



Australian Government

Australian Institute of  
Health and Welfare

AIHW

Australia's health **2022**  
in brief



**The AIHW is an independent statutory Australian Government agency 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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### **Australian Institute of Health and Welfare**

Board Chair

Mrs Louise Markus

Chief Executive Officer

Mr Rob Heferen

Any enquiries about or comments on this publication should be directed to:

Australian Institute of Health and Welfare

GPO Box 570

Canberra ACT 2601

Tel: (02) 6244 1000

Email: [info@aihw.gov.au](mailto:info@aihw.gov.au)

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# Contents

About Australia's health 2022	5
1 What is health?	6
2 How has COVID-19 affected our health?	8
3 How healthy are we?	24
4 Determinants of health	34
5 Our health system	40
6 Health of Aboriginal and Torres Strait Islander people	52
7 Health of population groups	60
8 How do we compare internationally?	66
9 The importance of health information	68



# About Australia's health 2022

Australia's health 2022 is comprised of 3 main products:



## ***Australia's health 2022: data insights***

This is a collection of 10 in-depth articles on selected health topics, including a focus on the health impacts of the COVID-19 pandemic, the evolution of the health system over the last 100 years, and the importance of a strong evidence base for supporting the health of Australians. It is available as a print report and online as a PDF.



## **Australia's health: topic summaries**

This is a collection of 63 web pages that present key information and statistics on the health system, health of Australians and factors that can influence our health. They are available online in HTML (some updated when new data are available).



## ***Australia's health 2022: in brief***

This presents key findings and concepts from the topic summaries and data insights to provide a holistic picture of health in Australia. It is available as a print report and online as a PDF. **All products can be viewed or downloaded at:**

[www.aihw.gov.au/reports-data/australias-health](http://www.aihw.gov.au/reports-data/australias-health)

1

What is health?



Good health is important – it influences not just how we feel, but also how we go about our everyday lives. Health can mean different things to different people but is widely accepted to be much more than the presence or absence of disease. It incorporates our physical, mental and social wellbeing, and is influenced by many determinants such as our:

-  health behaviours
-  physical environment
-  social connections
-  biomedical factors
-  cultural background
-  commercial and digital environments
-  socioeconomic circumstance
-  access to timely and quality health care programs and services
-  genetics.

Find out more: [What is health?](#) and [Social determinants of health](#)



## What is health literacy?

Health literacy relates to how people access, understand and use health information in ways that benefit their health. Health literacy is important, as higher health literacy levels are associated with increased patient engagement in the shared decision-making process. People with low health literacy are more likely to have worse health outcomes and adverse health behaviours, like being less likely to use health services (such as general practitioners visits) and preventive services (such as cancer screening).

Find out more: [Health literacy](#)

# 2

How has COVID-19 affected our health?














COVID-19 continues to affect the health and wellbeing of Australians. While people who contract COVID-19 now are less likely to be hospitalised or die than at the start of the pandemic, the large number of cases that have occurred to date in 2022 produced a much larger number of hospitalisations and deaths than in the first two years.

Measures put in place to limit the spread of COVID-19 can also affect our health and wellbeing. For example, changes to the way Australians work, travel, learn and interact with friends and family can affect our health behaviours, physical and mental wellbeing, and use of and access to important health services. However, the potential negative effects from these interventions is challenging to measure, as they can also result from changed personal behaviour even in the absence of government directions.

Over the course of the pandemic, measures to limit the spread of COVID-19 have included:

-  contact tracing
-  physical distancing policies
-  high testing rates
-  travel bans
-  isolation and quarantine processes
-  vaccines
-  wearing face masks
-  improved ventilation
-  personal hygiene practices



*Australia's health 2022: data insights* takes an in-depth look at how the health of Australians has changed during the pandemic.



## Timeline of the pandemic in Australia



Australia has had 4 main waves of COVID-19 since the first cases were recorded here in January 2020. Until December 2021, Australia had relatively low COVID-19 infection and death rates. The number of infections, hospitalisations and deaths rose to their highest levels with the spread of the Omicron variant near the end of 2021 and into 2022 (at the same time restrictions were eased and vaccination rates were high), although the proportion of cases that have resulted in death (the case-fatality rate) or severe disease (as measured by admission to hospital or Intensive Care Unit (ICU)) have been lower than in previous waves. Vaccination has played a key role in the reduction in the proportion of deaths and hospital admissions.

# Cases and deaths in Australia and internationally



## How many COVID-19 cases and COVID-19 related deaths have we seen?

Since the start of the pandemic until 30 June 2022, Australia had reported:



**more than 8 million confirmed cases of COVID-19**



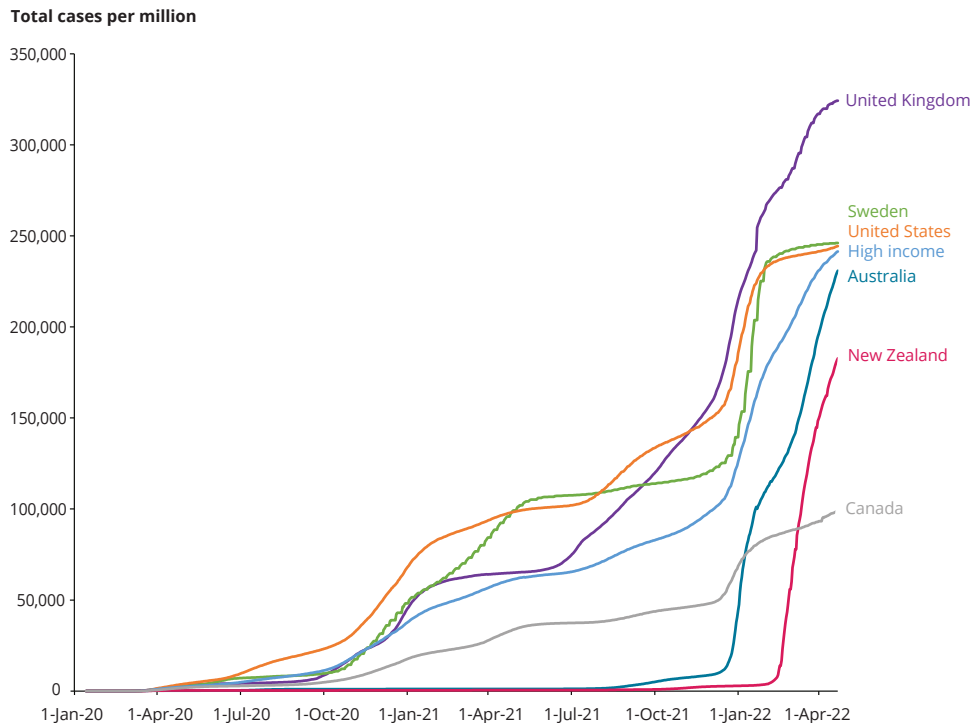
**around 10,000 COVID-19 related deaths**

The incidence (the number of new cases) of COVID-19 is highest in people aged 20–39 years, although deaths in this age range are rare (as at 1 May 2022). Among people aged 80 years or more, the incidence of COVID-19 is lowest and mortality rates from COVID-19 are highest (as at 30 April 2022).

## How do our case numbers compare internationally?

Compared with many other countries, the number of COVID-19 cases was very low in Australia until early 2022. The cumulative incidence by 30 April 2022 was 231,000 cases per million people, similar to the average of other high-income countries.

Country comparison of cumulative COVID-19 cases per million people, 22 January 2020 – 30 April 2022



# Australia has one of the highest vaccination rates in the world



Vaccination has been an important tool to protect the population from illness and death. Evidence shows that death rates are lower in people that have been vaccinated against COVID-19 (see Table 1.2 in Chapter 1 of *Australia's health 2022: data insights*).

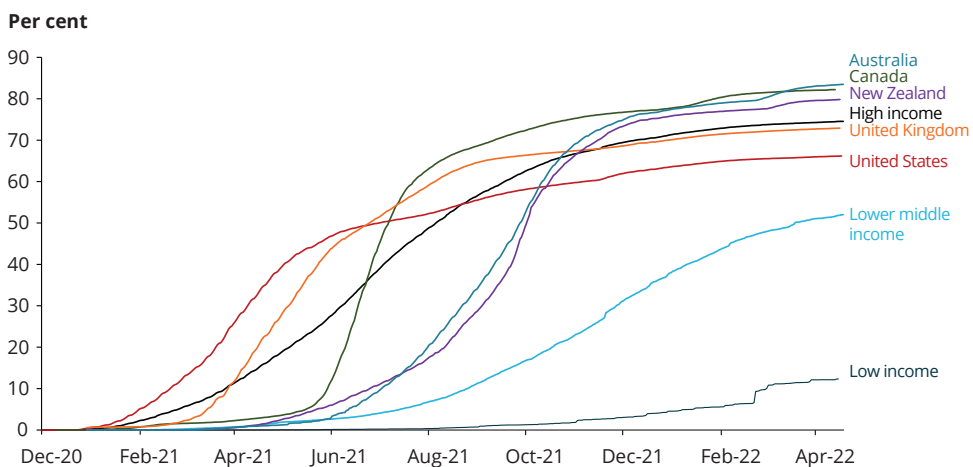
On 22 February 2021, Australia began a staged rollout of COVID-19 vaccination, beginning with priority groups at greatest risk of exposure to COVID-19 and those who were at particular risk of poor outcomes from the disease.

By 30 April 2022:

- 95.5% of the population aged 16 and over, 80.4% of those aged 12–15 and 36.9% of those aged 5–11 were fully vaccinated against COVID-19 (having received 2 doses).
- over two-thirds (69.3%) of eligible people had received a third dose.

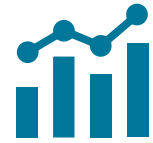
Rapid vaccination rates in the second half of 2021 resulted in Australia now having one of the highest levels of vaccination (having received 2 doses) in the world. However, uptake for a third 'booster' dose has not been as high in Australia as in other countries.

International comparison of vaccination levels. Percentage of people who completed the initial vaccination protocol (2 doses) 1 December 2020 to 30 April 2022



Inequalities in vaccination coverage also exist, with lower coverage in Aboriginal and Torres Strait Islander people, residents of the Northern Territory, and participants in the National Disability Insurance Scheme compared with the rest of Australia.

# Trends in deaths and severe disease during the pandemic



With each wave of COVID-19, both the infectiousness and how ill people became varied and so did the vaccination status of the population. These factors impacted on how many people required hospitalisation and intensive care or died.

## Hospitalisations rates were lower during the Omicron wave

During Omicron (wave 4) the proportion of positive cases requiring hospitalisation was much lower than for earlier waves. For example, when peak deaths occurred in:



**wave 2,**  
15.6% of active cases  
were in hospital

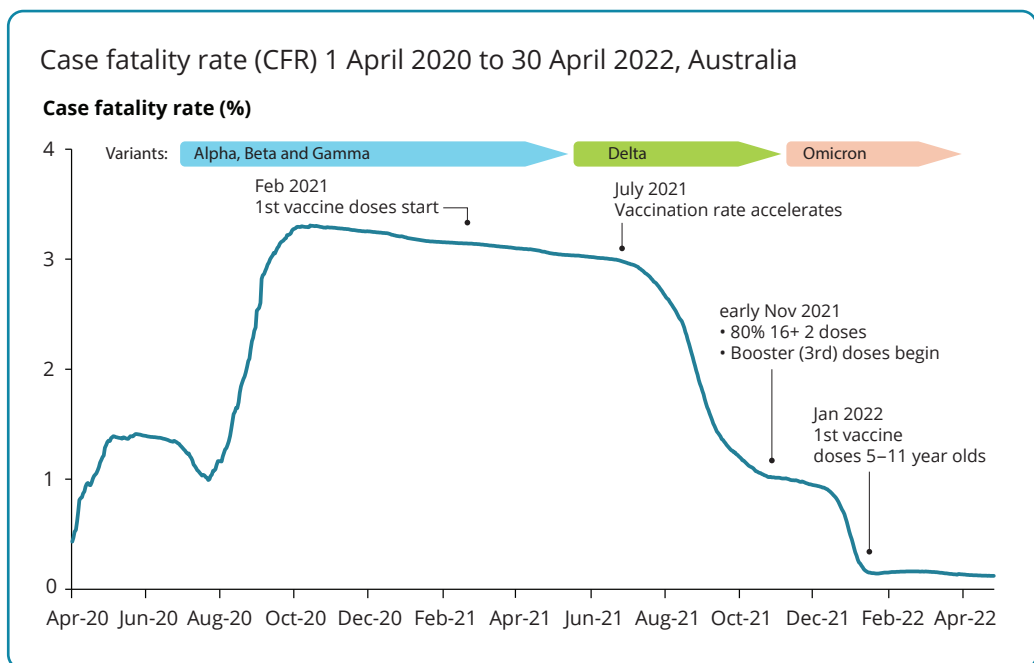


**wave 4,**  
1.3% of active cases  
were in hospital.

Despite this lower rate of hospitalisation, the overall infectiousness of the Omicron wave resulted in very large number of cases which placed significant pressure on the health system with large numbers of people requiring both hospitalisation and intensive care.

## The case fatality has fallen

The case fatality rate of COVID-19 related deaths has fallen from a peak of 3.3% in October 2020 to 0.1% in April 2022. This fall corresponds with the rollout of the national vaccination program.



## Most deaths and severe disease from COVID-19 have occurred in 2022

The rate of severe disease from COVID-19 (ICU admission and/or death) increased from 0.4 per 100,000 people in December 2021 to 3.7 per 100,000 people in January 2022.



By 30 April 2022, there had been 5,335 registered deaths *from* COVID-19 in Australia, of which 3,107 occurred in 2022.

## Excess mortality was down in 2020, but up in 2021 and up substantially in early 2022

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.

While death patterns do naturally vary, the number of actual deaths in a given time period are expected to be within a certain range. This range accounts for statistical variation. Using a measure of statistical significance, the actual number of deaths which fall outside this range can be estimated.

Excess mortality includes both COVID-19 and non-COVID-19 deaths, reflecting both the direct and indirect impact of the pandemic.

Based on doctor-certified deaths:

2020

during 2020, there were around 2,150 fewer deaths than expected overall in Australia. However, taking statistical variation into account there were only 205 fewer deaths than expected.

2021

during 2021, there were around 5,100 more deaths than expected overall in Australia. However, taking statistical variation into account there were only 94 more deaths than expected.

Early 2022

during the first 2 months of 2022, there were around 4,700 more deaths than expected overall in Australia. However, taking statistical variation into account there were 3,105 more deaths than expected.

COVID-19 accounted for a high proportion of the excess deaths in early 2022. There were also more deaths than expected due to coronary heart disease (29% higher), dementia (24%), chronic lower respiratory conditions (23%), stroke (20%) and diabetes (14%).

*Find out more:* Chapter 2 of [Australia's health 2022: data insights](#) and [ABS Measuring Australia's excess mortality during the COVID-19 pandemic \(doctor-certified deaths\)](#), ABS website, accessed 14 June 2022.

## Death trends during the pandemic - from all causes of death and causes other than COVID-19

### Death rates from all causes continued to fall in 2020 and 2021



Over the last 25 years, the overall number of deaths per 100,000 people has been declining in Australia. During 2020 and 2021 this trend continued.



Death rates from respiratory diseases fell substantially in 2020 and 2021, largely due to reduced deaths from influenza and pneumonia.



Death rates from cardiovascular disease and injury continued previous trends in 2020 and 2021.

### Have deaths by suicide increased during the pandemic?

While there has been a rise in the use of mental health services and an increase in psychological distress during the COVID-19 pandemic, the pandemic has not been associated with a rise in suspected deaths by suicide.



## Burden of disease

Burden of disease measures 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). It is measured using disability-adjusted life years (DALY). One DALY is equivalent to one year of healthy life lost.

### **In 2021, COVID-19 accounted for around 23,000 years of healthy life lost.**

Most of the total burden for COVID-19 was due to fatal burden, which contributed 89% of DALYs for males and 84% for females. Total fatal burden equated to 15 years of life lost per person who died from COVID-19 based on the Global Burden of Disease ideal life expectancy.

This was much lower than for diseases causing the most burden in Australia – for example it is much less than the 312,000 DALYs attributed to coronary heart disease in 2018, which was the leading cause of burden in that year.



ANUPoll is a quarterly survey of Australian public opinion. Findings summarised on pages 17 to 19 come from the [ANU Centre for Social Research and Methods](#) and the following report:

Biddle N, Gray M and Rehill P (2022) *Mental health and wellbeing during the COVID-19 period in Australia*, ANU Centre for Social Research and Methods, Australian National University, Canberra.

# How has the pandemic affected our mental health?

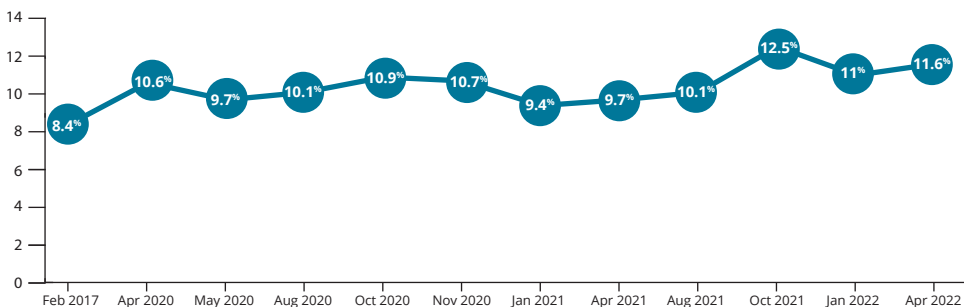


The potential for the COVID-19 pandemic to negatively affect mental health was recognised early. This can result from concerns about the virus itself, and the measures put in place to limit its spread in the community. Non-essential business and activities were shut down, and Australians urged to stay at home. These restrictions also affected other aspects of people's lives. Some people lost their jobs, their income and their social support networks. Many Australians also had to adapt to remote work and schooling.

## COVID-19 has been associated with rises in the level of psychological distress in Australia, especially for younger people.

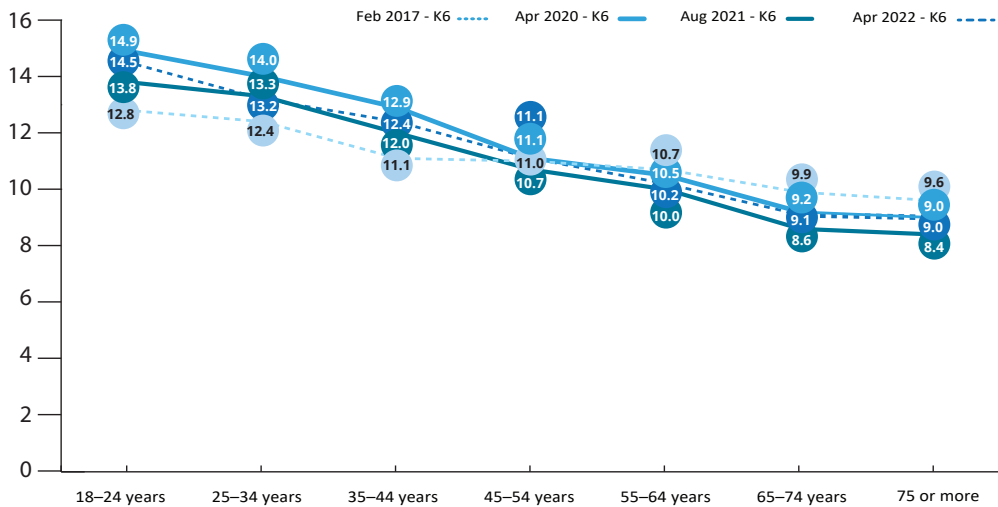
The proportion of the adult population experiencing severe psychological distress was higher in April 2022 (11.6%) than it was prior to the pandemic (8.4% in February 2017). The proportion of people with high/very high levels of psychological distress rose during the pandemic:

Per cent



Note: The K6 scale has been used to categorise those survey respondents experiencing 'severe' psychological distress. ANUPoll.

For younger people (aged 18–44) in particular, average levels of psychological distress were higher in 2020, 2021 and early 2022 than they were before the pandemic. Those aged 45 and above experienced either little change or improvements in their level of psychological distress:



Note: Psychological distress is based on the average K6 score. ANUPoll.

### The pandemic has also been associated with increases in the use of mental health services particularly for young people (young women).

There has been an increase in self-harm or suicidal ideation presentations for emergency departments in New South Wales since the pandemic began (Sara et al. 2022). For young people aged 10–24 years, the rate (per 10,000 population) increased by about 19% between March 2020 and June 2021. The highest increase within this group was for females aged 13–17 years where the rate increased by about 47% during this period (Sara et al. 2022).

Find out more: [Chapter 2 of Australia's health 2022: data insights](#) and Sara G, Wu J, Uesi J, Jong N, Perkes I, Knight K, O'Leary F et al. (2022). 'Growth in emergency department self-harm or suicidal ideation presentations in young people: Comparing trends before and since the COVID-19 first wave in New South Wales, Australia', *The Australian and New Zealand Journal of Psychiatry*, 48674221082518.

# Life satisfaction has shifted since the start of the pandemic

Life satisfaction has changed quite rapidly since the start of the pandemic. In Australia, average life satisfaction:



fell substantially during the early stages of the pandemic (from 6.9 out of 10 in January 2020 to 6.5 in April 2020)

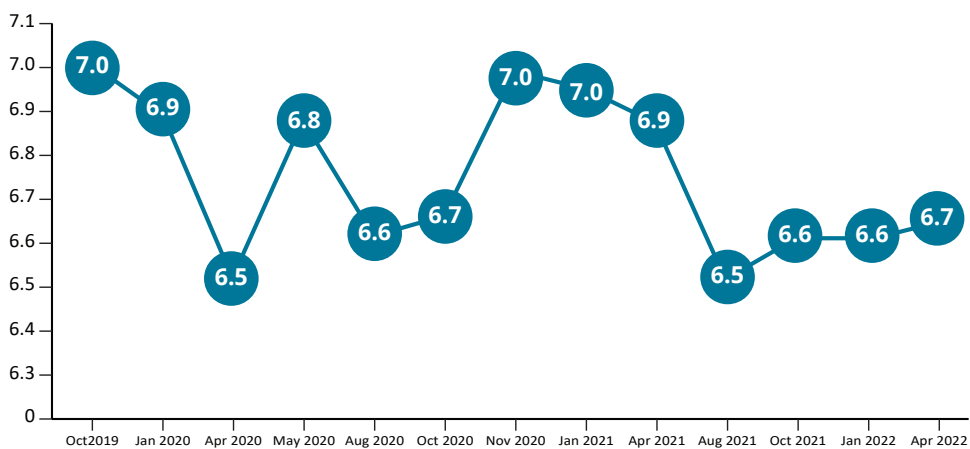


rose as infection rates and lockdown conditions eased (6.8 in May 2020)



fell again in August 2021 (6.5), but had increased slightly to April 2022 (6.7).

Life satisfaction, October 2019 to April 2022



Note: The life satisfaction question asks how satisfied you feel about life in general, on a scale from 0 to 10. Zero means you feel 'not satisfied at all' and 10 means 'completely satisfied'. ANUPoll.

# Did health service use change during the pandemic?



COVID-19 changed the way Australians used health services. Some services were suspended, some services changed, extra demands were put on hospitals when COVID-19 admissions were higher, and some people were hesitant to seek health care for fear of contracting COVID-19.

## Consults for chronic diseases fell

The number of chronic disease services in the early months of 2021 remained higher than previous years, but then fell to below 2018 to 2020 numbers for most of the months to October, before again recovering to similar numbers as in 2020. January 2022 saw much lower numbers than previous years, but then recovered to expected levels in February 2022. These periods of lower numbers than in previous years coincided with outbreaks of COVID-19 and, up until 2022, various stay-at-home orders.

## Impact on cancer screening

Diagnosing cancer early gives the best chance of favourable outcomes and survival.

During the pandemic, delays in screening or early detection services may signal an increased risk of more advanced cancers being diagnosed at a later date, although it is too early to see this potential effect in the data.

The number of screening mammograms performed through Australia's national breast cancer screening program, BreastScreen Australia, declined in 2020 (145,000 fewer performed from January to June 2020 than in the same period in 2018), but increased over the second half of 2020 as restrictions eased. It is too early to tell the impact of COVID-19 on bowel and cervical screening.

Data on Medicare-subsidised procedures related to screening and early detection provide further insight into potential missed care. In 2020:



colonoscopy rates dropped sharply and then returned towards the expected rates in 2021.



the number of Medicare-subsidised breast and prostate cancer tests showed some declines in 2020 compared with earlier years.



some Medicare-subsidised cancer procedures (including procedures for breast cancer, gynaecological cancers and melanoma) fell.

### **Non-urgent surgery fell**

At the start of the pandemic, non-urgent surgery was suspended for one month, from late March to late April 2020. Since then, suspensions have continued at local or state and territory levels as outbreaks have occurred.

Over the 2 years 2019–20 and 2020–21, there were around 120,000 less admissions for these non-urgent (or elective) surgeries in public hospitals than expected based on trends for public hospital admissions for elective surgeries between 2014–15 and 2018–19; for private patients (in public or private hospitals) there were more procedures in 2021 than expected.

### **Telehealth and other digital health tools changed**

New Medicare Benefits Schedule (MBS) subsidised items were temporarily introduced under Medicare to help patients access certain health care services by phone and video conferencing during the pandemic. This played an important role in keeping many types of services at similar levels to that before the pandemic. ‘Telehealth’ subsidised services included general practitioners (GPs), specialists, allied health providers, mental health professionals, nurse practitioners and participating midwives. Many of these subsidies have now been made permanent.

Digital health tools such as check-in apps, online vaccine booking systems, and messaging services that relayed COVID-19 test results and quarantine advice also supported the accessibility and delivery of health information.

# Has the pandemic affected population groups differently?

The differences in COVID-19 morbidity and mortality interact with and add to existing health and social inequalities in the Australian population. Although COVID-19 cases and death rates were higher in *Major cities* than regional or remote areas, disparities were evident for some population groups.

For deaths that were registered by 30 April 2022, COVID-19 mortality rates were:

- nearly **3 times as high for those living in the lowest socioeconomic area** compared with the highest socioeconomic area (age-standardised rate)
- **2.5 times as high for people born overseas** than people who were born in Australia (age-standardised rate). Of those born overseas, the rate was highest for people born in the **North Africa and the Middle East** (36.7 per 100,000).

30% of COVID-19-related deaths since the start of the pandemic have occurred in residential aged care, ranging from 75% of deaths in 2020 to 26% in the first few months of 2022.

Comprehensive data on the impact of the pandemic on people with disability is lacking. As of 1 May 2022, there had been a total of 12,721 COVID-19 cases reported in National Disability Insurance Scheme (NDIS) participants and 74 COVID-19 related deaths (0.6% of NDIS participant cases) since the start of the pandemic. These data will be an underestimate as many people with disability are not NDIS participants.

For information on the impact of COVID-19 on Aboriginal and Torres Strait Islander people, see [Chapter 7 'Health of population groups'](#).



## Looking ahead

It is still unknown what may come next in relation to COVID-19 – how many cases will continue in the community, whether there will be new waves or new variants, and whether new vaccines or treatments will be more effective than those currently available.

The longer-term impacts are also not known, such as the impact of any changes in health behaviours or the impact of missed health care. All of this uncertainty highlights the need to continue to monitor these population health impacts into the future.

For more information, see the [Australian Government Department of Health](#) website.

*Find out more: Chapters 1, 2, 3 & 5 of [Australia's health 2022 data insights](#).*

# 3

How healthy are we?



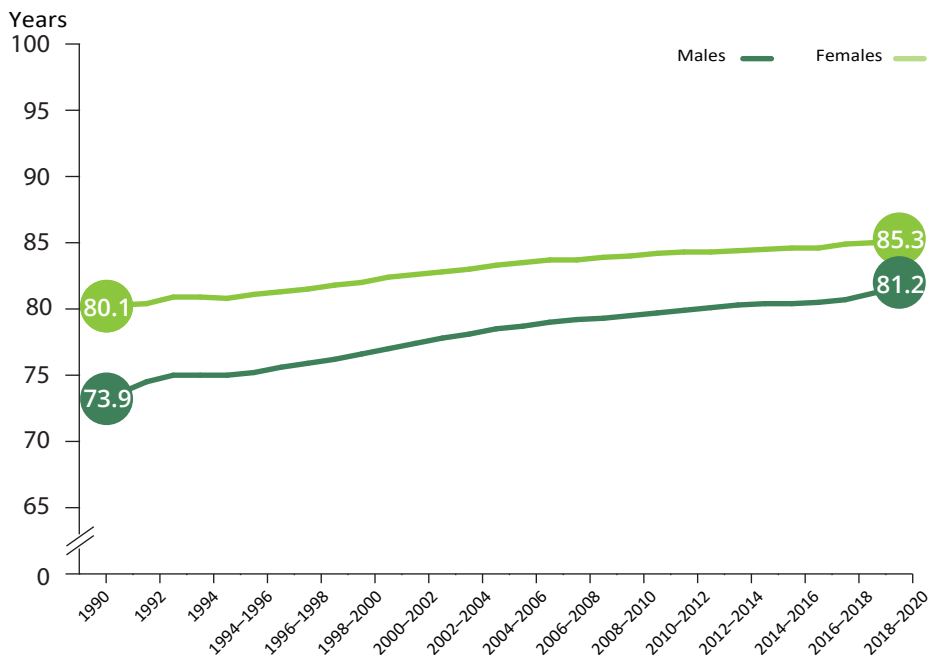




# How long do we live?

Life expectancy measures how long, on average, a person is expected to live based on current age and sex-specific death rates.

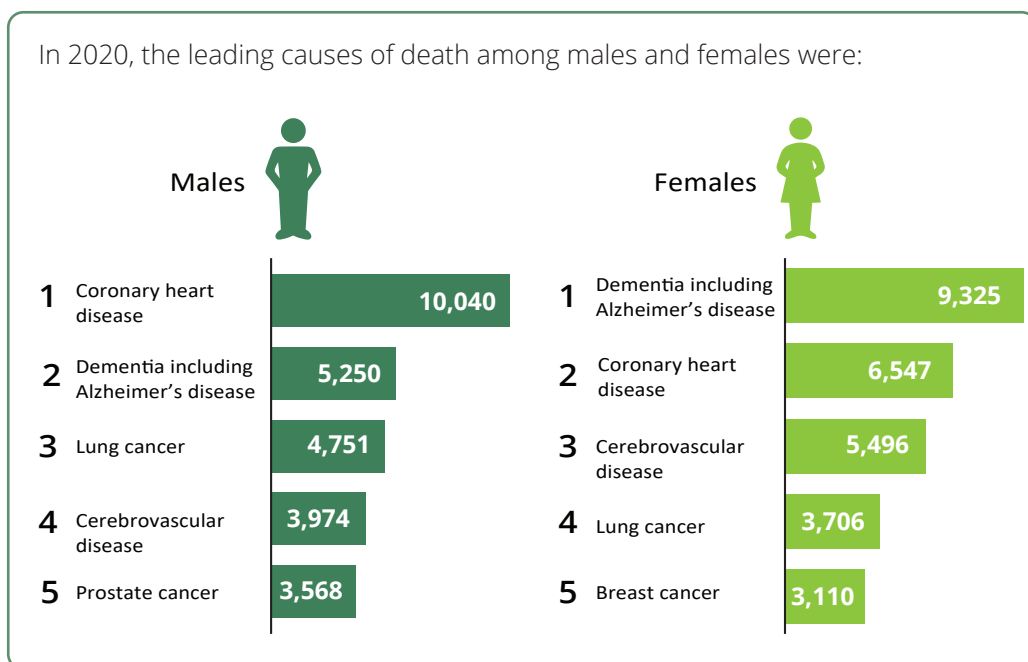
Life expectancy at birth in Australia is continuing to rise, for both males and females:



For people born in the early 1900s life expectancy at birth was around 55 years. Much of the increase in life expectancy since then is because of improved social conditions, advances in medical technology (such as mass immunisation and antibiotics) and health promotion and protection activities.

# 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. Over the last century, death rates have continuously declined but the leading – or main – causes of death have changed: generally, deaths from infectious diseases have decreased, while deaths from chronic conditions, such as cancers and dementia, have increased.



Leading cause of death differs by age. Chronic conditions feature more prominently among people aged 45 and over, while external causes, such as accidents and suicide, are the leading causes for people aged 1–44.

Find out more: [Causes of death, Chapter 4 Australia's health 2022: data insights](#)

# What is the burden of disease?

In 2018, Australians lost 5 million years of healthy life due to:

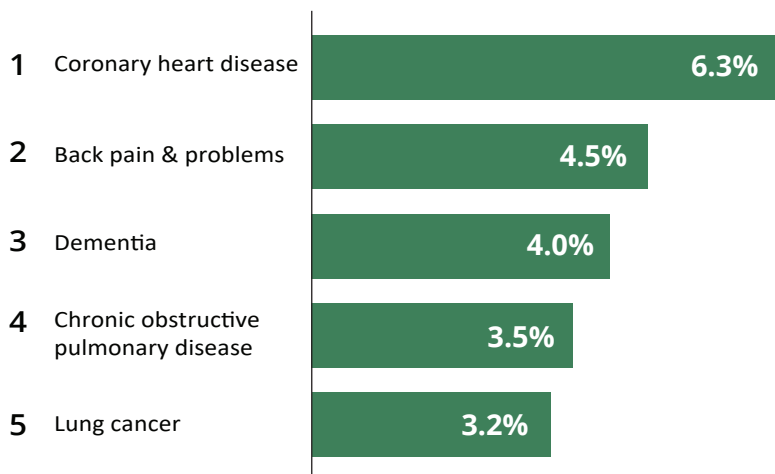


living with illness (non-fatal): 52% of total burden



dying prematurely (fatal): 48% of total burden.

In 2018, the 5 diseases that caused the most burden overall were all chronic conditions:



Males generally experienced more burden overall than females before the age of 85, largely due to males dying prematurely at a higher rate than females. For males, cancer, cardiovascular diseases and injuries (which includes suicide) were leading causes of total burden, while for females, musculoskeletal, neurological conditions (which includes dementia) and respiratory diseases were leading causes.

Find out more: [Burden of disease](#)

# How many people have a chronic condition?

Chronic conditions are an ongoing cause of substantial ill health, disability and premature death, making them an important global, national and individual health concern.

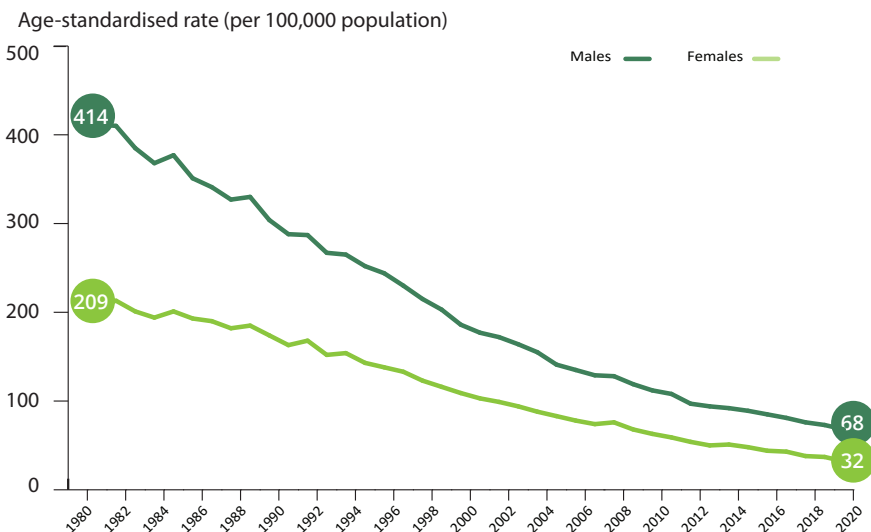
In 2020–21, almost half of Australians (47%, or 11.6 million people) were estimated to have one or more of 10 selected chronic conditions (including arthritis, asthma, back problems, diabetes and mental and behavioural conditions). An estimated 20% of people (4.9 million) had 2 or more conditions in 2017–18.

## Chronic conditions: at a glance

### Coronary heart disease

Coronary heart disease (CHD) is the leading single cause of disease burden and death in Australia. CHD occurs when there is a narrowing or blockage in the blood vessels that supply blood to the heart muscle. The 2 major forms are heart attack and angina.

In 2020–21, an estimated 571,000 Australian adults (2.9% of the adult population) had CHD. Overall, the CHD death rate has fallen by more than 80% since 1980:



This decline has been linked to reductions in some risk factor levels (including tobacco smoking), better treatment and care, and improved secondary prevention (including cardiac rehabilitation programs, and education and support for self-management).

Find out more: [Heart, stroke and vascular disease - Australian facts](#)

## Cancer

Cancer is a major cause of illness in Australia. It contributed to 18% of the total burden of disease in 2018, and accounted for 8.8% of health system spending related to specific diseases in 2018–19.

In 2022, it is estimated that:



about 162,000 new cases of cancer were diagnosed in Australia

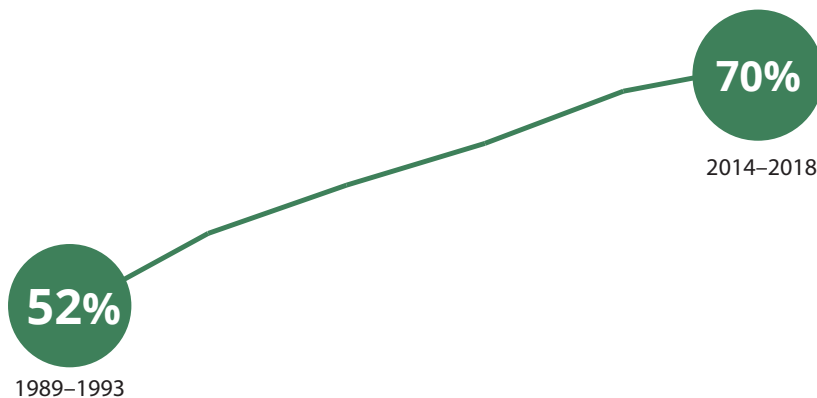


prostate cancer was the most commonly diagnosed cancer in males (24,217 cases)



breast cancer was the most commonly diagnosed cancer in females (20,428 cases).

Five-year cancer survival rates are increasing (meaning that, on average, people are more likely to survive for at least 5 years after a cancer diagnosis than they were in the past):



Potential reasons for the increased survival rates include improvements in cancer detection, treatments and care, and a greater understanding of the risk factors associated with cancer. Cancer screening programs also increase the likelihood of detecting cancer early, which leads to better outcomes.

## How common are some other chronic conditions?

An estimated:



3 in 10 (27%, or 6.9 million) people had arthritis or other musculoskeletal conditions, such as back pain, osteoarthritis and osteoporosis in 2020–21.



1 in 20 (almost 1.3 million) people were living with diabetes (type 1, type 2 and other diabetes) in 2020.



1 in 10 (10%, or 1.7 million) adults had biomedical signs (markers found during blood and urine testing) of chronic kidney disease in 2011–12.



1 in 3 (30% or 7.5 million) people had a chronic respiratory condition such as hay fever, asthma or chronic sinusitis in 2020–21.



387,000 people aged 15 and over – 214,000 males and 173,000 females – had had a stroke at some time in their lives in 2018.



386,200 to 472,000 Australians were living with dementia in 2021. Dementia cases and deaths are rising as Australia's population continues to age.

Note: These statistics are from different sources with different methodologies. Direct comparison between conditions is not recommended.

**Find out more:** [Chronic conditions and multimorbidity](#), [Chronic musculoskeletal conditions](#), [Cancer](#), [Cancer screening](#), [Chronic kidney disease](#), [Chronic respiratory conditions](#), [Coronary heart disease](#), [Dementia](#), [Diabetes](#), [Mental health](#), [Stroke](#) and [Chapter 8 Australia's health: data insights](#)



## Mental illness

Mental health conditions can severely affect all aspects of a person's life – including their health, day-to-day interactions with family and friends, and ability to study or work.

In 2007, an estimated 1 in 2 (46%) Australians aged 16–85 had experienced a mental health disorder during their lifetime. Among Australian's aged 16–85:



A higher proportion of males than females (48% compared with 43%) had experienced a mental disorder in their lifetime.



Those aged 16–24 (26%) were most likely to have experienced symptoms of a mental disorder in the previous 12 months.

The 2021 Census conducted by the Australian Bureau of Statistics (ABS) contained a new item on long-term health conditions, such as heart disease, arthritis and diabetes. Responses to this item will undergo further validation prior to its use for national monitoring of long-term health conditions. However, responses to this item will enable estimates of long-term health conditions to be produced at lower level geographies and for smaller sub-populations than was previously possible, and be used to inform health policy and health service planning at the local level.

*Find out more:* on the ABS website [2021 Census topics and data release plan](#).

# What are the leading causes of injury deaths?

Most injuries, whether unintentional or intentional, are preventable. In 2019–20, the most common causes of injury deaths were:

accidental falls

**40%**

suicide

**24%**

accidental poisoning

**11%**

*Find out more:* [Injury](#)

## Suicide and intentional self-harm

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

Suicide is an action taken to deliberately end one's own life, while intentional self-harm is deliberately causing physical harm to oneself but not necessarily with the intention of dying.

An average of **9 people died every day** by suicide in 2020 (3,139 deaths). Although males are 3 to 4 times as likely as females to take their own life, females are more likely to make an attempt or be hospitalised for intentional self-harm (making up two-thirds of intentional self-harm hospitalisations in 2019–20).

More than half (52%) of all deaths by suicide in 2020 were among people aged 30–59 (1,637 deaths) compared with 24% for those aged 15–29, and 23% for those aged 60 and over.

Suicide is the leading cause of death for young people aged 15–24 however, suicide rates for people in their 40s are higher than for younger people. The highest rates for any age groups and sex are for men aged 40–44 and 50–54 both 27.1 per 100,000 population) and for men aged 85 and above (36.2 per 100,000). Male suicide rates are higher than female rates in all age groups. The highest suicide rate for females was in those aged 45–49 (9.6 deaths per 100,000 population). Despite initial concerns, the onset of COVID-19 has not been associated with a rise in the suicide rate in Australia.

For more information about the impact of COVID-19 on health, see [Chapter 2: How has COVID-19 affected our health?](#)

*Find out more:* [Suicide and intentional self-harm](#)





# 4 Determinants of health



A person's circumstances and environment influence their health. Factors like income, education, housing, the environment, genetics and relationships have a considerable effect on health (known as **health determinants**). They may be risk or protective factors and interact to influence the health of individuals and communities.

**Social determinants of health** form part of the wider determinants of health. These determinants (such as working life conditions, housing and social support), have an important influence on health inequities – the unfair and avoidable differences in health status seen within and between groups and countries.

Some health determinants have direct influences on an individual's health (for example **risk factors** like blood pressure or lifestyle factors).

*Find out more:* [Social determinants of health](#)

## How does the environment affect our 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 aspects of our environment have direct implications for our health – such as illness or injury directly caused by exposure to an element of our environment. An example of this is air pollution. It can have short- and long-term impacts on health. In particular, breathing in fine airborne particles, known as PM2.5, is known to worsen a range of respiratory and other chronic diseases (such as coronary heart disease and chronic obstructive pulmonary disease), and increase mortality. In Australia in 2018 about 2.0% of deaths and 1.3% of the total burden of disease were attributed to PM2.5 air pollution. Conversely, clean air and water support our health and time spent in nature has been associated with improved wellbeing.

The **built environment** includes housing, public spaces, and transport, water and energy networks. The built environment can bolster and protect people's health and wellbeing; however, it can also create challenges to good health. When well planned, the built environment can promote healthy behaviours, such as increased opportunities for physical activity and connecting with the community, and easy access to healthy food options. For example, it has been found that people living within 1.6 km of a convenience store, shopping centre or newsagent were 2 times more likely to walk regularly and people with access to parks and well-connected footpaths were 2.5 times more likely to walk for more than one hour each week.






*Find out more:* [Built environment and health](#) and [Natural environment and health](#)

# What risk factors impact our health?

Many serious health issues, including some chronic conditions, are related to health behaviours and lifestyle 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:

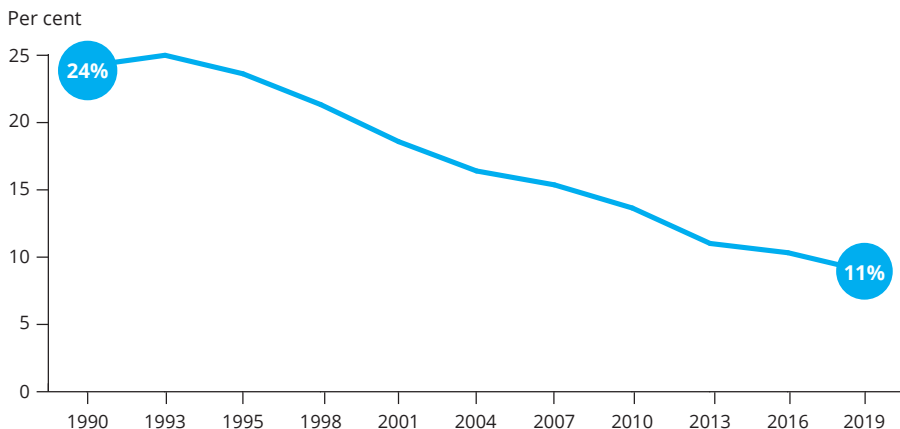
1.  tobacco use (8.6% of total burden)
2.  overweight and obesity (8.4%)
3.  dietary risks (5.4%)
4.  high blood pressure (5.1%)
5.  alcohol use (4.5%).

Detail on some risk factors is provided below.

## Tobacco smoking

Tobacco smoking is the leading cause of preventable disease and death in Australia. Successful health promotion and health protection strategies over many decades have resulted in a significant decline in daily smoking rates.

From 1991 to 2019, the proportion of Australians aged 14 and over smoking daily more than halved:

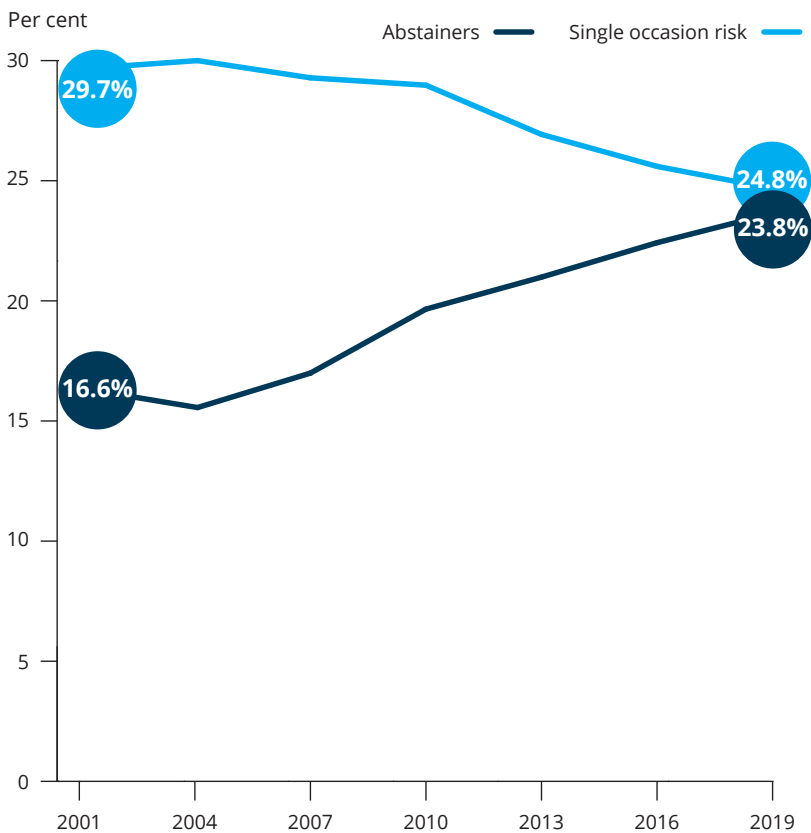




## Alcohol

Harmful levels of alcohol consumption is a major health issue, and is associated with increased risk of chronic conditions, injury and premature death.

In 2019, around three-quarters (77%) of the population aged 14 and over had consumed a full serve of alcohol in the previous 12 months. However, the trend for single occasion risky drinking (that is, had more than 4 standard drinks on one occasion at least once a month) fell. More people aged 14 and over were also abstaining from drinking (that is, had not consumed alcohol in the previous 12 months):

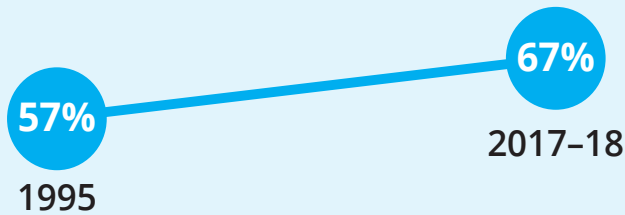




## Overweight and obesity

Overweight and obesity occurs because of an imbalance between energy intake (from diet) and energy expenditure (through physical activities and bodily functions). Genetic factors, schools, workplaces, homes and neighbourhoods, availability of convenience foods, and portion sizes can all also influence a person's body weight.

In 2017–18, 2 in 3 (67%) Australian adults were overweight or obese (36% were overweight but not obese, and 31% were obese). The prevalence of overweight and obesity has increased:



Men had higher rates of overweight and obesity than women:



Males  
75%



Females  
60%



## Physical inactivity

Regular physical activity is important for optimal health and wellbeing. It can improve a person's immune system and mental and musculoskeletal health and reduce disease risk factors such as overweight and obesity.

In 2020–21, an estimated:



3 in 10 adults (27%) aged 18–64 did not perform at least the recommended 150 minutes of physical activity in the past week



1 in 2 (50%) people aged 65 and over were insufficiently active – that is they did not participate in at least 30 minutes of physical activity per day over 5 or more days in the past week.



## Diet

Food provides energy, nutrients and other components that, if consumed in insufficient or excess amounts, can result in ill health. A healthy diet helps to prevent and manage health risk factors such as overweight and obesity, high blood pressure and high blood cholesterol.

In 2020–21, most Australians didn't consume the recommended number of serves of:



vegetables (96% for men and 87% for women)



fruit (59% for men and 52% for women).

## Family, domestic and sexual violence

Family, domestic and sexual violence (FDSV) has a serious and long-lasting impact on individuals, families and the community. Health impacts can include physical injury, mental illness, and suicide and self-inflicted injuries. Although people of all socioeconomic and demographic groups can experience FDSV, it predominantly affects women and children.

### Physical and/or sexual violence



**1 in 6 women**  
17% or 1.6 million



**1 in 16 men**  
6.1% or 548,000

have experienced physical and/or sexual violence by a current or previous partner since the age of 15.

In 2018, intimate partner violence contributed to:

- 228 deaths (0.3% of all deaths among females) in Australia
- 1.4% of the total burden of disease and injury among Australian women.

Younger women are especially affected. In 2018, intimate partner violence was ranked as the fourth leading risk factor for total disease burden for women aged 25–44, after child abuse and neglect, illicit drug use and overweight (including obesity).

*Find out more:* Alcohol, Biomedical risk factors, Diet, Illicit drug use, Insufficient physical activity, Overweight and obesity, Tobacco, Family, domestic and sexual violence, Social determinants of health.

# 5

## Our health system





Every day, many Australians come into contact with the health system. Our health system is a complex mix of programs and services. It includes public and private hospitals, primary health care services (such as general practitioners and allied health services that people can usually attend without a referral) and referred medical services (including many specialists, imaging and pathology).

Many health services are paid for by the Australian or state and territory governments, with the services either being privately owned or managed and controlled by state and territory governments. All are delivered and supported by a range of health professionals including doctors, nurses, dentists, allied health professionals, and administrative staff.

For more information about the impact of COVID-19 on the health system, see [Chapter 2: How has COVID-19 affected our health?](#)

## How much do we spend on health?



Australia spent an average of **\$7,926 per person** on health in 2019–20.

Total health spending in 2019–20 was **\$202.5 billion**, a real increase (adjusted for inflation) of 1.8% since 2018–19. This was lower than the average annual growth rate over the decade to 2019–20 (3.4%).

Governments were responsible for more than two-thirds (70.4%, \$142.6 billion) of total spending, with the bulk of spending being split between hospitals 41.2% and primary health care 33.1%.

During 2019–20 and 2020–21, the COVID-19 pandemic had an impact on most aspects of the health system. During this period, the Australian Government spent an estimated \$20.0 billion in current prices on COVID-19 health responses.

For more information on COVID-19, see [Chapter 2: How has COVID-19 affected our health?](#)

Find out more: [Health expenditure](#)

# Who works in health care?

The health workforce in Australia is large and diverse, covering many occupations. There were more than 642,000 health practitioners working in their registered professions (as registered with the Australian Health Practitioner Regulation Agency) in Australia in 2020, including:



350,000 nurses and midwives



166,000 allied health professionals  
(such as physiotherapists, pharmacists and psychologists)

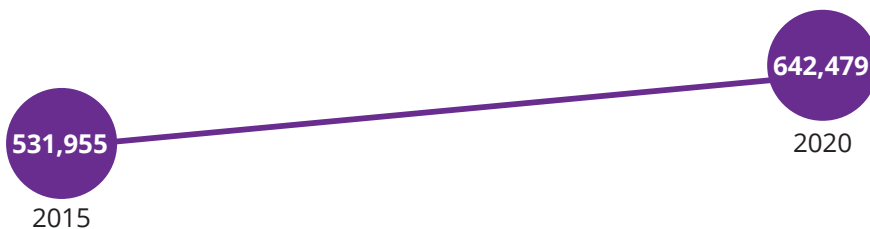


105,300 medical practitioners



21,500 dental practitioners.

Between 2015 and 2020, the Australian registered health workforce increased by 21%:



Some health professionals (such as dietitians, audiologists and speech pathologists) are self-regulated by their professional association to ensure that high safety and quality standards are maintained. According to the Australian Bureau of Statistics (ABS) 2016 Census of Population and Housing, outside of professions registered with the Australian Health Practitioner Regulation Agency, the health services industry workforce also includes around 13,200 ambulance officers and paramedics (note that paramedicine practitioners were then listed as a new registered health profession in 2019 data); 21,000 medical technicians; 21,000 dental assistants; and 26,100 nursing support and personal care workers.

Find out more: [Health workforce](#)

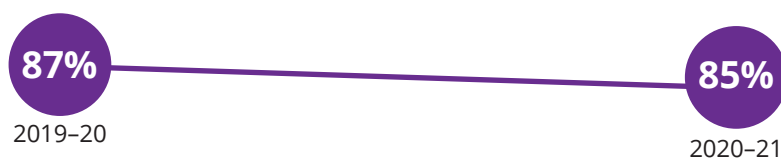
# Primary health care, specialist and diagnostic services

Primary health care is typically the first point of contact people have with the health system. It includes general practice, nursing, midwifery, pharmacy, dentistry, Aboriginal health services and allied health (including psychology, optometry and physiotherapy). Primary health care may be delivered in a range of settings, including aged care, disability support and the community.



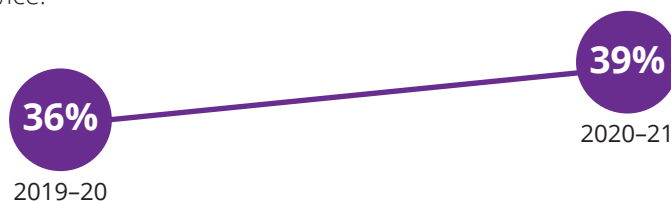
## Most of us saw a GP

In 2020–21, 85% of Australians received at least one Medicare-subsidised general practitioner (GP) service:



## Two-fifths of us used subsidised allied health care

In 2020–21, 39% of Australians received at least one Medicare-subsidised allied health service:



Of the 27 million allied health services provided, the most common type of service was optometry (10.4 million).



## Half of us saw a dentist

In 2020–21:

- 1 in 2 (48%) Australians aged 15 and over saw a dental professional in the last 12 months
- 46.1 million dental services were subsidised by private health insurance providers.



## One-third of us received MBS-subsidised specialist care

Specialists generally see patients that have a referral from a primary health care practitioner. They provide diagnostic and treatment services in a specific area of medicine, generally for a particular disease or body system. These services can be provided outside or within hospital settings.

In 2020–21:

- there were 36.6 million MBS-subsidised referred medical specialist attendances (consultations) provided to 8.6 million Australians (34% of people)
- most of these attendances (77%, or 28.2 million services) occurred in non-hospital settings, such as private consulting rooms and private outpatient clinics
- the most widely used specialties in non-hospital settings were ophthalmology (used by 5.1% of the population) and cardiology (4.6%).



## Two-thirds of us accessed Medicare-subsidised pathology, imaging and other diagnostic services

Pathology, diagnostic imaging and other diagnostic services assist medical and other health practitioners to describe, diagnose and monitor a patient's illness or injury.

In 2020–21, 17.8 million (69%) Australians accessed 204.1 million Medicare-subsidised pathology tests, imaging scans and a range of diagnostic services.



## 16.6 million patients had a prescription dispensed

Medicines can contribute to the quality of life of Australians by curing or relieving the symptoms of illness. They can also prevent complications in existing health conditions or delay the onset of disease.

In 2020–21:

- 314.8 million prescriptions were dispensed under the Pharmaceutical Benefits Scheme (PBS) and the Repatriation Pharmaceutical Benefits Scheme (RPBS)
- medicines used to treat cardiovascular conditions were the most dispensed (accounting for 33% of all PBS and RPBS prescriptions).

*Find out more:* [General practice, allied health and other primary care services](#), [Oral health and dental care](#), [Referred medical specialist attendances](#), [Pathology, imaging and other diagnostic services](#), [Medicines in the health system](#)

# Hospital care

Both public and private hospitals provide services for admitted and non-admitted patients (non-admitted includes visits to outpatient clinics and people presenting to emergency departments).

## On an average day in Australia's hospitals:



**\$229 million** is spent on public and private hospital services



**166,000** nurses and **50,000** doctors are employed in public hospitals



there are **30,500** hospitalisations



**24,100** people present for care at Australia's public hospital emergency departments



**105,000** services are provided via 'outpatient' or non-admitted patient clinics



there are **2,100** admissions to public hospitals from elective surgery waiting lists



a hospital-acquired complication occurs in **411 hospitalisations**

## Hospitals at a glance:

In 2019–20:



There were **695 public hospitals** (and **657 private hospitals**, including day hospital facilities, in 2016–17).

Hospitals accounted for 41% of all health expenditure (\$83.5 billion):



Public hospitals:  
**\$66.4 billion**

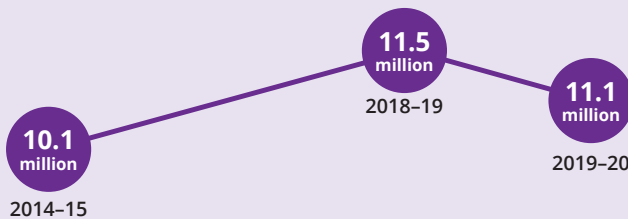


Private hospitals:  
**\$17.1 billion**



There were 2.5 beds per 1,000 population. The number of beds per 1,000 population in public hospitals has fallen by an average of 0.9% every year since 2015–16.

The total number of hospitalisations was higher than in 2014–15:



Between 2014–15 and 2018–19, hospitalisations increased by 3.3%, on average, per year – faster than the population growth over the same period. In 2019–20 there was a 2.8% decrease in hospitalisations due to the impact of COVID-19.

In 2020–21:



**50%** of patients admitted to hospital from public hospital elective surgery waiting lists waited for **48** days or less, and **90%** waited for **348** days or less.



There were **8.8 million** presentations to emergency departments.

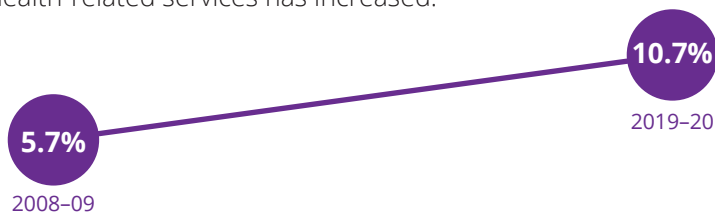
Find out more: [Hospitals](#)

# Mental health services

Mental health treatment, care and support is provided by:

- specialised hospital services – public and private
- residential mental health care services
- community mental health care services
- private clinical practices
- non-government organisation services
- primary care services
- allied health services.

Since 2008-09, the proportion of Australians accessing Medicare-subsidised mental health-related services has increased:



The population rate of mental health-related presentations to public emergency increased from 83.8 per 10,000 population in 2011-12 to 121.6 in 2019-20, an increase of about 45%. This compares with a 20% increase for specialised community mental health care service contact rates, an 18% increase for public overnight mental health-related hospitalisation rates and a 33% increase for private overnight mental health-related hospitalisation rates over the same period.

# Alcohol and other drug treatment services

Alcohol and other drug treatment services in Australia assist people with their drug use, with an aim to reduce the harm of drug use. Some treatments specifically aim to help clients develop skills that facilitate drug-free lifestyles and prevent relapse. These typically use abstinence-oriented interventions in a structured, substance-free setting.

In 2020-21:



around 138,000 clients aged 10 and over received treatment



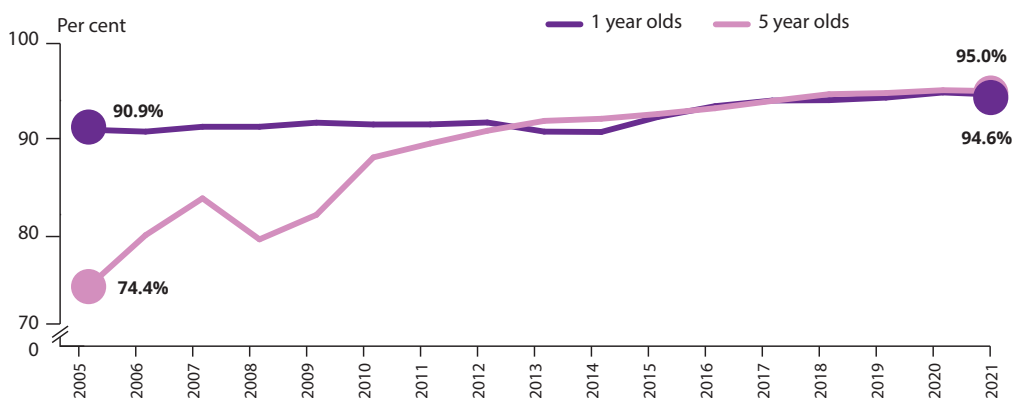
alcohol was the most common principal drug of concern that led clients to seek treatment for their own drug use – 37% of treatment episodes.

Find out more: [Mental health services](#) and [Alcohol and other drug treatment services](#)



# How does our system prevent ill health and protect and promote good health?

A fundamental aim of any health system is to prevent disease and reduce ill health so that people remain as healthy as possible for as long as possible. Immunisation and population-based cancer screening programs are major areas of disease prevention in Australia. Several vaccine preventable diseases, such as measles, rubella and diphtheria, are now rare in Australia as a result of our high immunisation rates. The immunisation rate for 1- and 5-year-olds has increased since 2005:



Health promotion and health protection use strategies to support people to adopt or maintain healthy behaviours, and remain protected against the emergence of health threats, such as COVID-19. Strategies may include educational activities (such as awareness-raising campaigns), organisational, economic or political actions (such as advocacy) and changing public policy.

Health promotion and health protection can occur across all levels of government and aim to address the determinants of health. They also assess the needs of different groups across different settings (such as schools or workplaces) and tailor programs, activities and policies accordingly to address different needs across populations groups.

One of Australia's most successful health promotion stories is the decline in tobacco smoking rates over the last 30 years – which are currently at historically low levels, particularly among children and youth. Key to this success has been the many tobacco control measures of Australian governments and public health organisations, including plain packaging and bans on advertising, education campaigns tobacco excises (tax), and smoke-free laws and policies.

For more information about COVID-19, see [Chapter 2: How has COVID-19 affected our health?](#)

*Find out more:* [Health promotion and health protection](#), [Immunisation and vaccination](#), [Infectious and communicable diseases](#), [Cancer screening](#)

# Palliative care services

With an ageing and growing population, more Australians are in need and in receipt of palliative care services. Palliative care aims to prevent and relieve suffering and improve the quality of life for people with a life-limiting illness and their families.

From 2015–16 to 2019–20, palliative care-related hospitalisations increased by 18%, a larger increase than for hospitalisations for all reasons (6%) over the same period.

*Find out more:* [Palliative care services](#)

# Digital health

Digital health technologies have improved the availability and accessibility of health care services and products, particularly during the COVID-19 pandemic (see [Chapter 2: How has COVID-19 affected our health?](#)).

Today, many Australians use digital health technology to monitor their own health and engage in their health care. For example, they might:



wear a fitness device to record how much exercise they do



consult with a health professional using telehealth



securely access their pathology test results through My Health Record.

For health care providers, digital health technology 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.

*Find out more:* [Digital health](#)



# 6

## Health of Aboriginal and Torres Strait Islander people





For Aboriginal and Torres Strait Islander 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 2016, there were an estimated 798,400 Indigenous Australians, representing 3.3% of the total Australian population.



### Population projections

Based on the Australian Bureau of Statistics population projections, the number of Indigenous Australians in 2022 was estimated to be around 896,300. The Indigenous Australian population is projected to reach about 1.1 million people by 2031.

In 2018–19, among Indigenous Australians aged 15 and over:



74% (357,400 people) recognised an area as a homeland/ traditional country



66% (314,200 people) identified with a tribal group, language, clan, mission or regional group



24% (130,500 people) lived on their homeland

Find out more: [Profile of Indigenous Australians](#)

## Health and wellbeing

Overall, Indigenous Australians experience socioeconomic disadvantage and health inequality. However, in recent years, there have been a number of improvements.

### Life expectancy and deaths

Life expectancy and deaths are widely used as indicators of population health. In 2015–2017, the life expectancy at birth for Indigenous Australians was:

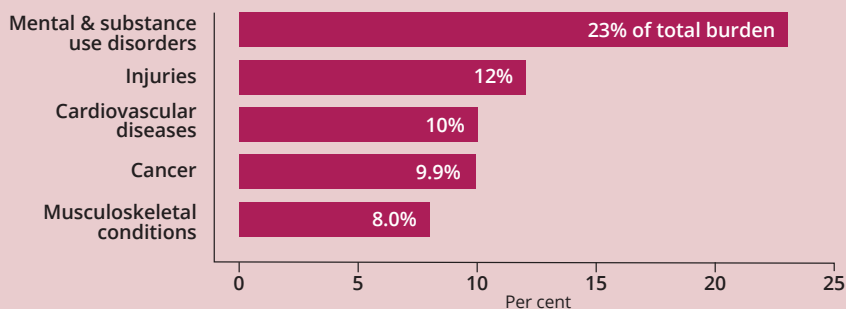


Among Indigenous Australians, the median age at death increased from:



### Burden of disease

Among Indigenous Australians, the leading disease groups contributing to total burden in 2018 were:



### Social and emotional wellbeing

Social and emotional wellbeing is the foundation of physical and mental health for Indigenous Australians. It is a holistic concept that includes mental health and illness but also encompasses the importance of connection to land, culture, spirituality and ancestry, and how these affect the wellbeing of the individual and the community.



In 2018–19, an estimated 24% of Indigenous Australians reported having a diagnosed mental health or behavioural condition and 3 in 10 (31%) Indigenous adults reported 'high or very high' levels of psychological distress.

Find out more: [Indigenous health and wellbeing](#)

## Determinants of health

For Indigenous Australians, social determinants of health include factors such as cultural identity, family, participation in cultural activities and access to traditional lands. Factors related to Indigenous community functioning are also important determinants of Indigenous health and wellbeing.

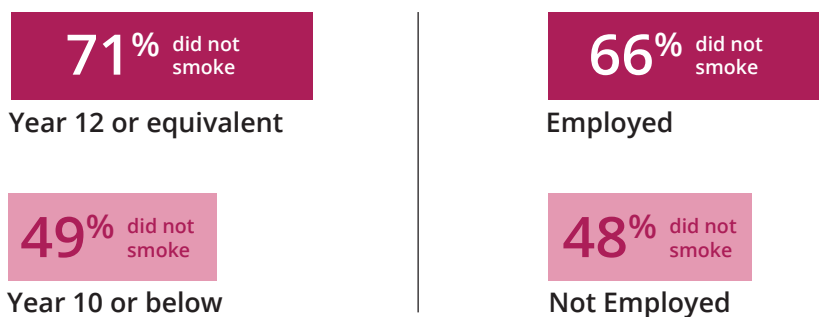
Colonisation is recognised as having a fundamental impact on the disadvantage and poor health of Indigenous peoples worldwide, through social systems that maintain disparities. Cultural factors – such as connection to Country and caring for Country, knowledge and beliefs, language, self-determination, family and kinship, and cultural expression – can be protective, and positively influence Aboriginal and Torres Strait Islander people’s health and wellbeing.

### Socioeconomic and environmental factors

An AIHW analysis of results from 2018-19 ABS health survey data estimated that:

- around one-third (34%) of the health gap (the differences in health outcomes) between Indigenous and non-Indigenous Australians was due to social determinants (employment and hours worked, highest non-school qualification, level of schooling completed, housing adequacy and household income)
- just under one-fifth (19%) of the gap was due to health risk factors (risky alcohol consumption, high blood pressure, overweight and obesity status, inadequate fruit and vegetable consumption, physical inactivity and smoking).

There is significant interaction and overlap between social determinants and health risk factors. For example, in 2018–19, the proportion of Indigenous Australian adults who did not smoke differed by employment status and educational attainment:



Find out more: [Determinants of health for Indigenous Australians](#)



## Health system



Access to appropriate, high-quality and timely health care throughout life is essential for improving health outcomes for Indigenous Australians. Some aspects of health system performance for Indigenous Australians have improved over the last decade. However, barriers affecting their access remain, and Indigenous Australians have less access to health services compared with non-Indigenous Australians.

### 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 Indigenous Australians. A culturally safe health system is one that respects Indigenous cultural values, strengths and differences, and addresses racism and inequity. It also requires health professionals and health services to be culturally responsive, to take action to overcome racism and power imbalances, and to have active engagement with Indigenous clients/patients to ensure that the system meets their needs.

### Summary of health system performance

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

-  an increase in Indigenous women accessing antenatal care in their first trimester of pregnancy
-  increased immunisation rates for Indigenous children (with the vast majority being fully immunised at 5 years)

Some areas of health system performance that have worsened for Indigenous Australians over the most recent decade include:

-  increases in the rate of preventable hospitalisations
-  increases in the rate of people taking their own leave from hospital before completing treatment.

Find out more: [Indigenous Australians and the health system](#)

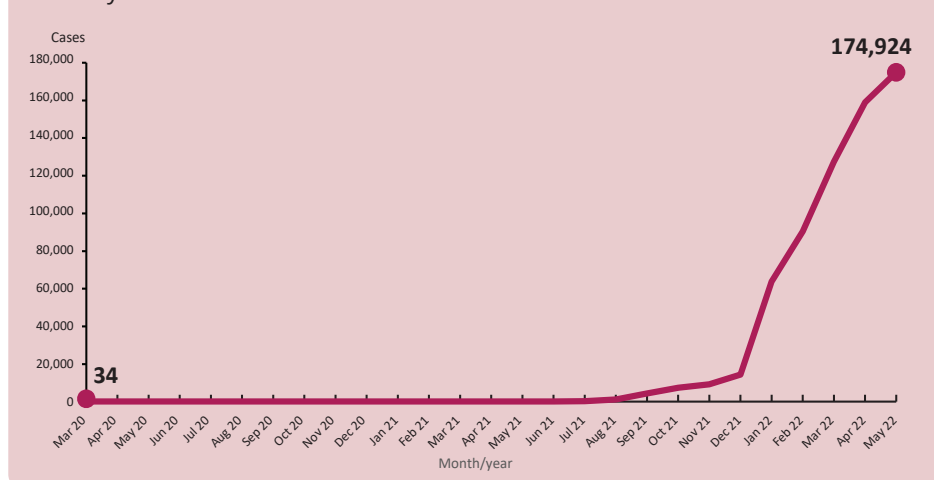
## Indigenous Australians and COVID-19

Since the start of the pandemic up until 22 May 2022, among Indigenous Australians there have been:

- nearly 175,000 confirmed COVID-19 cases notified, 2.5% of all cases in Australia:
  - with the cumulative number of cases for Indigenous Australians increasing rapidly from 171 by June 2021 (or less than 1% of all cases in Australia) to around:



Cumulative number of PCR confirmed and RAT positive COVID-19 cases among Indigenous Australians, by notification date (year and month), 1 January 2020 - 22 May 2022



The accuracy of the number of COVID-19 cases has varied since the start of the pandemic and the latest counts for Indigenous Australians are likely to be an underestimate. In particular, there have been variations in the proportion of records with missing Indigenous status, as well as differences in the timing and completeness jurisdictional data.

Up until 10 April 2022, among Indigenous Australians there have been:

- 107 deaths with COVID-19 reported
- 275 cases admitted to intensive care units.

By 30 April 2022, 60% of Indigenous children aged 12–15 years were fully vaccinated (received 2 doses) against COVID-19 compared with 80% for all 12–15-year-olds.

In the first 18 months of the pandemic, with a focus on March–June 2020 (a period when all states and territories enacted some form of the public health measures and when cases of COVID-19 among Indigenous Australians were still low), health service use changed for Indigenous Australians. In particular:



Telehealth accounted for nearly 412,800 (8.8%) of the 4.7 million claims for non-referred (GP) consultations in 2019–20, compared with just under 3,300 claims for non-referred GP consultations by video conference in 2018–19. The increase follows the introduction of MBS rebates for telephone consultations and the expanded eligibility for video conferencing items on or after 13 March 2020.



Claims for Indigenous health checks decreased slightly across all ages, with the decline starting in March 2020 and continuing through 2020–21.



In March–June 2020 (compared with March–June 2019), emergency department (ED) presentations were 10% lower (around 19,000 fewer ED presentations); hospitalisations (excluding dialysis) were 9.7% lower (around 10,000 fewer hospitalisations); and elective surgeries were 31% lower (about 3,100 fewer elective surgeries). This trend directly related to the restrictions placed on performing surgeries classified as less urgent (categories 2 and 3).



In the period 1 July 2020 to 30 June 2021, ED presentations and elective surgeries appeared to be in-line with pre-pandemic levels and trends.

At the time of publication, the only national data available on the included health services from July 2021 onwards (the period that included the outbreaks of the Delta and Omicron variants) were claims for Indigenous health checks. Future work will focus on this period.

Find out more: [Chapter 1](#) and [Chapter 3](#) *Australia's health 2022: data insights*.

# 7

## Health of population groups





Most Australians can expect to enjoy long and relatively healthy lives, however, some population groups have different experiences of health than others.

Generally, the higher a person's socioeconomic position, the better their health. If all Australians had experienced the same disease burden as people living in the highest socioeconomic areas in 2018, the total burden could have been reduced by one-fifth (21%).

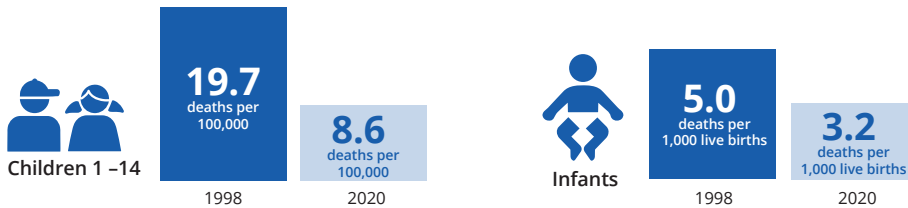


## Children

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

### Are infant and child death rates falling?

The death rate for infants (under 1) and children aged 1–14 has fallen:



In 2020, infant deaths (deaths under one year of age) accounted for 7 in 10 (71%) deaths among all children aged 0–14. Infant mortality is an important indicator of the general health and wellbeing of a population and declines in death rates over time are a positive improvement.

### Do children eat enough fruit and vegetables?

Although most (72%) Australian children (aged 5–14) ate the recommended amount of fruit, they did not eat enough vegetables (only 4.4%) in 2017–18.

### How many children are overweight or obese?

While the majority of children aged 5–14 (67% or an estimated 2 million) were a normal weight in 2017–18, around 1 in 4 (24% or an estimated 746,000) were overweight or obese. The prevalence of overweight and obesity has remained relatively stable since 2007–08.

### What are the overall leading causes of disease burden for children?

In 2018, 4 of the 5 leading causes of total disease burden for children aged 5–14 years were related to mental health conditions:

- 1 Asthma
- 2 Anxiety disorders
- 3 Depressive disorders
- 4 Conduct disorder
- 5 Autism spectrum disorders



## Young people

Youth is a key transition period in a person's life. The health of young people can influence how likely they are to achieve better educational outcomes, make a successful transition into full-time work, develop healthy adult lifestyles, and experience fewer challenges forming families and parenting.

### How common are deaths among young people?

The death rate among young people (aged 15–24) has fallen:



2009



2020

### What is the leading cause of death among young people?

Injuries were the leading cause of death among young people in 2020, accounting for 73% of deaths for 15–24-year-olds. More than half (52%) of all injury deaths were caused by intentional self-harm (suicide).

### How many young people use mental health services?

Rates of high or very high psychological distress in people aged 18–24 increased from 12% in 2011–12 to 15% in 2017–18.

In 2020–21, around one-third (32%) of Australians aged 12–24 received a Medicare-subsidised mental health-specific service, an increase from more than one-quarter (28%) in 2019–20.

### How many young people are not smoking?

In 2019, an estimated 97% of people aged 14–17 and 80% of people aged 18–24 had never smoked tobacco. The proportion of people aged 14–17 who had never smoked increased:





## Older people

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

### Are older people living longer?

We know life expectancy at birth has improved over the last century. However, another way to measure life expectancy is through the remaining life expectancy at a given age.

Men aged 65 in 2018–2020 could expect to live another 20.3 years (to 85.3); women could expect to live another 23.0 years (to 88). These life expectancies from age 65 are longer than in the past:



### What is the leading cause of death among older Australians?

Coronary heart disease is the overall leading cause of death among older Australians. However, there were differences in the leading cause of death across older age groups during 2018–2020:

	65–74	75–84	85–94	95+
1st	Lung cancer (10.2%)	Coronary heart disease (10.0%)	Dementia (15.0%)	Dementia (18.2%)
2nd	Coronary heart disease (9.6%)	Dementia (8.4%)	Coronary heart disease (12.3%)	Coronary heart disease (14.4%)
3rd	Chronic obstructive pulmonary disease (5.9%)	Lung cancer (6.5%)	Cerebrovascular disease (8.0%)	Cerebrovascular disease (8.9%)

Dementia is a leading and growing cause of death among older Australians, particularly women; it is the leading cause of death for women aged 75 and over.

### How many older Australians visit the GP?

Most older Australians see a GP. In 2019–20:

- an estimated 3.7 million people aged 65 and over saw a GP at least once (95% of all older people).
- there were 43 million Medicare claims for unreferral GP attendances for people aged 65 and over – 30% of the total 141 million claims for unreferral GP attendances.

Find out more: [Health of older people](#), [Causes of death](#)





## People with disability

An estimated 1 in 6 people in Australia (17.7% or 4.4 million people) had disability in 2018, including about 1.4 million people (5.7% of the population) with severe or profound disability.

In general, people with disability report poorer general health and higher levels of psychological distress than people without disability. They also have higher rates of some modifiable health risk factors and behaviours, such as poor diet and tobacco smoking, than people without disability.

For example:

- In May 2021, 29% of adults with disability reported self-assessed excellent or very good physical health, compared with 55% of adults without disability.
- In June 2021, 29% of adults with disability reported high or very high levels of psychological distress, compared with 17% of adults without disability.

Find out more: [Health of people with disability](#)



## Rural and remote health

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

People living in *Remote* and *Very remote* areas generally have poorer access to health services than people in regional areas and *Major cities*. When compared with *Major cities*:

- Rates of potentially preventable hospitalisations in 2019–20 were 2.6 times as high for people living in *Very remote* areas and 1.8 times as high for people living in *Remote areas*
- Rates of potentially avoidable deaths in 2020 were 3.0 times as high for females and 2.1 times as high for males in *Very remote* areas.

Medicare claims data from 2020–21 show that the numbers of non-hospital non-referred attendances per person, such as GP visits, were lower in *Remote* and *Very remote* areas (4.7 and 3.4 per person respectively), than in *Outer regional* areas (6.1 per person), *Inner regional* areas and *Major cities* (6.8 per person for each area).

Find out more: [Rural and remote health](#)

Find out more about other population groups at: [Health across socioeconomic groups](#), [Health of prisoners](#), [Health of mothers and babies](#), [Health of veterans](#), [Health of people experiencing homelessness](#).

# 8

How do we  
compare  
internationally?



Australia performs well or better than many other comparable countries for some measures of health, including life expectancy and smoking rates. However, there is room for improvement. Australia ranked above the Organisation for Economic Co-operation and Development (OECD) average for alcohol consumption and obesity rates.

### Australia's ranking among OECD member countries for selected health measures and health risk factors<sup>(a)</sup>



(a) Based on data from 2020 or nearest available year.

Find out more: [International health data comparisons](#)

# 9

## The importance of health information



# Our health information

High quality information in many areas of health enables us to better understand and improve health behaviours, health care and outcomes, and to identify possible areas for improvement. Some sources of health data include:



data collected from health service use  
(for example clinical records)



surveys



clinical trials and other research



emerging data sets, including surveillance monitoring systems  
(for example the National Ambulance Surveillance System).

Data from other sectors (for example, education), also contribute to an understanding of the health and wellbeing of the population.

## Health data during the COVID-19 pandemic

Health data have been critical in managing the response to the COVID-19 pandemic because governments have needed immediate information to make swift, evidence-based decisions to prevent the spread, and minimise the impact, of the disease. This also includes the use of data to help understand the indirect impact of the pandemic on other areas such as employment, mental health, and family violence.

More than any other recent event, COVID-19 has demonstrated the need for timely data. The pandemic saw the reporting of daily COVID-19 cases and admissions to hospitals and intensive care units.

The pandemic propelled health and health data into the spotlight, highlighting some gaps in the information we have, but opening the door to innovation and transformation of the health information landscape.

For more information about how COVID-19 has impacted our health, see [Chapter 2: How has COVID-19 affected our health?](#)

# Gaps in health information and filling those gaps

Despite ongoing information improvements and enhancements, there are aspects of health and the health system that we don't have adequate information on. Gaps exist where there are no national or sub-national data currently available or where data collected are not comprehensive or in a format that we can analyse or use them meaningfully.

Some gaps in Australian health data include:

- a lack of person-centred data. Some data are event rather than person based and it is not always possible to see how people use a single service many times or multiple services
- data on primary health care service use and outcomes
- information on some population groups – such as culturally and linguistically diverse (CALD) populations and refugees
- limited measures of health system efficiency and cost-effectiveness.

The AIHW works with governments, data providers, independent bodies and the non-government sector, to enhance existing data collections or to create new ones and fill data gaps.

## Linking data to fill gaps

While there are many ways to fill data gaps, data gaps are increasingly filled by creating new linked data assets (combining information from multiple databases, while preserving privacy). Data linkage can support more meaningful insights by enabling data from one database to supplement data in another.

Linking the Australian Immunisation Register (AIR) to the Multi-Agency Data Integration Project (MADIP) is an example of how timely linkage can increase the usefulness of data by forming new insights.

Australia's COVID-19 vaccination roll-out is a national priority that aims to ensure all Australians who want to be vaccinated can be.

Enhanced de-identified information from weekly integration of AIR data with the MADIP supports detailed and targeted analysis to understand and foster progress of the roll-out. Without having to collect new data, the integrated data set allows for deeper analysis of vaccination trends by occupation and industry, and by different groups, such as people from culturally and linguistically diverse backgrounds, and helps identify priority cohorts (such as people with disability or chronic health conditions) – all while protecting people's privacy.

Find out more: [Chapter 6, 7 and 10 Australia's health 2022: data insights](#)

# Measuring our health and healthcare performance

Health data can be brought together from a range of sources to evaluate our health and health system, track changes over time, and compare data between population groups, geographic areas, or even between countries.

The [Australian Health Performance Framework](#) (the framework) is a navigational tool that supports system-wide reporting of Australia's:



**Health status**



**Health care performance**



**Health system**

The framework provides a way to describe and study specific aspects of health and health system performance, under the following domains: determinants of health, health status and the health system. Using a range of measures from the framework, we know that in general, Australians enjoy good health and have an effective health system.

For example, the health of Australians is improving in many areas:



**Incidence of heart attacks are falling.** The age-standardised (that is, after adjusting for differences in the age structure of the population) rate of acute coronary events fell by more than half (57%) between 2001 and 2019.



**Cancer survival rates are increasing.** Five-year survival for people diagnosed with cancer increased, from 52% in 1989–1993 to 70% in 2014–2018.



**Fewer children are exposed to tobacco smoke in the home.**

Fewer dependent children were exposed to daily tobacco smoke inside the home, declining from 19.7% in 2001 to just 2.1% in 2019.

However, there are still areas of concern. For example:



**More adults are overweight or obese.** The proportion of adults who were overweight or obese increased from 57% in 1995 to 67% in 2017–18.



**Patients are waiting longer to be seen.** In 2020–21, 71% of presentations to emergency departments were seen on time, down from 74% in 2019–20.

*Find out more:* Learn more about the framework or explore data at [Australia's health performance](#)

*Australia's health 2022: in brief* presents a holistic summary of health in Australia with key findings on the health system, the health of Australians and factors that can influence our health.

*Australia's health 2022* is the 18th biennial health report of the Australian Institute of Health and Welfare. This edition's full product suite comprises:

- *Australia's health 2022: data insights*
- *Australia's health: topic summaries*
- *Australia's health 2022: in brief.*



Stronger evidence,  
better decisions,  
improved health and welfare