domestic and sexual violence and COVID-19
  - use nowcasting and projections, which are techniques used to provide a
    picture of health status for today and beyond when available data do not reach
    that far normally. AIHW has been including projected data to the current year
    (nowcasting) in regular reporting for cancer incidence since 2012 and for cancer
    mortality since 2014. Nowcasting and projections have been included in the
    Australian Burden of Disease Study, since 2022.
    - The AIHW will release nowcast cancer prevalence statistics on the number
      of people alive who have previously been diagnosed with cancer for the first
      time in 2024. These will support day-to-day service delivery and also help to
      identify emerging areas of need.
- For more, see AIHW: Improving Australia's dementia data for national action, Using nowcasting and projections for statistical understandings in health and Australia's health data landscape

# **Building data capacity**

Within Australia's health system, improvements in how health information is managed can lead to enhanced patient care, operational efficiencies, and improved healthcare outcomes. Some key areas where improvements are needed include:

- **Data governance** this refers to the overall management of the availability, usability, integrity, security and privacy of data across Australia's health system.
- Interoperability information sharing across different parts of the health system (such as hospitals and primary care settings) can support care coordination and improve clinical decision-making. For example, the ABS and the AIHW are working to establish the Australian National Data Integration Infrastructure (ANDII). The ANDII aims to improve the efficiency and interoperability of national data linkage while also ensuring data protection and security and maintaining people's privacy. It will reduce the time required to build and access integrated datasets.
- Data standards Australia has been active in the development and advancement
  of new standards, terminologies and classifications (such as ICD-11, SNOMED-CT
  AU), and the development of health data exchange standards (such as fast health
  interoperability resources (FHIR)).
- **Data science** the development of generative artificial intelligence (AI) and the advancements in machine learning and natural language processing (NLP) are likely to provide new opportunities to automate the way data are captured, coded, transmitted and reported. For example, the use of machine learning and NLP will also likely change the way health data are coded in Australia.
- for more, see AIHW: Australia's health data landscape

# About Australia's health 2024

Australia's health 2024 is the AIHW's 19th biennial health report.

It consists of 3 products:



## Australia's health 2024: in brief

This report provides a summary of the state of health in Australia today.



## Australia's health: topic summaries

This is a collection of over 60 web pages that present key information and statistics on the health of Australians, the health system, and factors that can influence our health (some are updated when new data are available).



## Australia's health 2024: data insights

This report is a collection of 11 in-depth web articles on selected health topics, with a focus on the importance of a strong evidence base for supporting the health of Australians.

All products can be viewed or downloaded at: www.aihw.gov.au/reports-data/australias-health

# About the AIHW

The AIHW is an independent statutory Australian Government agency with more than 30 years of experience working with health and welfare data.

We create and provide meaningful information and statistics for the benefit of the Australian people, on a range of health and welfare topics.

#### Our role is to:

- collect, produce, coordinate and assist in the collection, and production of, and access to health and welfare-related information and statistics, including through data linkage
- conduct and promote research into Australians' health and their health services
- develop specialised standards and classifications for health, health services and welfare services
- **publish information** that provides a holistic picture of health and welfare in Australia
- make recommendations to the Minister on the prevention and treatment of diseases and improvement and promotion of the health and health awareness of Australians
- **provide researchers with access** to health and welfare-related information and statistics, subject to confidentiality provisions.

For more information, see: www.aihw.gov.au/about-us



