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# Aboriginal and Torres Strait Islander Health Performance Framework Summary report

March 2024





# **Aboriginal and Torres Strait Islander Health Performance Framework**

**Summary report March 2024**

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# Aboriginal and Torres Strait Islander Health Performance Framework - Summary report March 2024

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This report summarises the latest information health outcomes, health system performance and the broader determinants of health for Aboriginal and Torres Strait Islander (First Nations) people, drawing from the Health Performance Framework (HPF) measures.

A pdf copy of the web report is available for download below (version released on 21 March 2024). Please check the online version for any available updates.

This release incorporates updates from the following measures: [1.01 Birthweight](#), [1.06 Acute rheumatic fever and rheumatic heart disease](#), [1.12 HIV, hepatitis and sexually transmissible infections](#), [1.20 Infant and child mortality](#), [1.21 Perinatal mortality](#), [2.11 Contact with the criminal justice system](#), [2.12 Child protection](#), [2.21 Health behaviours during pregnancy](#), [3.01 Antenatal care](#), [3.06 Access to hospital procedures](#), [3.07 Selected potentially preventable hospital admissions](#), [3.09 Self-discharge from hospital](#).

## Overview

In 2018, the burden of disease among Aboriginal and Torres Strait Islander (First Nations) people was 2.3 times that of non-Indigenous Australians. Among First Nations people, mental and substance use disorders were the leading contributor to disease burden (24%).

Measures of health status (Tier 1), determinants of health (Tier 2), and health system performance (Tier 3) drawn from the Aboriginal and Torres Strait Islander Health Performance Framework (HPF) show mixed results. It is important to note that measures in the 3 tiers are interconnected, and understanding the reasons for progress (or lack thereof) in the health status and outcomes of First Nations people may often be best understood by examining relevant measures in determinants of health and health system performance.

AIHW analysis of ABS health survey data for 2017–19 showed that an estimated 35% of the total health gap between First Nations people and non-Indigenous Australians was explained by social determinants (e.g. employment, income, education, housing), and a further 30% by selected health risk factors (e.g. smoking). Around 35% of the gap was unexplained, reflecting factors that could not be included in the analysis. For example, these factors may include access to affordable and culturally appropriate health care services, connection to Country and language, and effects of structural disadvantage and racism.

First Nations people are often found to have relatively poorer access to health services than non-Indigenous Australians in relation to need, for a range of reasons, including barriers such as availability, cost and a lack of culturally appropriate health services. The HPF measures have a particular focus on differences by remoteness, given that in general, First

Nations people living in rural and remote areas are more likely to live with, and die prematurely from, a disease or injury.

The HPF highlights that enhanced health services and continued improvement in, and access to, comprehensive, culturally appropriate and safe primary health care services are needed to support improvements in the health and reduce the burden of disease among First Nations people.

For First Nations people, self-determination and empowerment, cultural identity, family and kinship, Country and caring for Country, knowledge and beliefs, language and participation in cultural activities and access to traditional lands are also key determinants of health and wellbeing.

The HPF shows improvements in some aspects of First Nations people’s health and social determinants, while other aspects have either not improved or worsened.

Across the HPF measures, in the last decade or so, there have been improvements in health-related measures such as smoking (including during pregnancy), attendance at antenatal care, immunisation, health assessments, chronic disease management, early detection and early treatment, deaths from cardiovascular and kidney diseases, and self-discharge from hospital. Social determinants such as Year 12 attainment, employment and home ownership, and youth detention have also improved.

However, there has been little or no progress in some measures, while some others have worsened. For example, measures such as birthweight, infant and child mortality, perinatal mortality, diabetes mortality, avoidable mortality and potentially preventable hospitalisations have shown little or no progress; while measures of suicide, death from cancer, female hospitalisation for assault, children in out-of-home care, and adult imprisonments have all worsened.

Avoidable mortality	Perinatal and infant mortality	Cardiovascular and kidney disease mortality
Over the decade from 2010 to 2019, the rate of potentially avoidable deaths among First Nations people did not change significantly, nor did the gap between First Nations people and non-Indigenous Australians.	Between 2011 and 2020, there was no significant change in perinatal death rates for babies born to First Nations mothers, nor in First Nations infant death rates (between 2012 and 2021).	Over the decade from 2010 to 2019, the rate of death due to cardiovascular disease and kidney disease for First Nations people decreased by 18% and 36%, respectively.
Smoking	Employment	Year 12 attainment
The proportion of First Nations people aged 15 and over who smoke daily fell from 45% in 2008 to 37% in 2018–19. Smoking accounted for 47% of the burden of disease due to respiratory disease, 37% of the burden of disease due to cancer and 34% of the burden due to cardiovascular disease in 2018.	For First Nations people aged 25–64, the employment rate increased from 51.0% in 2016 to 55.7% in 2021. The proportion of First Nations people aged 25–64 who were employed increased with level of educational attainment.	From 2011 to 2021, the proportion of First Nations people aged 20–24 who had completed Year 12 or equivalent increased from 52% to 68%. The gap in attainment rates between First Nations people and non-Indigenous Australians aged 20–24 also decreased over the decade from 34 to 23 percentage points.

Youth justice supervision	Barriers to health care access	Health workforce
<p>Over the decade from 2012–13 to 2021–22, the rate of First Nations young people aged 10–17 years under youth justice supervision fell from 180 to 121 per 10,000 youth. This comprised a 34% decline in the rate of community-based supervision and a 25% decline in the rate of detention.</p>	<p>In 2018–19, 3 in 10 (30%) First Nations people who needed to go to a healthcare provider did not. Barriers included cost, and health services being unavailable, far away or because of long waiting times.</p>	<p>Between 2011 and 2021, the rate of First Nations people aged 15 and over employed in health-related occupations increased from 255 to 309 per 10,000, with increased numbers of nurses and midwives accounting for 54% of this increase.</p> <p>In 2021, First Nations people were employed in health-related occupations at about 60% the rate of non-Indigenous Australians (309 compared with 515 per 10,000).</p>

# 1. Introduction

The *Aboriginal and Torres Strait Islander Health Performance Framework summary report* provides the latest information on the health and welfare of First Nations people, compiling key facts from the Health Performance Framework (HPF) measures.

In May 2023, for the first time, the summary report has been released in a web report format to facilitate more regular updates. The previous summary report (published in PDF format in 2020) is available from [Publications](#).

Since 2020, detailed HPF findings and data have been presented together on a dedicated website: [indigenoushpf.gov.au](http://indigenoushpf.gov.au). The website includes:

- comprehensive national and state and territory reporting
- supplementary data tables
- interactive data visualisations.

The measures also include sections on research and evaluations. These provide insights into aspects of health and service delivery that are not easily captured in administrative data sets, but can demonstrate characteristics of communities and services that are working well or need improvement.

In the future, feature articles will also be published on the [Aboriginal and Torres Strait Islander Health Performance Framework](#) website to further explore insights from key data and research, exploring particular topics across HPF measures. The first feature article *Key factors contributing to low birthweight among Aboriginal and Torres Strait Islander babies* was released in May 2022. This feature article examines birthweight among First Nations babies, with a focus on identifying factors contributing to low birthweight.

## Terminology

Aboriginal and Torres Strait Islander (First Nations) people are the first peoples of Australia. They are not one group, but comprise hundreds of groups that have their own distinct set of languages, histories and cultural traditions.

The term 'First Nations people' is now the preferred term used by the AIHW when referring to Aboriginal and Torres Strait Islander people. Across the HPF website, 'Indigenous Australians' is also used. As content in the HPF website is updated, this will be progressively updated to 'First Nations people'.

Note that references to 'First Nations people' on this website refers to First Nations people in Australia only. Where data are compared with those for indigenous people internationally, for clarity, 'Aboriginal and Torres Strait Islander people' will be used.

In most Australian data collections, 'First Nations people' refers to people who have identified themselves or have been identified by a representative (for example, their parent or guardian), as being of Aboriginal and/or Torres Strait Islander origin. For a few data collections, such as those associated with government grants and payments, information on acceptance of a person as being First Nations by a First Nations community may also be required.

See also [Glossary](#).

## Interpretation of results

Some results are restricted to states and territories where information on Indigenous status is considered of sufficient quality. This is noted throughout the report.

Given the differences in the age structure between the First Nations people and non-Indigenous Australians populations, age-standardised rates have been used in this report when comparing the 2 populations and when looking at change over time within the First Nations population. Where age-standardised rates have been used, this is stated in the relevant sections of the report.

Improvements in data quality and changes in Indigenous identification in several important data sets have a major bearing on the interpretation of the findings, and can impact the interpretation of changes in outcomes. This is particularly important for mortality data, the Census, and the population estimates derived from the Census that form the denominators for many of the statistics across data sets.

Note that for rate calculations the HPF is currently using [Estimates and Projections, Aboriginal and Torres Strait Islander Australians, 2006–2031 published by Australian Bureau of Statistics \(abs.gov.au\)](#). The base population is the Aboriginal and Torres Strait Islander estimated resident population of Australia at 30 June 2016, derived from 2016 Census counts of Aboriginal and Torres Strait Islander people, and adjusted for net undercount as measured by the Post Enumeration Survey (PES). New estimates and projections for the Aboriginal and Torres Strait Islander population, based on 2021 Census counts, are expected for release in July 2024.

For more information, see [Technical appendix](#).

## The Aboriginal and Torres Strait Islander Health Performance Framework

Since 2006, Aboriginal and Torres Strait Islander Health Performance Framework (HPF) reports have provided information about health outcomes, key drivers of health and the performance of the health system for First Nations people.

The HPF was designed, in consultation with First Nations stakeholder groups, to promote accountability, inform policy and research, and foster informed debate about the health of First Nations people.

## **The Aboriginal and Torres Strait Islander Health Performance Framework**

The HPF is made up of 68 measures across 3 levels, or *tiers*:

Tier 1: Health status and outcomes

Tier 2: Determinants of health

Tier 3: Health system performance

Each HPF measure represents a health-related concept that is explored in detail, using various indicators drawn from relevant data sources and research. It is important to note that measures in the 3 tiers are interconnected, and understanding the reasons for progress (or lack thereof) in the health status and outcomes of First Nations people (Tier 1) may often be best understood by examining relevant measures in Tier 2 (determinants of health) and Tier 3 (performance of the health system).

The HPF analyses variation within the population of First Nations people by age, geography, and other key characteristics and providing insights through research and evaluations. The HPF also analyses trends across the measures and draws implications for further improvement. This helps identify what is working well and how to better target policy and services to meet the needs of First Nations people.

The HPF reporting process is overseen by a Steering Committee made up of First Nations representatives and other stakeholders. These include:

- a First Nations person as Chair
- the National Aboriginal Community Controlled Health Organisation
- the Australian Institute of Health and Welfare
- the National Indigenous Australians Agency
- the Australian Government Department of Health and Aged Care
- representatives from 2 or 3 State and Territory Governments
- two or three non-government representatives with data expertise relating to First Nations people.

The design of the HPF recognises that the health system and factors beyond the health sector contribute to health outcomes, and that achieving better health outcomes requires a whole-of-government approach, working in partnership with First Nations people (AHMAC 2006).

Information from HPF reporting has been used, in part, to monitor progress towards improving health and wellbeing outcomes for First Nations people outlined in the National Agreement on Closing the Gap (the National Agreement).

A key theme of Tier 3: Health system performance from the research and evaluations cited in the HPF measures is the importance of culturally competent service delivery, and the need to partner with and share decision-making with First Nations people in the design of services and programs that affect them.

While there are organisations across sectors that provide culturally competent services to First Nations people, the HPF highlights the crucial role of Aboriginal Community Controlled Health Services (ACCHS). ACCHSs are operated and governed by the local community to deliver holistic, comprehensive and culturally safe primary health services (NACCHO 2022). The HPF also highlights where mainstream services are not adequately meeting the needs of First Nations people, or where there are service gaps.

The [Cultural safety in health care for Indigenous Australians: monitoring framework](#) aims to measure progress in achieving cultural safety in the Australian health system by bringing together data focusing on:

- culturally respectful health care services
- patient experience of health care among First Nations people
- access to health care.

## Closing the Gap

In July 2020, the [National Agreement on Closing the Gap](#) was developed in partnership between Australian governments and the Coalition of Aboriginal and Torres Strait Islander Peak Organisations (the Coalition of Peaks). The National Agreement has been built around 4 Priority Reforms that will change the way governments work with First Nations people. These reforms outline obligations for governments to work in partnership; share decision making; build the community-controlled sector; transform government organisations; and provide shared access to regional level data.

This agreement provides a framework to address the entrenched inequality faced by First Nations people so that their life outcomes are equal to all Australians.

### **The National Agreement on Closing the Gap, July 2020**

Closing the Gap is a government framework aiming to reduce disadvantage among First Nations people. In 2008, the Australian government first agreed to targets to 'close the gap' between First Nations people and non-Indigenous Australians in life expectancy, child mortality, education and employment. With 4 of the 7 targets expiring unmet, a new approach was needed.

The National Agreement is a marked shift in the approach to the Closing the Gap framework. The agreement represents the culmination of a significant amount of work by the Joint Council on Closing the Gap in partnership between all Australian governments and the Coalition of Aboriginal and Torres Strait Islander Peak Organisations.

This was the first time an agreement designed to improve life outcomes for First Nations people had been developed with First Nations people. The agreement was launched on 30 July 2020 by former Prime Minister Scott Morrison, Minister for Indigenous Australians Ken Wyatt, and Pat Turner, the convenor of the Coalition of Peaks – a representative body of more than 50 First Nations community controlled peak organisations that have come together to partner with Australian governments on closing the gap.

The National Agreement is available at [Closing the Gap](#). The Agreement has been built around 4 Priority Reforms:

- Priority reform 1 – Formal partnerships and shared decision making.
- Priority reform 2 – Building the community-controlled sector.
- Priority reform 3 – Transforming government organisations.
- Priority reform 4 – Shared access to data and information at a regional level.

The Agreement also includes 17 socioeconomic outcomes and targets – see Table 1.1.

The [National Aboriginal and Torres Strait Islander Health Plan 2021–2031](#) (the Health Plan), provides a strong overarching policy framework for First Nations health and wellbeing and is the first national health document to address the health targets and priority reforms of the National Agreement (Department of Health and Aged Care 2021b). Data relevant to some of

these targets are presented within this summary report. Assessment of progress against the targets by the Productivity Commission is available from the [Closing the Gap Information Repository](#).

As reporting on the National Agreement targets and the Health Plan progresses, the HPF will need to adapt. This might mean changing existing measures or adding other measures into the future.

**Table 1.1. National Agreement on Closing the Gap – socioeconomic outcomes and targets**

<b>Outcome</b>	<b>Target</b>
1 Aboriginal and Torres Strait Islander people enjoy long and healthy lives.	Close the Gap in life expectancy within a generation, by 2031.
2 Aboriginal and Torres Strait Islander children are born healthy and strong.	By 2031, increase the proportion of Aboriginal and Torres Strait Islander babies with a healthy birthweight to 91 per cent.
3 Aboriginal and Torres Strait Islander children are engaged in high quality, culturally appropriate early childhood education in their early years.	By 2025, increase the proportion of Aboriginal and Torres Strait Islander children enrolled in Year Before Fulltime Schooling (YBFS) early childhood education to 95 per cent.
4 Aboriginal and Torres Strait Islander children thrive in their early years.	By 2031, increase the proportion of Aboriginal and Torres Strait Islander children assessed as developmentally on track in all five domains of the Australian Early Development Census (AEDC) to 55 per cent.
5 Aboriginal and Torres Strait Islander students achieve their full learning potential.	By 2031, increase the proportion of Aboriginal and Torres Strait Islander people (age 20–24) attaining Year 12 or equivalent qualification to 96 per cent.
6 Aboriginal and Torres Strait Islander students reach their full potential through further education pathways.	By 2031, increase the proportion of Aboriginal and Torres Strait Islander people aged 25–34 years who have completed a tertiary qualification (Certificate III and above) to 70 per cent.
7 Aboriginal and Torres Strait Islander youth are engaged in employment or education.	By 2031, increase the proportion of Aboriginal and Torres Strait Islander youth (15–24 years) who are in employment, education or training to 67 per cent.
8 Strong economic participation and development of Aboriginal and Torres Strait Islander people and communities.	By 2031, increase the proportion of Aboriginal and Torres Strait Islander people aged 25–64 who are employed to 62 per cent.
9 Aboriginal and Torres Strait Islander people secure appropriate, affordable housing that is aligned with their priorities and need.	A: By 2031, increase the proportion of Aboriginal and Torres Strait Islander people living in appropriately sized (not overcrowded) housing to 88 per cent.  B: By 2031, all Aboriginal and Torres Strait Islander households: <ul style="list-style-type: none"> <li>i. within discrete Aboriginal and Torres Strait Islander communities receive essential services that meet or exceed the relevant jurisdictional standard;</li> <li>ii. in or near to a town receive essential services that meet or exceed the same standard as applies generally within the town (including if the household might be classified for other purposes as a part of a discrete settlement such as a 'town camp' or 'town based reserve').</li> </ul>
10 Aboriginal and Torres Strait Islander adults are not overrepresented in the criminal justice system.	By 2031, reduce the rate of Aboriginal and Torres Strait Islander adults held in incarceration by at least 15 per cent.
11 Aboriginal and Torres Strait Islander young people are not overrepresented in the criminal justice system.	By 2031, reduce the rate of Aboriginal and Torres Strait Islander young people (10–17 years) in detention by at least 30 per cent.
12 Aboriginal and Torres Strait Islander children are not overrepresented in the child protection system.	By 2031, reduce the rate of over-representation of Aboriginal and Torres Strait Islander children in out-of-home care by 45 per cent.
13 Aboriginal and Torres Strait Islander families and households are safe.	By 2031, the rate of all forms of family violence and abuse against Aboriginal and Torres Strait Islander women and children is reduced by at least 50%, as progress towards zero.
14 Aboriginal and Torres Strait Islander people enjoy high levels of social and emotional wellbeing.	Significant and sustained reduction in suicide of Aboriginal and Torres Strait Islander people towards zero.
15 Aboriginal and Torres Strait Islander people maintain a distinctive cultural, spiritual, physical and economic relationship with their land and waters.	A. By 2030, a 15 per cent increase in Australia's landmass subject to Aboriginal and Torres Strait Islander people's legal rights or interests.  B. By 2030, a 15 per cent increase in areas covered by Aboriginal and Torres Strait Islander people's legal rights or interests in the sea.
16 Aboriginal and Torres Strait Islander cultures and languages are strong, supported and flourishing.	By 2031, there is a sustained increase in number and strength of Aboriginal and Torres Strait Islander languages being spoken.
17 Aboriginal and Torres Strait Islander people have access to information and services enabling participation in informed decision-making regarding their own lives.	By 2026, Aboriginal and Torres Strait Islander people have equal levels of digital inclusion

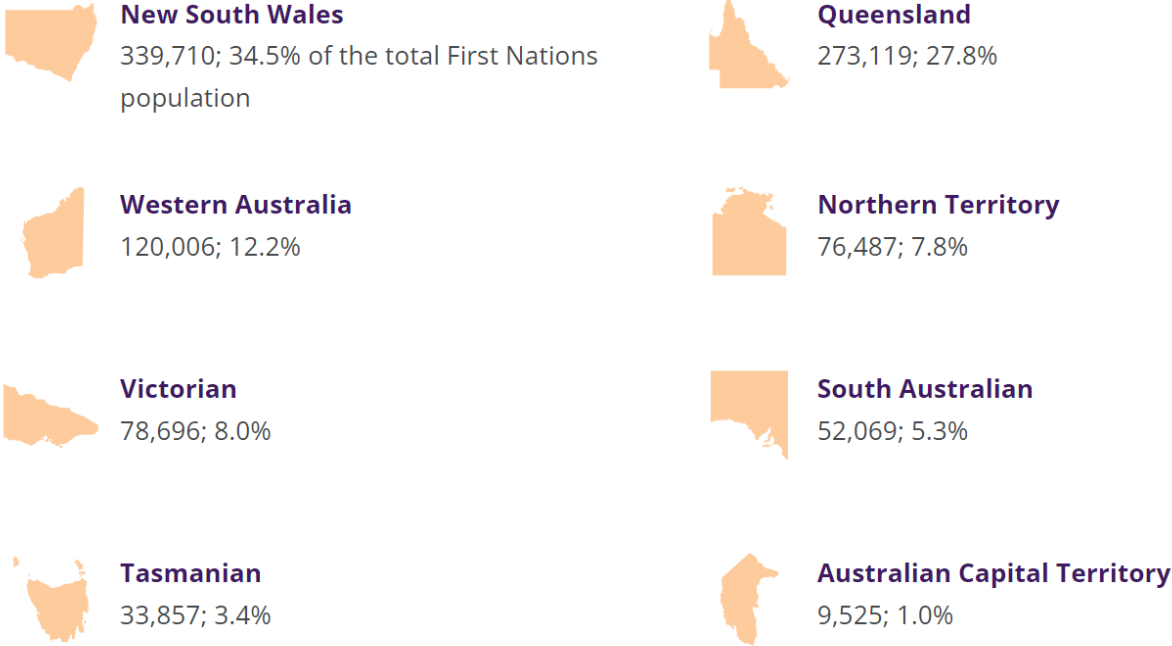
## Structure of this report

- Section 1 'Introduction' presents the background to, and purpose of, the HPF.
- Section 2 'Demographic and social context' presents an overview of the broader social and policy context to the health of First Nations people.
- Section 3 'How First Nations people are faring' presents a summary of key findings from the 2023 Aboriginal and Torres Strait Islander HPF.
- Section 4 'Tier 1 – Health status and outcomes' presents key findings from Tier 1 of the HPF.
- Section 5 'Tier 2 – Determinants of health' presents key findings from Tier 2 of the HPF.
- Section 6 'Tier 3 – Health system performance' presents key findings from Tier 3 of the HPF.
- Section 7 'Additional information' provides information about where to find more detailed data and related information (such as data source information).
- Section 8 'References' provides a list of references used in the Summary report.

# 2. Demographic and social context

According to national population estimates based on the 2021 Census, about 984,000 Australians identified as being Aboriginal and/or Torres Strait Islander, representing 3.8% of the population. Time series data based on the 2021 Census is expected to be released in 2024 (ABS 2021).

In 2021, about 3 in 5 (62%) First Nations people lived in New South Wales and Queensland.



Source: HPF Table D1 – AIHW analysis of Australian Bureau of Statistics (ABS) population estimates based on 2021 Census.

First Nations people are more likely to live in urban and regional areas than remote areas, though the proportion of the total population of First Nations people is generally higher in more remote areas. In 2021:

- 84.6% (832,800 people) of First Nations people lived in non-remote areas: 40.8% lived in Major cities, 24.8% in Inner regional areas and 19.0% in Outer regional areas.
- around 1 in 7 First Nations people (15.4% or 150,900 people) lived in Remote (6.0%) or Very remote areas (9.4%).
- the proportion of the total population in each area who were First Nations increased with remoteness, from 2.2% in Major cities, to 47.1% in Very remote areas (Table 2.1).

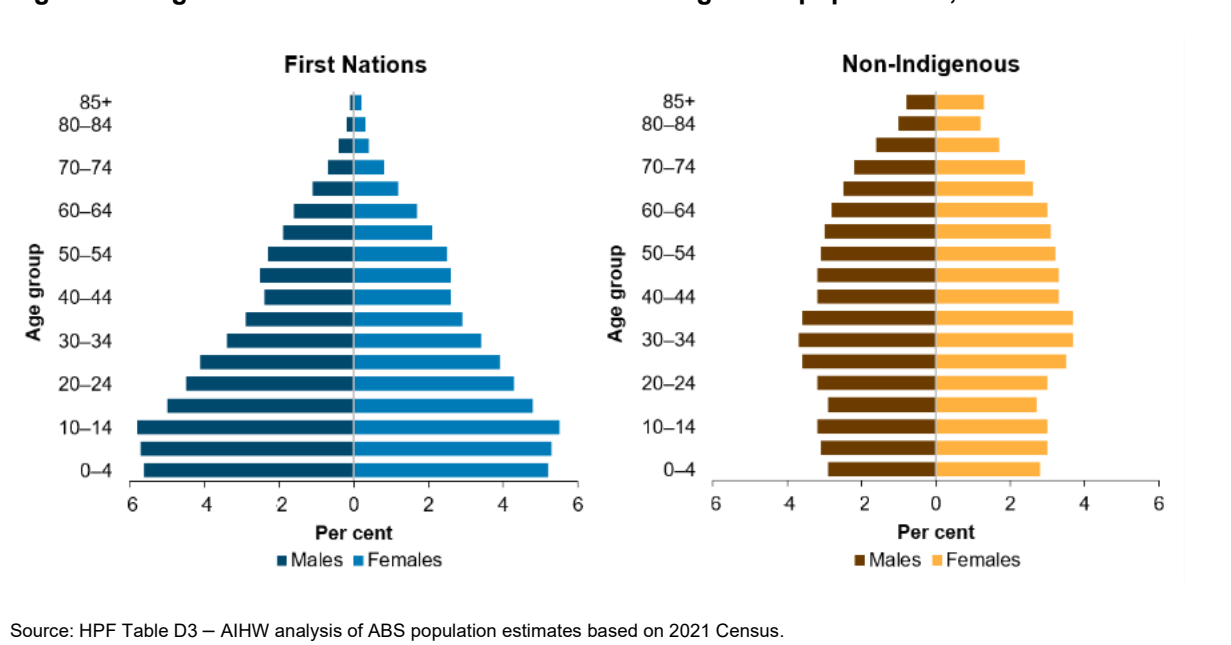
**Table 2.1 First Nations population by remoteness area, 2021**

Remoteness area	Number	Proportion (%) of total First Nations population	Proportion (%) of total population of each area
Major cities	401,674	40.8	2.2
Inner regional	244,012	24.8	5.3
Outer regional	187,150	19.0	9.0
Remote	58,727	6.0	19.6
Very remote	92,146	9.4	47.1

Source: HPF Table D2 — AIHW analysis of ABS population estimates based on 2021 Census.

The First Nations population is relatively young (Figure 2.1). In 2021, one-half of First Nations people were aged under 24 years (median age), and about 1 in 3 (33.1%) First Nations people (about 325,800) were aged under 15, compared with fewer than 1 in 5 (17.9%) non-Indigenous Australians aged under 15.

**Figure 2.1: Age structure of First Nations and non-Indigenous populations, 2021**



Source: HPF Table D3 – AIHW analysis of ABS population estimates based on 2021 Census.

## Cultural and social determinants

There is evidence that cultural factors – Country and caring for Country, knowledge and beliefs, language, self-determination, family and kinship, and cultural expression – can be protective, and positively influence First Nations people’s health and wellbeing (Bourke et al. 2018).

The Mayi Kuwayu Study of Aboriginal and Torres Strait Islander Wellbeing aims to provide more evidence of how culture is related to First Nations people’s health and wellbeing (Australian National University 2020; Thurber et al 2022).

In contrast to cultural protective factors, racism or racial discrimination are associated with poorer physical and mental health (see, for example, Priest et al. 2011 and Paradies et al. 2014). Colonisation is recognised as having a fundamental impact on disadvantage and health among indigenous peoples worldwide, through social systems that maintain disparities (see, for example, Paradies & Cunningham 2012 and Paradies 2016).

Racism can be interpersonal (such as through exclusion, abuse, or stereotyping), or systemic (through policies, conditions, and practices).

Experiences of racism can have an impact on health through:

- reduced access to social resources, including employment, education, housing, health care, and other services
- psychological distress and increased likelihood of engaging in risk behaviours, such as substance use
- injury from assault (Paradies & Cunningham 2012).

Between March and May 2017, the Australian Government Department of Health, together with the Advisory Group on the Implementation Plan for the National Aboriginal and Torres Strait Islander Health Plan 2013-2023, led a consultation process (*My life my lead*) across Australia that examined the role of cultural and social factors on a person's health and wellbeing. These consultations provided an opportunity for First Nations communities and leaders, governments, the non-government and private sectors to inform the [National Aboriginal and Torres Strait Islander Health Plan 2021–2031](#) (released in December 2021).

### **My life my lead – report on the national consultations**

In 2017, the Australian Government released *My life my lead – opportunities for strengthening approaches to the social determinants and cultural determinants of Indigenous health: report on the national consultations*. Four main themes emerged from the consultations:

- Culture is central to the wellbeing of First Nations people, and needs to be an integral part of First Nations-specific services and mainstream services.
- Racism within health and other systems must be addressed to remove barriers and achieve better outcomes in health, education, and employment.
- The effects of trauma across generations of First Nations people must be acknowledged and addressed.
- Governments need to support long-term, coordinated, place-based approaches that honour community priorities and embed participation (Department of Health 2017).

Health is also influenced by social determinants – the circumstances in which people grow, live, work, and age (Commission on Social Determinants of Health 2008) – and individual health risk factors. Income, employment, and education are key social determinants of health that account for a large part of the disparity in First Nations and non-Indigenous health outcomes. Obesity and smoking are identified as the 2 most significant key health risk factors. Section 5 (Tier 2 – Determinants of Health) looks at these and other social determinants of health and risk factors.

## **Recent events**

During 2020, 2 major events with global effects occurred – the COVID-19 (coronavirus disease 2019) pandemic, and the Black Lives Matter protests that followed the death of George Floyd, a 46-year-old African American man, during a police arrest in the United States.

In Australia, there were concerns about the potential impact of COVID-19 on First Nations communities, particularly in remote areas. Black Lives Matter rallies in Australia protested against racism and deaths in police custody of First Nations people.

### **COVID-19 among First Nations people**

During the first 18 months of the pandemic (January 2020 to June 2021), 171 cases of COVID-19 were confirmed among First Nations people, representing less than 1% of all cases in Australia. Case numbers began increasing after this period, due to outbreaks of the Delta and then the Omicron variants.

By the end of 2021, the cumulative number of cases among First Nations people was around 14,400 (AIHW 2022b).

In the subsequent Omicron wave, from 15 December 2021 to 23 October 2022, there have been 316,068 cases of COVID-19 notified for First Nations people (3.5% of all cases in Australia) (Department of Health and Aged Care 2022).

Note that the accuracy of counts of COVID-19 cases has varied over the course of the pandemic, and there has also been variation in the proportion of cases of COVID-19 for which Indigenous status was missing: 3% of records when there were relatively few new cases in Australia; at least 19% between September and December 2021; just under one-half (49%) by mid-January 2022; and 20% by 10 April 2022.

As at 23 October 2022, 279 deaths had been reported among First Nations people, and 521 cases had been admitted to intensive care units (ICUs) (Department of Health and Aged Care 2022). The overall rate of severe disease (defined as ICU admission or death) for First Nations people during the Delta wave (16 June to 14 December 2021) was 16.5 per 100,000, and rose to 76.3 per 100,000 by 23 October 2022 during the Omicron wave (Department of Health and Aged Care 2022). Based on surveillance data supplied by the Department of Health and Aged Care, the rate of severe disease during the Omicron wave to 3 July 2022 for First Nations people was 1.4 times as high as for non-Indigenous Australians (54.0 per 100,000 compared with 37.8 per 100,000 respectively).

For more information on the course of the pandemic among First Nations people, including changes in the use of health services, see [Australia's Health 2022: Data insights](#).

The COVID-19 pandemic and response, and the Black Lives Matter protests, have highlighted recurring themes from First Nations health policy and research in Australia over the past 3 decades, including:

- continuing health inequalities between First Nations people and non-Indigenous Australians
- broader social inequalities between First Nations people and non-Indigenous Australians in areas that can affect health, including housing, education, employment, income, and access to adequate health care and other goods and services
- how well the health system serves the needs of First Nations people
- how governments can work in partnership and share decision-making with First Nations communities and leadership in identifying and responding to health priorities.

In Australia, 2020 also saw the signing of the National Agreement on Closing the Gap. This agreement is based on governments and First Nations people working in partnership and sharing decision-making to support better health and wellbeing outcomes among First Nations people.

More recently in 2023 and 2024, Australia has been experiencing high levels of inflation, with increased cost of living and higher interest rates impacting on housing costs and household disposable income (Reserve Bank of Australia 2023). Higher inflation has the potential to disproportionately impact the lowest income households and contribute to greater inequality, as lower income households spend a greater proportion of their income on essentials, tend

to have fewer savings buffers, and have less scope to adjust spending patterns in response to rising costs (Wood et al. 2023).

On 14 October 2023, Australians voted in a referendum – the first of the 21st century – on whether to amend the Constitution to recognise Aboriginal and Torres Strait Islander peoples by establishing a body known as the Aboriginal and Torres Strait Islander Voice. The referendum did not pass. The Australian Government respects this democratic decision and has reaffirmed its commitment to continue efforts to work with First Nations communities to achieve better outcomes. Moreover, the National Agreement on Closing the Gap and other initiatives will continue to ensure practical progress in areas such as health, education, employment, housing and justice for First Nations peoples.

### 3. How First Nations people are faring

In 2018, the burden of disease among Aboriginal and Torres Strait Islander (First Nations) people was 2.3 times that of non-Indigenous Australians. The leading contributors to burden for First Nations people were, in order: mental and substance use disorders, injuries and chronic diseases such as cardiovascular disease, cancer, musculoskeletal conditions and respiratory disease. In general, people living in rural and remote areas are more likely to live with, and die prematurely from, a disease or injury (AIHW 2022c). This is particularly relevant to First Nations people as the proportion of the First Nations people out of the total population increases with remoteness, from 2.2% in *Major cities* to 47.1% in *Very remote* areas (2021 data) (Table 2.1).

First Nations people have lower access to health services than non-Indigenous Australians, for a range of reasons including barriers such as cost and a lack of accessible or culturally appropriate health services. For First Nations people to have better health outcomes, improvements in the health system and determinants beyond the health sector are required. A large part of the disparity in health outcomes between First Nations people and non-Indigenous Australians is also explained by disparities in social determinants (in particular income, employment, housing and education) – accounting for an estimated 35% of the total health gap between First Nations people and non-Indigenous Australians in 2017–19 (AIHW 2024, *Australia's Health 2024: data insights* forthcoming).

Measures of First Nations people's health status and outcomes drawn from the HPF show mixed results over the most recent decade of data. Key selected findings are presented in the figures below and are described in the subsequent sections.

- It is often difficult to establish the reasons behind improving or worsening health in a population, for several reasons:
- The factors that affect health are complex and are often inter-related.
- The relationship between health and health determinants can work in both directions – while education and employment can affect people's health, health can also affect people's ability to participate in schooling and work.
- Health is shaped throughout life – an adult's health is shaped by their life history, daily living conditions and health behaviours (Osborne et al. 2013).

However, measures across the HPF tiers can provide insights into changing health outcomes – for example, deaths from cardiovascular disease have decreased along with a decreased rate of smoking and increased rates of hospital procedures related to coronary heart disease.

Some key changes in health outcomes, determinants of health, and health system performance are shown in figures 3.1, 3.2 and 3.3, respectively. Note that changes over time cannot be assessed for all measures, as trend data are not available in all cases. When assessing change over time, information from all data points in the series has been considered, rather than just the first and last points in the time trend. Linear regression (based on 'least squares' method) was used when assessing change over time for all trends shown in Figure 3.1 with more than 5 data points.

**Figure 3.1: Key changes in health status and outcomes for First Nations people over time**

Measure	Change over time	Progress
<b>Cardiovascular (circulatory) disease (measure 1.05)</b>		
Decrease in the death rate due to cardiovascular disease (age-standardised per 100,000 population)	<p>269 2010 to 2019 228</p>	✓
<b>Cancer (measure 1.08)</b>		
Increase in the death rate due to cancer (age-standardised per 100,000 population)	<p>210 2010 to 2019 234</p>	✗
<b>Diabetes (measure 1.09)</b>		
No significant change in rate of death due to diabetes for First Nations people (age-standardised per 100,000 population)	<p>76 2010 to 2019 70</p>	--
<b>Kidney disease (measure 1.10)</b>		
Decrease in death rate due to kidney disease (age-standardised per 100,000 population).	<p>31 2010 to 2019 20</p>	✓
<b>Social and emotional wellbeing (measure 1.18)</b>		
Increase in the suicide rate (age-standardised per 100,000 population).	<p>20 2010 to 2019 27</p>	✗
<b>Infant and child mortality (measure 1.20)</b>		
No significant change in the rate of child deaths (0–4 years) (age-specific per 100,000 population).	<p>129 2012 to 2021 127</p>	--
<b>Perinatal mortality (measure 1.21)</b>		
No significant change in the rate of perinatal deaths (crude per 1,000 births).	<p>19 2011 to 2020 17</p>	--
✓ Improved   ✗ Worsened   -- No change		

Note: Infant and child mortality data are from New South Wales, Queensland, Western Australia, South Australia and the Northern Territory combined.

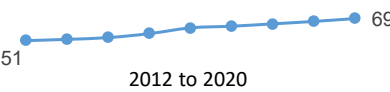
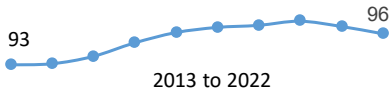
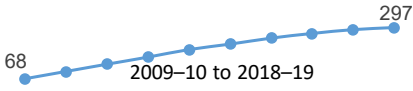
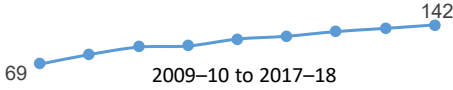




**Figure 3.2: Key changes in determinants of health for First Nations people over time**

Measure	Change over time	Progress
<b>Housing (measure 2.01)</b>		
Increase in the proportion of First Nations people living in appropriately sized housing (%).	<p>75 81 2011, 2016 and 2021</p>	✓
<b>Literacy and numeracy (measure 2.04)</b>		
Increase in the proportion of Year 3 students achieving the national minimum standards in reading (%).	<p>74 84 2012 to 2021</p>	✓
<b>Education outcomes for young people (measure 2.05)</b>		
Increase in the Year 7/8 to Year 12 retention rate (%).	<p>51 59 2012 to 2021</p>	✓
<b>Employment (measure 2.07)</b>		
Increase in the employment-to-population rate among those aged 25–64 (%).	<p>51 56 2011, 2016 and 2021</p>	✓
<b>Contact with the criminal justice system (measure 2.11)</b>		
Decrease in the youth detention rate for ages 10–17 (crude per 10,000 population).	<p>34 28 2012–13 to 2021–22</p>	✓
Increase in the adult imprisonment rate (age-standardised per 100,000 population).	<p>1,630 2,151 2013 to 2022</p>	✗
<b>Tobacco use (measure 2.15)</b>		
Increase in the proportion of First Nations people aged 15–17 who had never smoked (%).	<p>77 85 2012–13, 2014–15 and 2018–19</p>	✓

✓ Improved   ✗ Worsened   -- No change

Note: In the employment data, people who participated in CDEP and received wages from their community were considered as employed in the 2011 Census. This changed in 2016 where people who participated in the CDP received income support payments directly from the Government and were not considered to be employed, unless they had another non-CDP job.

**Figure 3.3: Key changes in health system performance for First Nations people over time**

Measure	Change over time	Progress
<b>Antenatal care (measure 3.01)</b>		
Increase in the proportion of First Nations mothers accessing antenatal care in the first trimester of pregnancy (age-standardised %).		✓
<b>Immunisation (measure 3.02)</b>		
Increase in the proportion of First Nations children fully immunised at age 5 (%).		✓
<b>Early detection and early treatment (measure 3.04)</b>		
Increase in the rate of health checks for First Nations people (crude rate per 1,000 population).		✓
<b>Chronic disease management (measure 3.05)</b>		
Increase in the rate of claims for GPMPs for chronic disease (age-standardised per 1,000 population).		✓
<b>Selected potentially preventable hospital admissions (measure 3.07)</b>		
Increase in the rate of potentially preventable hospitalisations (age-standardised per 1,000 population).		✗
<b>Self-discharge from hospital (measure 3.09)</b>		
Decrease in the proportion of hospitalisations where the patient discharged at own risk (age-standardised %).		✓
Increase in the proportion of emergency department presentations where the patient left at own risk (age-standardised %).		✗
Decrease in the proportion of emergency department presentations where the patient did not wait (age-standardised %).		✓
✓ Improved   ✗ Worsened   -- No change		

**Outcomes have improved for a number of measures**

Over the period from 2012 to 2021, the proportion of First Nations Year 3 students meeting the national minimum standards for reading increased by 11% and the gap with non-Indigenous students narrowed by 33%. Over the same period the proportion of First Nations students in Year 5 meeting the national minimum standards for numeracy increased by 13%. Levels of educational attainment have improved over the decade. Between 2011 and 2021, the proportion of First Nations people aged 20–24 who had completed Year 12 or equivalent increased from 52% to 68%, and the gap in attainment rates between First Nations people and non-Indigenous Australians aged 20–24 decreased from 34 to 23 percentage points. The relative difference (rate ratio) also decreased, from a Year 12 attainment rate that was 1.6 times as high for non-Indigenous Australians as First Nations people to one that was 1.3 times as high. In 2021, 48% of First Nations people aged 20–64 reported they either

completed a non-school qualification at Certificate III or above or were studying for a non-school qualification at any level – an increase from 42% in 2016 and 35% in 2011.

Cardiovascular disease is the second leading cause of death among First Nations people. The age-standardised death rate due to cardiovascular disease decreased by 18% over the decade from 2010 to 2019 (though there was no significant change in the gap, due to a similar decrease in the rate for non-Indigenous Australians). The decline in deaths from cardiovascular disease coincided with reductions in smoking rates and an increase in the proportion of hospitalisations receiving a cardiovascular-related procedure among First Nations adults hospitalised for acute heart diseases.

Over the decade from 2010 to 2019, the age-standardised rate of death due to kidney disease declined by 36%.

Between 2012–13 and 2021–22, the rate of community-based supervision for First Nations young people (aged 10–17) declined from 147 to 94 per 10,000 population, a reduction of 34% based on linear regression.

In the decade from 2012–13 to 2021–22, the rate of First Nations young people aged 10–17 in detention declined from 34 to 28 per 10,000 population, while the rate for non-Indigenous young people remained the same, and the gap between First Nations and non-Indigenous young people declined (from 33 to 27 per 10,000). Based on linear regression, the rate of First Nations young people aged 10–17 in detention declined by 25% nationally during this period.

The proportion of First Nations households who owned their home increased slightly over the last 3 Censuses – from 37% in 2011, to 40% in 2016, and 42% in 2021. The proportion of First Nations people living in appropriately sized housing increased from 74.6% in 2011, to 78.9% in 2016, and 81.4% in 2021.

Between 2011 and 2021, the employment rate for First Nations people aged 15–64 also increased from 46% in 2011, to 47% in 2016, and 52% in 2021.

Median household incomes of First Nations people increased in real terms (that is, after adjusting for inflation) from \$619 to \$825 per week between 2011 and 2021. Non-Indigenous households experienced a weekly increase in income of \$998 to \$1,141 over the same period.

The proportion of First Nations people aged 15 and over who smoked daily fell from 45% in 2008 to 37% in 2018–19. The proportion of First Nations people aged 15–17 who smoked fell from 22% to 13% between 2008 and 2018–19 and the proportion who had never smoked increased from 72% to 85% over the same period. The age-standardised proportion of First Nations women who smoked during pregnancy fell from 48% in 2011 to 44% in 2020.

Between 2012 and 2020, the age-standardised proportion of First Nations mothers who gave birth at 20 weeks or more gestation and attended at least one antenatal care visit in the first trimester of pregnancy (before 14 weeks of gestation) increased from 51% in 2012 to 69% in 2020.

The rate of health assessments for First Nations people increased 4-fold between 2009–10 and 2018–19 from 68 checks per 1,000 population to 297 checks per 1,000.

Between 2010–2011 and 2018–2019, participation rates among First Nations women aged 40 and above increased from 18% to 27%, before decreasing to 25% in 2019–2020, most likely due to the impact of the COVID-19 pandemic.

Between 2009–10 and 2017–18, the age-standardised rate of Medicare Benefit Schedule (MBS) claims for First Nations people for chronic diseases management plans increased –

from 55 to 125 per 1,000 for Team Care Arrangements (TCAs) and from 69 to 142 per 1,000 for GP Management Plans (GPMPs). In 2017–18, the rate for TCAs and GPMPs combined was 1.4 times the rate for non-Indigenous Australians (267 per 1,000 compared with 185 per 1,000).

The number of Commonwealth-funded First Nations-specific primary health care organisations increased from 108 in 1999–00 to 211 in 2021–22. Episodes of care delivered by these organisations increased from 1.2 million to 4.0 million and the number of health care workers in these organisations more than tripled from 2,300 to 8,800 over the same period.

In 2018–19, 92% of First Nations people reported they had a usual place to go for health problems and advice. Those with a usual general practitioner or medical service reported higher rates of satisfaction with their health care experience than those without one.

The rate of general practitioner Medicare Items claimed by First Nations people increased by 42% between 2003–04 and 2017–18. First Nations people used GP services at rates that were slightly higher than those for non-Indigenous Australians (1.2 times) but do not reflect the higher level of need among First Nations people.

Over the decade from 2011–12 to 2020–21, based on linear regression, there was a 19% increase in the age-standardised proportion of hospitalisations for First Nations people that included a hospital procedure.

Over the decade from 2011–12 to 2020–21, based on linear regression, the age-standardised proportion of hospitalisations for First Nations people that ended in discharge at own risk (excluding dialysis) decreased from 4.6% to 3.8%. In contrast, there was little change in the proportion of emergency department presentations where the First Nations patient did not wait to be seen by a health care professional or left at own risk before completing treatment, from 9.1% in 2011–12 to 9.2% in 2020–21.

## **However, there has been little recent change for some measures**

The proportion of First Nations babies born with a low birthweight (less than 2,500 grams) did not change significantly over the period from 2013 to 2020 (from 9.8% to 9.6%).

Over the decade from 2010 to 2019, the age-standardised rate of potentially avoidable deaths among First Nations people did not change significantly, nor was there a significant change in the absolute gap between First Nations people and non-Indigenous Australians.

From 2010 to 2019, there was no significant change in the age-standardised all-cause death rate for First Nations people. However, the rate for non-Indigenous Australians declined by 8.6% and as a result the gap widened by 18% over this period.

Between 2012 and 2021, there were no significant changes in the death rates of perinatal, neonatal or stillbirth babies born to First Nations mothers nor was there any significant reduction in the gap with babies born to non-Indigenous mothers. During the same period, there was no statistically significant change in the rate of deaths for First Nations children aged 0–4, nor any significant change in the gap.

In 2018–19, 31% of First Nations adults reported high/very high levels of psychological distress, not significantly different from 2014–15 (33%). Those who had been removed from families or had relatives removed from families had a higher proportion of high/very high levels of psychological distress (38%) compared with those who had not been removed nor had a family member removed (26%).

MBS claim rates for First Nations patients accessing specialist providers were almost one-half the rate of non-Indigenous patients (598 per 1,000 and 1,070 per 1,000 population,

respectively) in 2017–18. Over the period from 2009–10 to 2017–18 there was no significant change in the age-standardised rate of Medicare claims for specialist care among First Nations people.

## **Some measures have worsened**

Cancer is currently the leading cause of death among First Nations people (accounting for 23.4% of all deaths of First Nations people). Between 2010 and 2019, the death rate for First Nations people increased by 12% while the non-Indigenous Australians rate decreased by 10%. This resulted in a widening of the absolute gap between First Nations people and non-Indigenous Australians. First Nations people have lower cancer screening rates and are more likely to be diagnosed with cancer at more advanced stages resulting in lower cancer survival rates. Note that while there have been recent reductions in tobacco smoking, a risk factor for lung and other cancers, a time lag is expected before those improvements will result in measurable changes in cancer-related mortality.

In 2015–2019, the suicide rate for First Nations people was 24 per 100,000 deaths and accounted for 5.5% of all deaths among First Nations people. Over the decade from 2010 to 2019, the age-standardised rate of death due to suicide increased by 30% for First Nations people. Similarly, over the period from 2009–10 to 2018–19 the hospitalisation rate of First Nations people for intentional self-harm increased by 63%.

Over the decade from 2009–10 to 2018–19, the age-standardised rate of hospitalisations due to assault for First Nations people increased by 7.9%. This increase was driven by the 11% increase in hospitalisation rates due to assault for First Nations females as the rate for First Nations males remained unchanged over this period.

From 2013 to 2022, the age-standardised imprisonment rate among First Nations adults increased from 1,630 to 2,151 per 100,000 adults. Based on linear regression of data for all years in the decade, the age-standardised imprisonment rate for First Nations adults increased by 31%, with little change among non-Indigenous adults. The absolute gap (rate difference) between First Nations and non-Indigenous adults widened (from 1,497 to 2,000 per 100,000 adults), and the relative difference in imprisonment rate between First Nations and non-Indigenous adults increased from 12 times as high for First Nations people to 14 times as high (from a rate ratio of 12.2 to 14.3) over this period.

# 4. Tier 1 – Health status and outcomes

The original set of Closing the Gap targets included 2 health measures: life expectancy and child mortality (for example, see Department of Prime Minister and Cabinet 2020).

The new Closing the Gap targets refer to life expectancy, healthy birthweight, and suicide (see [Closing the Gap](#)). As such, this section begins by presenting key findings on life expectancy, perinatal, infant and child mortality, and birthweight. The rest of the section focuses on leading causes of burden of disease and mortality, including suicide, among Aboriginal and Torres Strait Islander (First Nations) people.

## Life expectancy

In 2020–2022, life expectancy at birth was estimated to be 71.9 years for First Nations males and 75.6 years for First Nations females. The gap between First Nations people and non-Indigenous Australians was estimated to be 8.8 years for males and 8.1 years for females (Table 4.1). These life expectancy estimates for Australia are adjusted using age-specific rates of First Nations identification (‘age-adjusted’) (ABS 2023a). For earlier estimates, see [1.19 Life expectancy at birth](#).

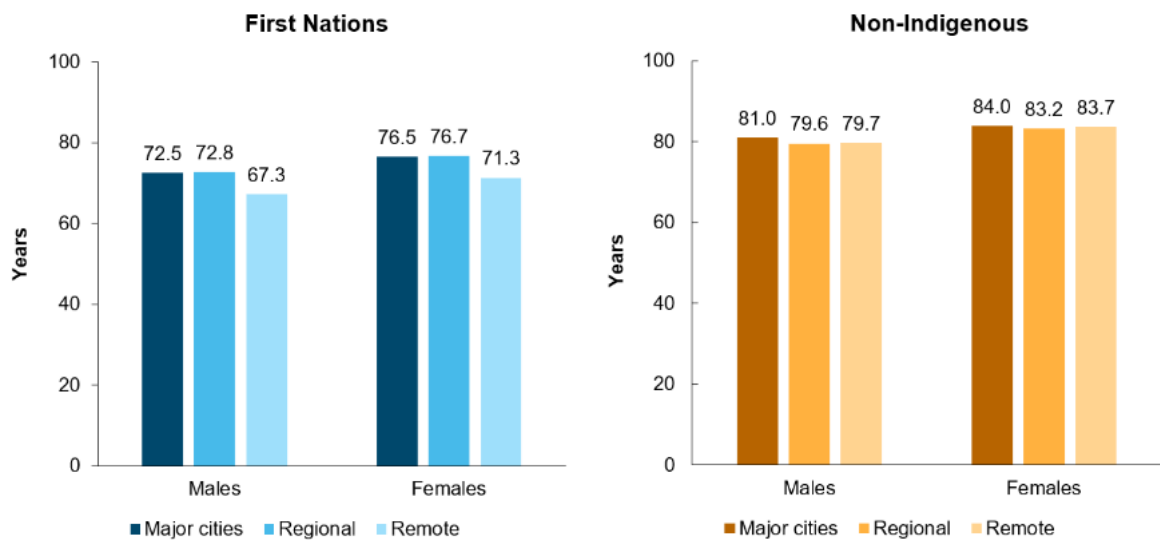
**Table 4.1: Life expectancy at birth (age-adjusted), by Indigenous status and sex, 2020–2022**

	Years
First Nations males	71.9
Non-Indigenous males	80.6
<i>Difference in years</i>	<i>8.8</i>
First Nations females	75.6
Non-Indigenous females	83.8
<i>Difference in years</i>	<i>8.1</i>

Source: Table 1 – Australian Bureau of Statistics (ABS 2023a).

First Nations males and females living in *Remote and very remote* areas have the lowest life expectancy, while the highest was in *Inner and outer regional* areas, followed closely by *Major cities*. First Nations males and females living in *Remote and very remote* areas have a life expectancy around 5 years lower than those in *Major cities*. The largest difference in life expectancy between First Nations and non-Indigenous Australians was in *Remote and very remote* areas, with a difference of 12.4 years (for both males and females) (Figure 4.1).

**Figure 4.1: Life expectancy at birth (age-adjusted), by remoteness and sex, 2020–2022**



**Notes**

1. 'Regional' includes Inner regional and Outer regional areas, 'Remote' includes Remote and Very remote areas.
2. Life expectancy estimates are calculated taking age-specific identification rates into account.

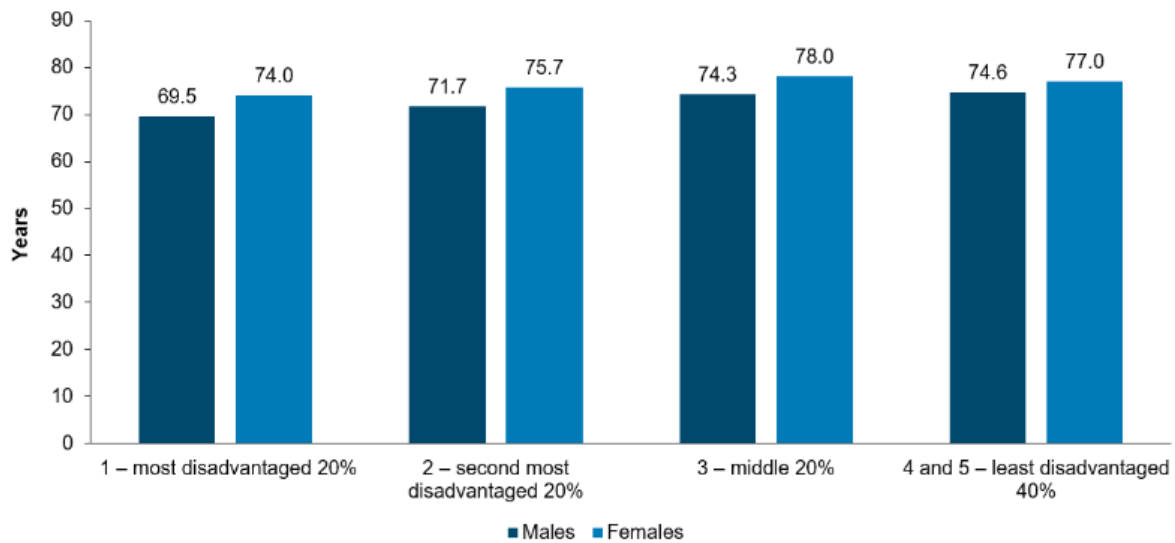
Source: Table 3 – Australian Bureau of Statistics (ABS 2023a).

**Socioeconomic disadvantage**

The [Index of Relative Socio-economic Disadvantage \(IRSD\)](#) used in this section is a general socioeconomic index that summarises a range of information about the economic and social conditions of people and households within an area. A low score indicates relatively greater disadvantage. For example, an area could have a low score if there are: many households with low income, or many people without qualifications, and many people in low skilled occupations. A high score indicates a relative lack of disadvantage. For example, an area may have a high score if there are: few households with low incomes, few people without qualifications, few people in low skilled occupations.

First Nations males living in the most socioeconomically disadvantaged areas have a life expectancy (age-adjusted) that is about 5 years lower than those living in the least disadvantaged areas. First Nations females in the most disadvantaged areas had a life expectancy of around 3 years lower than those in the least disadvantaged areas (Figure 4.2).

**Figure 4.2: Life expectancy at birth (age-adjusted) for First Nations people, by socioeconomic area and sex, 2020–2022**



**Notes**

1. Socioeconomic area is based on the Index of Relative Socio-Economic Disadvantage (IRSD). A low IRSD score indicates relatively greater disadvantage, and a high score indicates a relative lack of disadvantage. Quintile 1 contains the lowest 20% of scores (the most disadvantaged areas), and quintile 5 contains the highest 20% of scores (the least disadvantaged areas).

2. Life expectancy estimates are calculated taking age-specific identification rates into account.

Source: Table 3 – Australian Bureau of Statistics (ABS 2023a).

For further information, see:

- [1.19 Life expectancy at birth](#) (to be updated in late 2024 with estimates for 2020–2022).

## Birthweight

Being born with a healthy birthweight provides children with the best start in life, while low birthweight infants are prone to ill-health in childhood and to chronic disease as adults (AIHW 2011). The importance of healthy birthweight is also reflected in Target 2 of the National Agreement: By 2031, increase the proportion of Aboriginal and Torres Strait Islander babies with a healthy birthweight to 91 per cent – see the [Closing the Gap Information Repository](#).

In this report, birthweight is categorised as follows:

- low birthweight: less than 2,500 grams
- healthy birthweight: 2,500 to 4,499 grams
- high birthweight: 4,500 grams or more.

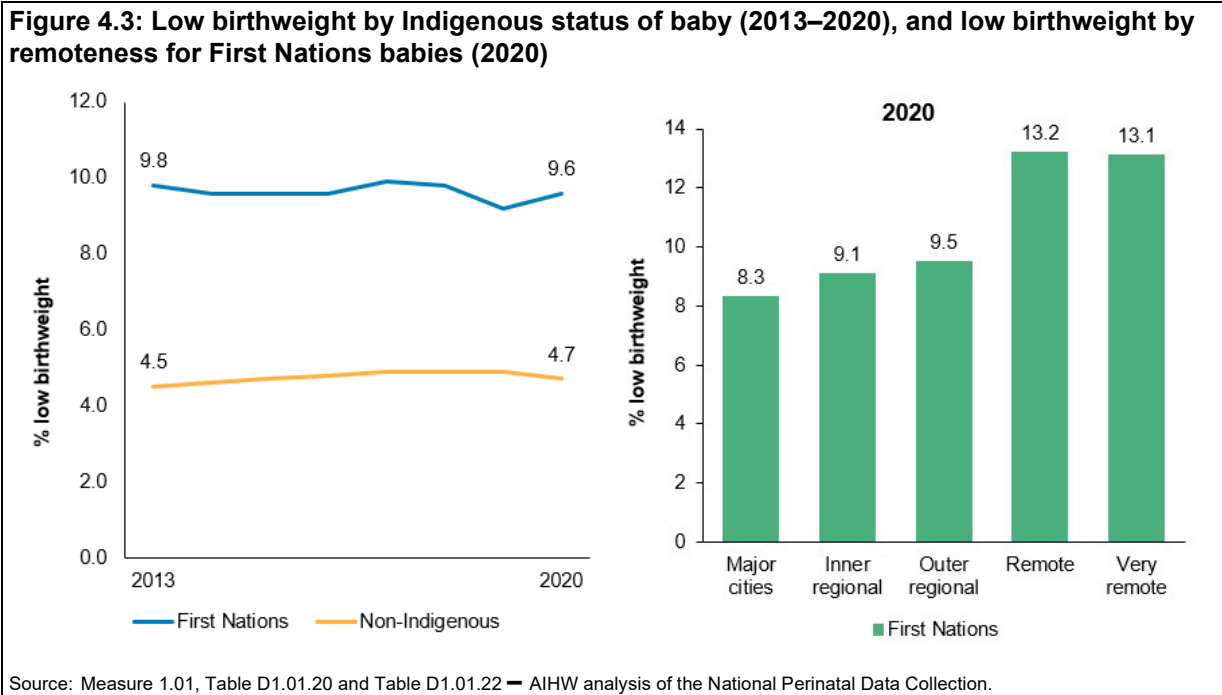
Most First Nations babies are born with a healthy birthweight, but the rate of low birthweight among First Nations babies remains about twice as high as for non-Indigenous babies.

In 2020, almost 9 in 10 (88.9%) singleton First Nations babies were born with a healthy birthweight, while 9.6% had a low birthweight, and 1.4% had a high birthweight. In comparison, 94.0% of non-Indigenous babies had a healthy birthweight, 4.7% had a low birthweight, and 1.2% had a high birthweight.

The average birthweight of singleton First Nations babies in 2020 was 3,271 grams, compared with 3,367 grams for non-Indigenous babies.

Over the period 2013 to 2020, the proportion of First Nations babies born with a healthy birthweight did not change significantly, ranging between 88.7% and 89.5%.

In 2020, the national rate of low birthweight for First Nations babies was 9.6%, ranging from 8.4% in South Australia to 14.6% in the Northern Territory. The rate of low birthweight babies born to First Nations mothers also varied with remoteness areas. Comparing with First Nations babies in the *Major cities* (8.3%), rates were higher for those living in the *Outer regional* (9.5%), *Remote* (13.2%) and *Very remote* (13.1%) areas. There was no significant difference in rates between *Major cities* and *Inner regional* areas (8.3% and 9.1%, respectively) (Figure 4.3).

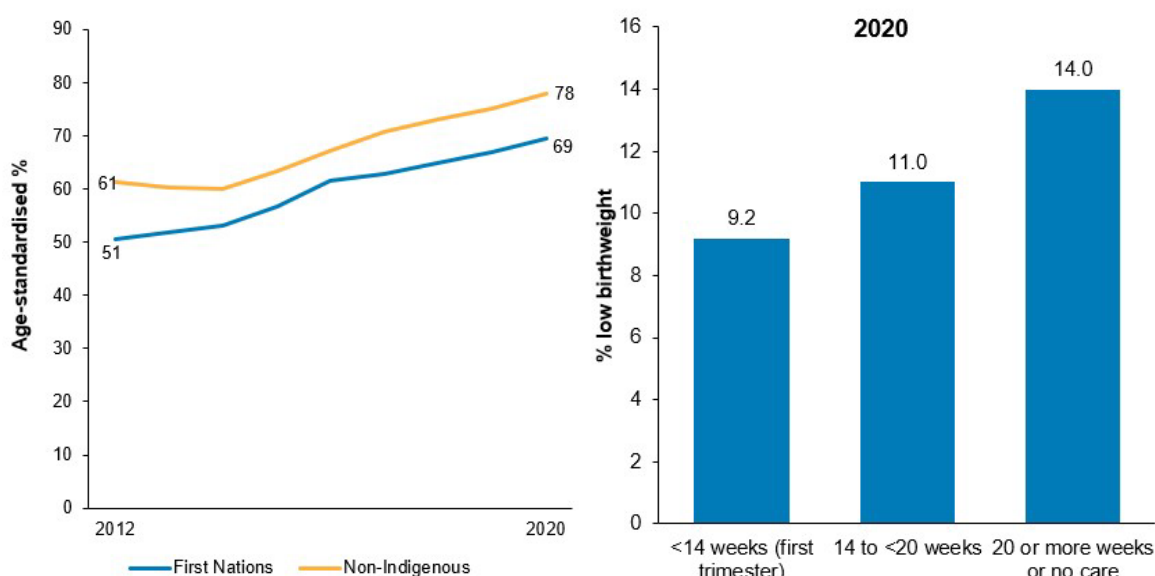


Antenatal care includes risk identification, prevention and management of pregnancy-related or concurrent diseases, health education and health promotion. Regular antenatal care that commences early in pregnancy has been found to have a positive effect on health outcomes for mothers and babies (AHMAC 2012).

Among First Nations mothers who gave birth at 20 weeks or more gestation in 2020, 71% received their first antenatal care visit in the first trimester (14 weeks). In 2020, 88% of First Nations mothers who gave birth at 32 weeks or more attended 5 or more antenatal visits throughout their pregnancy. Between 2012 and 2020, based on age-standardised rates, the proportion of mothers who attended first antenatal care in the first trimester of their pregnancy increased by 41% for First Nations mothers and by 33% for non-Indigenous mothers (Figure 4.4).

First Nations mothers who attended their first antenatal care visit in the first trimester of pregnancy were less likely to have a low birthweight baby compared with those who either had their first visit after 20 weeks of pregnancy or did not have any antenatal care (9.2% compared with 14%) (Figure 4.4).

**Figure 4.4: Antenatal care visit during the first trimester by Indigenous status (2012 to 2020) (age-standardised), and low birthweight First Nations babies by duration of pregnancy at first antenatal visit (2020)**



Note: Data on the duration of pregnancy at first antenatal care visit and birthweight status of babies refer to mothers who gave birth at 20 weeks or more gestation.

Source: Measure 3.01, Table D3.01.21 and Table D3.01.14 – AIHW analysis of the National Perinatal Data Collection.

During pregnancy, smoking is associated with an increased risk of low birthweight in babies (see [Key factors contributing to low birthweight of Aboriginal and Torres Strait Islander babies](#)). In 2020, the proportion of low birthweight babies born to First Nations mothers who smoked was 2.6 times as high as for those born to First Nations mothers who did not smoke (14.3% and 5.5%, respectively). Over the period from 2011 to 2020, the age-standardised proportion of First Nations mothers who smoked during pregnancy decreased by 4 percentage points (from 48% to 44%).

For further information, see:

- [1.01 Birthweight](#)
- [2.21 Health Behaviours during pregnancy](#)
- [3.01 Antenatal care](#)
- HPF feature article [Key factors contributing to low birthweight among Aboriginal and Torres Strait Islander babies](#)

## Leading causes of disease burden and mortality

### Burden of disease

In 2018, Aboriginal and Torres Strait Islander (First Nations) people lost 239,942 years due to premature death or living with disease or injury, which equates to around 289 DALY for every 1,000 First Nations people. The rate of disease burden among First Nations people was more than double (2.3 times) that of non-Indigenous Australians in 2018. After adjusting for differences in population size and age structure:

- 400 years were lost to disease burden for every 1,000 First Nations people

- 177 years were lost to disease burden for every 1,000 non-Indigenous Australians.

Among First Nations people aged under 75, almost two-thirds (64%) fatal burden of disease was due to potentially avoidable deaths (AIHW 2022d).

Between 2003 and 2018, after adjusting for population growth and ageing, the total burden for First Nations people declined by 15%. The decrease was driven by a 27% decline in fatal burden. There was no substantial change in non-fatal burden over the same period.

These results come from *Australian Burden of Disease Study: impact and causes of illness and death in Aboriginal and Torres Strait Islander people 2018* (AIHW 2022d), the latest available burden of disease information for First Nations people and non-Indigenous Australians.

#### **What is the burden of disease and how is it measured?**

'Burden of disease' refers to the impact of disease and injury on a population. It is measured in 'disability adjusted life years' (DALY), which comprises:

- years lost from dying prematurely (YLL), also known as fatal disease burden.
- years lost due to living with disease or injury (YLD), also known as non-fatal disease burden.

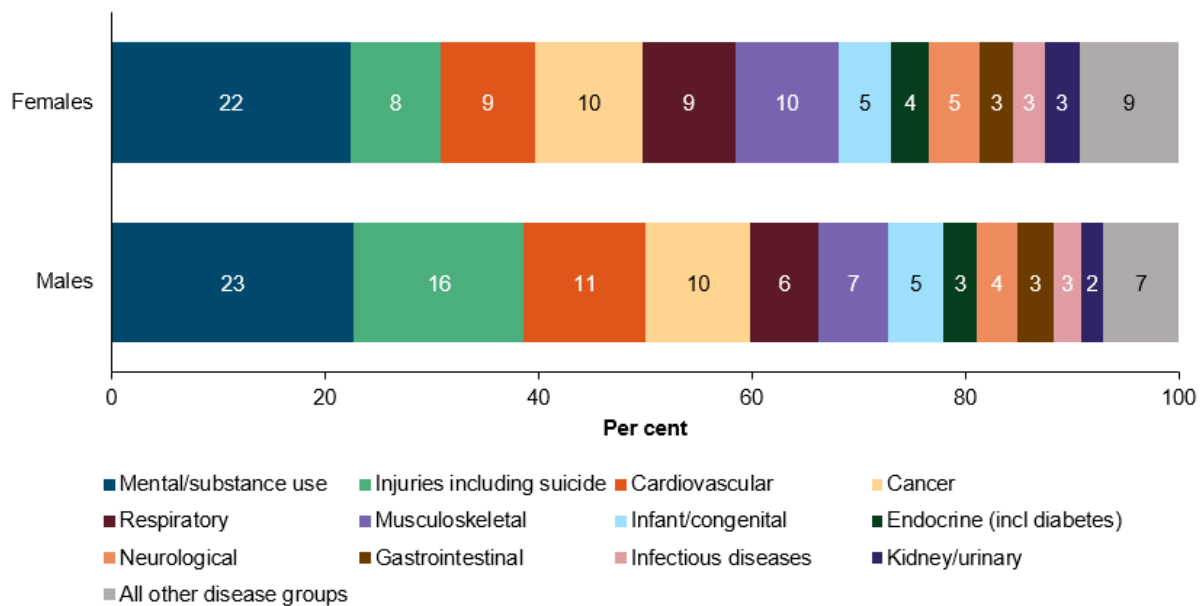
Among First Nations people, 23% of total disease burden in 2018 was due to mental and substance use disorders (54,263 DALY). The other leading causes were:

- injuries (12% or 29,769)
- cardiovascular disease (10% or 24,612)
- cancer (9.9% or 23,742)
- musculoskeletal conditions (8.0% or 19,168) (Figure 4.5).

First Nations people in *Very remote* (492 DALY per 1,000 population) and *Remote* (486 DALY per 1,000 population) areas experienced higher rates of total burden than those living in *Major cities* (393 DALY per 1,000 population). The mental and substance use disorders disease group was the leading contributor to burden in all remoteness areas, ranging from 17% to 27% of total burden.

First Nations people living in the most socioeconomic disadvantaged areas experienced more than 3 times the total burden of First Nations people in the least socioeconomic disadvantaged areas (591 and 164 DALY per 1,000 population, respectively).

**Figure 4.5: Leading causes of disease burden among First Nations people, by sex, 2018**



Source: adapted from Australian Burden of Disease Study: impact and causes of illness and death in Aboriginal and Torres Strait Islander people 2018 (AIHW 2022d).

For further information, see:

- [1.02 Top reasons for hospitalisations](#)
- [1.23 Leading causes of mortality](#)

## Avoidable deaths

### Potentially avoidable deaths

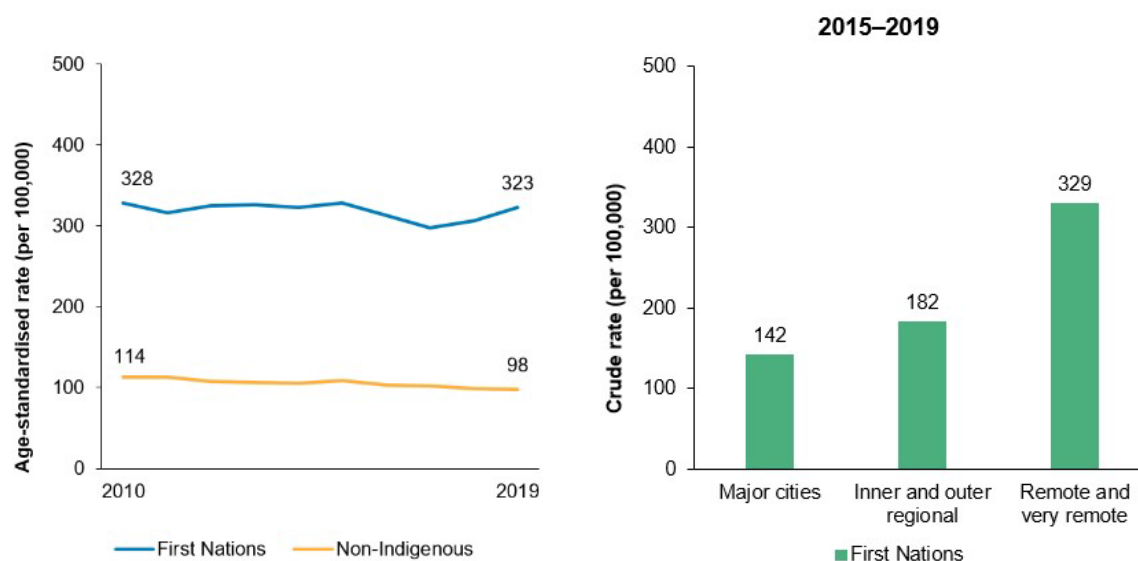
Potentially avoidable deaths are premature deaths – among those aged under 75 – from health conditions and injuries that could potentially be avoided with disease prevention and population health initiatives or access to timely and effective health care.

Avoidable deaths, as a measure, is often used as an indicator of the quality, effectiveness, and accessibility of the health system.

Over the 5-year period 2015–2019, there were 7,366 potentially avoidable deaths among First Nations people, accounting for 60% of all deaths of First Nations people aged 0–74 (data from New South Wales, Queensland, Western Australia, South Australia, and the Northern Territory combined). The rate of potentially avoidable deaths among First Nations people was 208 deaths per 100,000 population, with a higher rate in more remote areas, ranging from 142 deaths per 100,000 population in *Major cities* to 329 deaths per 100,000 population in *Remote and very remote* areas combined.

Between 2010 and 2019, there was no significant change in the rate of potentially avoidable deaths for First Nations people. In comparison, the rate decreased by 13% for non-Indigenous Australians. Over the same decade, there was no significant change in the gap in the rate of potentially avoidable deaths between First Nations people and non-Indigenous Australians (Figure 4.6).

**Figure 4.6: Potentially avoidable deaths by Indigenous status (age-standardised rate) (2010–2019), and by remoteness for First Nations people (crude rate) (2015–2019)**



Note: Data from New South Wales, Queensland, Western Australia, South Australia, and the Northern Territory combined.

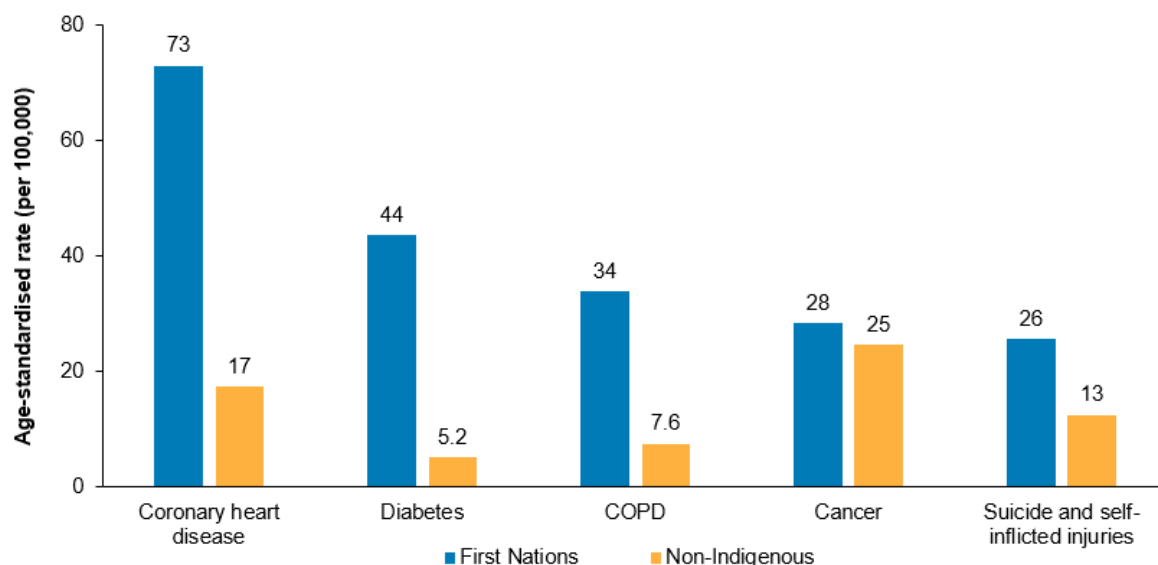
Source: Measure 1.24, Table D1.24.2 and Table D1.24.6 – AIHW National Mortality Database.

In 2015–2019, the leading 5 causes of potentially avoidable deaths among First Nations people were:

- coronary heart disease (21.0%, 1,560 deaths)
- diabetes (12.0%, 868 deaths)
- suicide and self-inflicted injuries (11.0%, 843 deaths)
- chronic obstructive pulmonary disease (8.8%, 651 deaths)
- cancer (8.0%, 587 deaths).

The age-standardised rates of potentially avoidable deaths due to these 5 leading causes were consistently higher for First Nations people than for non-Indigenous Australians (Figure 4.7). The conditions contributing most to the gap in rates of potentially avoidable deaths between First Nations people and non-Indigenous Australians were coronary heart disease (26% of the gap in avoidable deaths), diabetes (18% of the gap) and chronic obstructive pulmonary disease (13% of the gap).

**Figure 4.7: Rate of potentially avoidable deaths, top 5 causes, by Indigenous status, 2015–2019 (age-standardised)**



**Notes**

1. Data from New South Wales, Queensland, Western Australia, South Australia, and the Northern Territory combined.
  2. Data are shown for the top 5 causes of avoidable death for First Nations people.
- Source: Measure 1.24, Table D1.24.5 – AIHW and ABS analysis of National Hospital Mortality Database.

For further information, see:

- [1.24 Avoidable and preventable deaths](#)

## Mortality rates and leading causes of death

In the 5-year period 2015–2019, there were 15,439 deaths of First Nations people, corresponding to 430 deaths per 100,000 population. Between 2010 and 2019, there was no significant reduction in the age-standardised death rate among First Nations people.

In 2015–2019, cancer and other neoplasms was the leading broad cause of death among First Nations people, accounting for 23% (3,612 deaths) of all deaths in this period. Cancer (as a broad disease group) was closely followed by cardiovascular disease (23.0%, 3,471 deaths), injury and poisoning (15.0%, 2,240 deaths), respiratory disease (9.7%, 1,498 deaths), and endocrine, nutritional and metabolic diseases (8.6%, 1,333 deaths) as the leading broad causes of death for First Nations people.

Death rates for First Nations males were higher than for First Nations females across most leading causes (except for kidney diseases (6.5 compared with 9.1 deaths per 100,000 population) and diabetes (29 compared with 34 deaths per 100,000), where rates were higher for First Nations females). Death rates from all the leading causes of death were higher for First Nations people in remote areas than in non-remote areas.

The age-standardised death rate due to endocrine, nutritional and metabolic diseases for First Nations people was 3.7 times as high as for non-Indigenous Australians (86 compared with 23 deaths per 100,000 population).

For deaths caused by both injury and poisoning, and respiratory disease, death rates were twice as high for First Nations people compared with non-Indigenous Australians (79

compared with 40 deaths per 100,000 population; and 106 compared with 52 deaths per 100,000 population, respectively).

For chronic obstructive pulmonary disease, the age-standardised death rate for First Nations people was almost 3 times as high as for non-Indigenous Australians (70 compared with 24 deaths per 100,000 population).

For further information, see:

- [1.22 All-cause age-standardised death rates](#)
- [1.23 Leading causes of mortality](#)

## Perinatal, infant, and child mortality

**Content warning:** This content contains information some readers may find distressing. If this information raises any issues for you, contact [Red Nose Grief and Loss](#) on [1300 308 307](#) or [13YARN](#) on [13 92 76](#). Go to the [support services page](#) for a list of support services.

Perinatal deaths include stillbirths (deaths prior to or during labour and/or birth) and neonatal deaths (within 28 days following birth).

Over the decade from 2011 to 2020, there was no significant change in the rate of perinatal deaths for babies born to First Nations mothers. There was no significant change in the rate of stillbirths (varying between 8.3 deaths and 13.3 deaths) or neonatal deaths (varying between 3.7 and 6.5 deaths per 1,000 live births) (Figure 4.8). There was also no statistically significant change in the perinatal death rate for babies born to non-Indigenous mothers, nor in the gap between the rates for First Nations and non-Indigenous mothers.

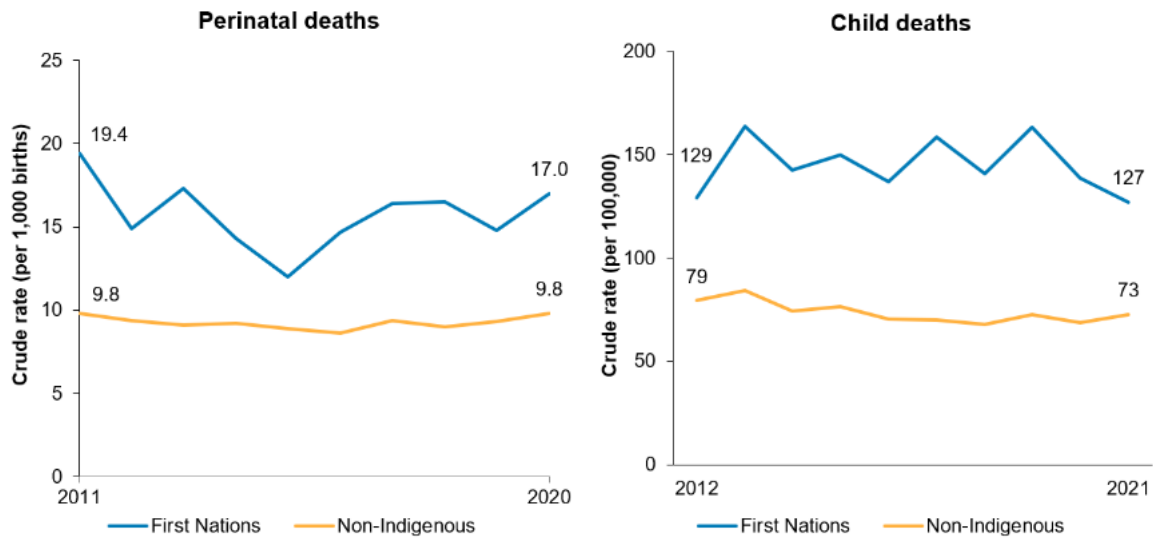
In New South Wales, Queensland, Western Australia, South Australia and the Northern Territory combined, the death rates of First Nations infants (aged under 1) did not change significantly from 2012 to 2021, which varied between 4.3 and 6.8 deaths per 1,000 livebirths. The death rate among First Nations children (aged 0–4) did not change significantly, ranging between 127 and 164 deaths per 100,000 children (Figure 4.8).

Note that data pertaining to perinatal deaths are from the AIHW's National Perinatal Mortality Data Collection (NPMDC). These data points are sourced from midwives and other birth attendants, who collect information from mothers, perinatal administrative and clinical record systems. This differs to the source used for reporting on infant and child deaths (the National Mortality Database), which is based on death registrations. The 2 collections are not directly comparable.

For further information, see:

- [1.20 Infant and child mortality](#)
- [1.21 Perinatal mortality](#)

**Figure 4.8: Rate of perinatal (2011–2020) and child deaths (2012–2021), by Indigenous status**



**Notes**

1. Perinatal death is based on the Indigenous status of the mother.  
 2. Child deaths data New South Wales, Queensland, Western Australia, South Australia, and the Northern Territory combined. Child deaths includes children aged 0–4.  
 Source: Measure 1.21, Table D1.21.2 – AIHW analysis of the National Perinatal Data collection; and Measure 1.20, Table D1.20.3 – AIHW National Mortality Database.

## Mental health and social and emotional wellbeing

### Where to find help and support

This page presents material that some people may find distressing. If this material raises any issues for you, these services can help:

- **13YARN:** 13 92 76
- **Lifeline:** 13 11 14
- **Suicide Call Back Service:** 1300 659 467
- **Beyond Blue:** 1300 22 4636
- **The National Indigenous Postvention Service:** 1800 805 801

Crisis support services can be reached 24 hours a day, 7 days a week.

The broad disease group that is the leading cause of disease burden for Aboriginal and Torres Strait Islander (First Nations) people is mental and substance use disorders, which includes depressive disorders, bipolar disorder, anxiety disorders, schizophrenia and alcohol and drug use disorders.

Most of the disease burden from mental and substance use disorders is non-fatal – that is, it is due to years spent living with illness.

Maintaining high levels of social and emotional wellbeing is now a focus of the National Agreement, as reflected in Target 14: Significant and sustained reduction in suicide of Aboriginal and Torres Strait Islander people towards zero – see the [Closing the Gap Information Repository](#).

The [National Aboriginal and Torres Strait Islander Health Plan 2021–2031](#), released in December 2021, provides a strong overarching policy framework to ensure the formal partnership and shared decision making between the Australian Government and First Nations communities. The Health Plan covers a range of health services including mental health, and social and emotional wellbeing.

The [National Strategic Framework for Aboriginal and Torres Strait Islander Peoples' Mental Health and Social and Emotional Wellbeing](#) (Commonwealth of Australia 2017) and the [National Mental Health and Suicide Prevention Plan](#) (Department of Health and Aged Care 2021a) are important components of the national response to the health of First Nations people.

While intentional self-harm and suicidal behaviour are classified as injuries for burden of disease analysis, in the HPF they are reported under measure [1.18 Social and emotional wellbeing](#). Some information on intentional self-harm and deaths by suicide is presented in this section and in the following section on injury.

Almost 1 in 3 First Nations adults (31%) had high to very high levels of psychological distress in 2018–19 (age-standardised), a similar proportion to 2014–15. In comparison, 13% of non-Indigenous adults had high levels of psychological distress. Those who had been removed from families or had relatives removed from families had a higher proportion with high or very high levels of psychological distress (38%) compared to those who did not have these experiences (26%).

In 2014–15, 68% of First Nations people aged 15 and above (303,300) reported that in the previous year they had experienced one or more specified personal stressors – that is, events with the potential to adversely affect their health or wellbeing, such as serious illness or the death of a family member or friend (see Table 4.2 for most common personal stressors).

**Table 4.2: Most common personal stressors, First Nations people aged 15 and over, by remoteness, 2014–15**

Sources of stress	Non-remote		Remote	
	Number	Per cent	Number	Per cent
Death of a family member or close friend	89,100	26%	33,400	35%
Not able to get a job	63,500	18%	18,200	19%
Serious illness	45,100	13%	8,600	8.9%
Mental illness	40,200	12%	5,500	5.7%
Overcrowding at home	20,100	5.8%	9,000	9.3%
Alcohol-related problems	20,500	5.9%	8,600	8.9%

Note: Proportion of all First Nations people aged 15 and over, more than one response could be given.

Source: Measure 1.18, Table D1.18.4 – AIHW and ABS analysis of National Aboriginal and Torres Strait Islander Social Survey 2014–15.

### **COVID-19 and mental health of First Nations people**

The COVID-19 pandemic presented a high risk to the physical and social and emotional wellbeing of First Nations people (Victorian Government et al. 2020). Specific concerns have included: lack of accessible, culturally appropriate and culturally safe mental health services; challenges faced by the First Nations allied health workforce, including those living with high-risk individuals; inequalities within the health system that may affect access to care, particularly in the move to digital and telehealth; and loss of remote community services including fly in fly out mental health care.

The impact of lockdowns was particularly acute for First Nations people who are deeply interconnected with family and community members, and where caring responsibilities may have been disrupted. There were heightened effects on: those in, or with connections to, remote communities, where isolation was greater and freedom of movement was more restricted; those who could not access waterways, songlines and Country; and those who could not attend to cultural and sorry business. Research on the impacts of COVID-19 and the associated restrictions on Stolen Generations survivors found they had an increased and heightened sense of isolation and loneliness, significant disconnection from family, community, culture and Country, and declines in their mental health and wellbeing (Healing Foundation 2021).

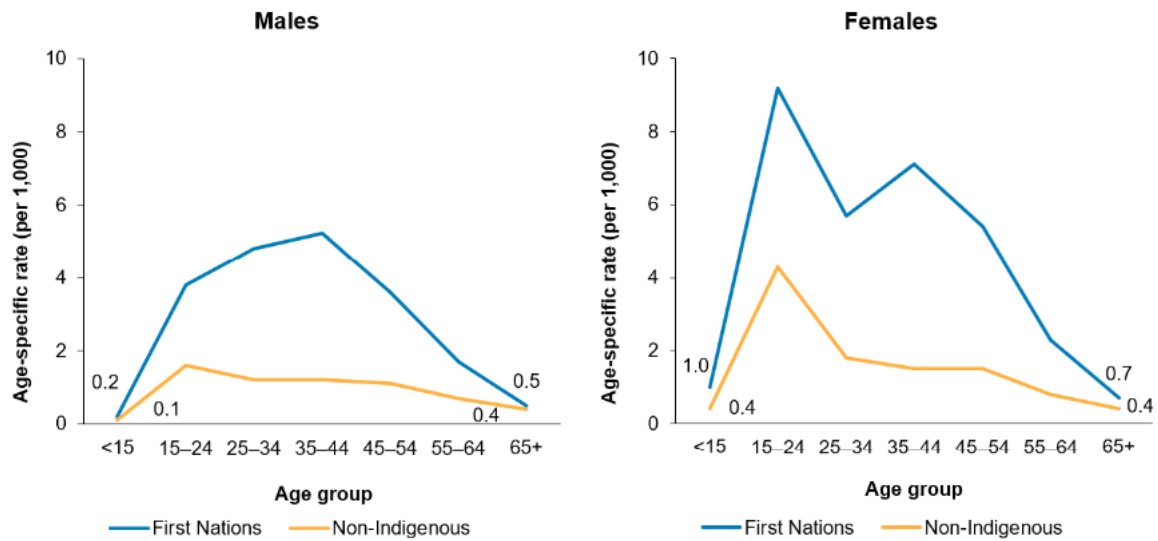
### **Intentional self-harm and suicide**

Between July 2017 and June 2019, 5,829 First Nations people were hospitalised due to intentional self-harm (0.9% of all hospitalisations of First Nations people, excluding dialysis). This corresponds to a rate of 3.5 hospitalisations per 1,000 population for First Nations people.

Among First Nations people, rates of hospitalisations for intentional self-harm were higher among females than males (4.4 compared with 2.6 hospitalisations per 1,000, based on crude rates). For First Nations males, the hospitalisation rate for intentional self-harm was highest for those aged 35–44 (5.2 hospitalisations per 1,000 population). For First Nations females, the rate for was highest for those aged 15–24 (9.2 hospitalisations per 1,000 population) (Figure 4.9).

First Nations people were hospitalised for intentional self-harm at nearly 3 times the rate of non-Indigenous Australians, based on age-standardised rates. The largest relative differences in rates between First Nations people and non-Indigenous Australians (4.5 times) was in the 35–44 age group, with rates being 4.3 times as high for males and 4.6 times as high for females.

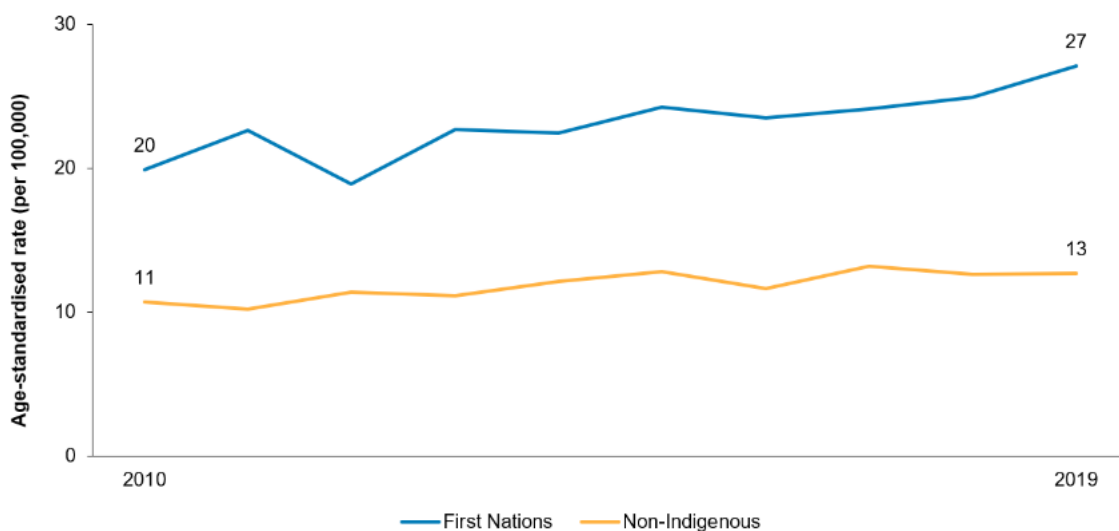
**Figure 4.9: Rate of hospitalisations due to intentional self-harm, by Indigenous status, age group and sex, July 2017 to June 2019**



Source: Measure 1.18, Table D1.18.27 – AIHW analysis of National Hospital Morbidity Database.

In 2015–2019, 847 First Nations people died from intentional self-harm (suicide), a rate of 24 suicide deaths per 100,000 population. Suicide accounted for approximately 5.5% of total deaths among First Nations people. The age-standardised suicide rate for First Nations people increased by 30% over the decade from 2010 to 2019 based on linear regression analysis, with the rate also increasing for non-Indigenous Australians (by 24%) (data from New South Wales, Queensland, Western Australia, South Australia, and the Northern Territory combined) (Figure 4.10). This corresponded to a significant widening (by 38%) of the gap between First Nations people and non-Indigenous Australians.

**Figure 4.10: Suicide rates, by Indigenous status (age-standardised), 2010–2019**

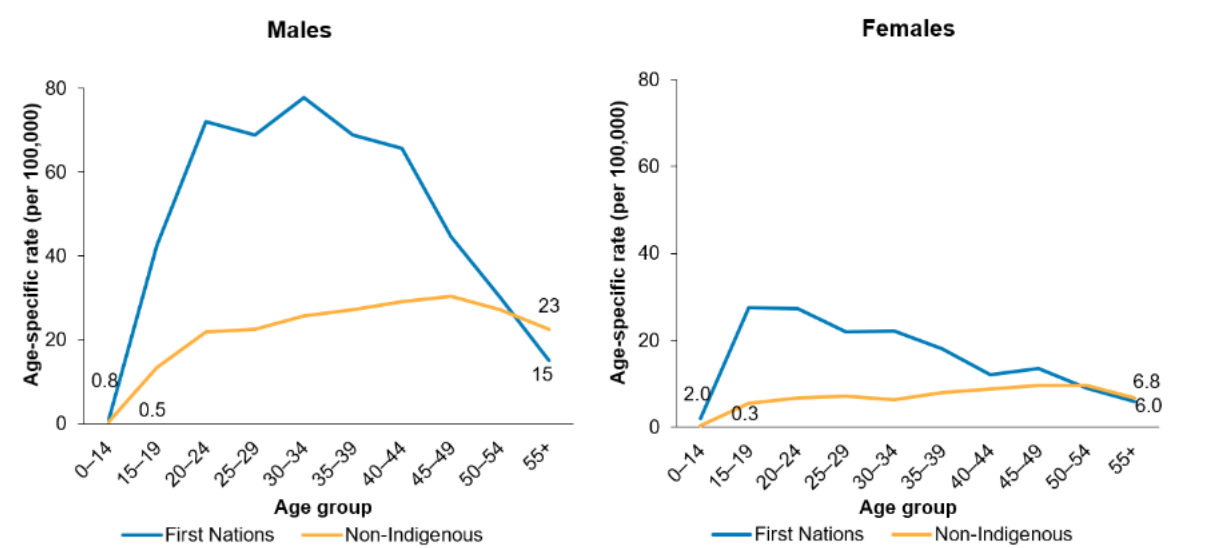


Note: Data New South Wales, Queensland, Western Australia, South Australia, and the Northern Territory combined.

Source: Measure 1.18, Table D1.18.26 – AIHW National Mortality Database.

The death rate due to suicide was highest for First Nations males aged 30–34 (77.8 per 100,000) and for First Nations females aged 15–19 (27.5 deaths per 100,000 population) in 2015–2019 (data from New South Wales, Queensland, Western Australia, South Australia, and the Northern Territory combined). Among non-Indigenous Australians, the suicide death rate was highest for males aged 45–49 (30.5 deaths per 100,000 population) and females aged 45–49 and 50–54 (both 9.7 deaths per 100,000 population) (Figure 4.11). The overall rate of deaths from suicide for First Nations people was 2 times the rate of non-Indigenous Australians.

**Figure 4.11: Suicide rates, by Indigenous status, age group and sex, 2015–2019**



Note: Data from New South Wales, Queensland, Western Australia, South Australia, and the Northern Territory combined.  
 Source: Measure 1.18, Table D1.18.22 – AIHW and ABS National Mortality Database.

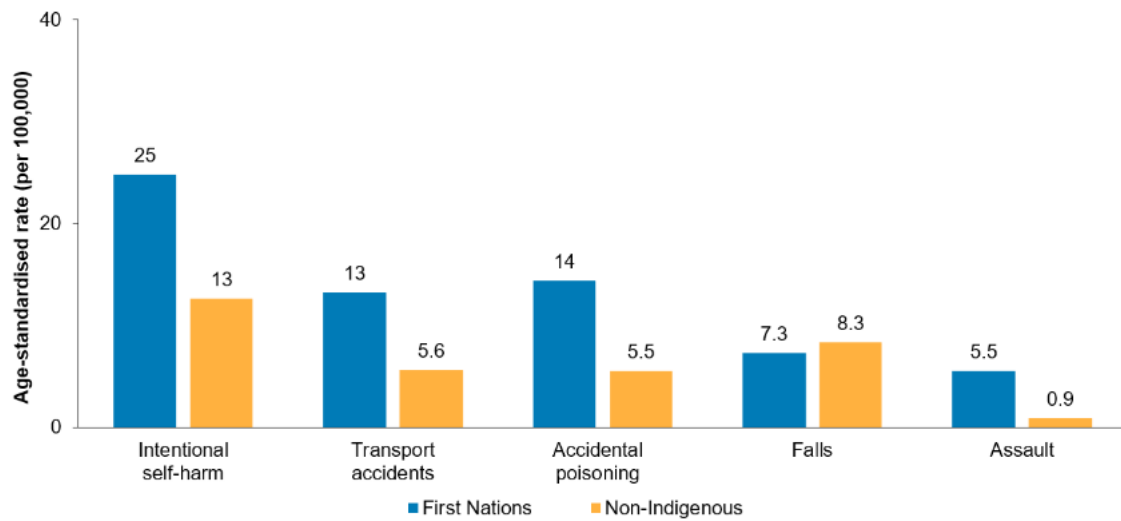
- For further information, see:
- [1.18 Social and emotional wellbeing](#)
  - [3.10 Access to mental health services](#)

## Injury and poisoning

In 2015–2019, injury and poisoning was the second leading cause of disease burden and third leading cause of death among First Nations people, accounting for 15% (2,240 deaths) of all deaths in this period.

The rate of death due to injury and poisoning among First Nations people was 62 deaths per 100,000 population, with a rate 2.1 times as high for First Nations males as females (84 compared with 40 deaths per 100,000 population). There was a large gap between First Nations people and non-Indigenous Australians in the age-standardised rates of underlying causes of death per 100,000 population from all causes of injury and poisoning except for falls (Figure 4.12).

**Figure 4.12: Rate of injury and poisoning deaths, top 5 causes, by Indigenous status, 2015–2019**



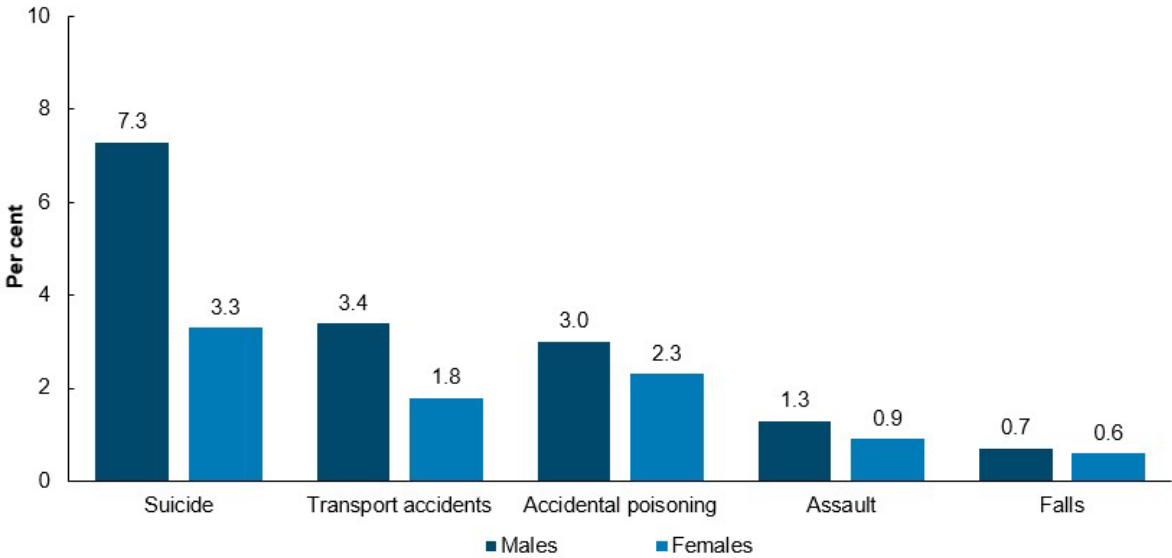
**Notes**

1. Data from New South Wales, Queensland, Western Australia, South Australia, and the Northern Territory combined.
  2. Data are shown for the top 5 causes of injury and poisoning death for First Nations people.
- Source: Measure 1.03, Table D1.03.1 – AIHW National Mortality Database.

Among First Nations people, the most common underlying causes of deaths from injury and poisoning in 2015–2019 were suicides (847 deaths, 38% of all injury and poisoning deaths), transport accidents (417 deaths, 19%), accidental poisoning (413 deaths, 18%), assault (174 deaths, 7.8%) and falls (101 deaths, 4.5%).

For First Nations males, suicide and transport accidents were the first two leading causes of deaths from injury and poisoning, and for First Nations females, the first two leading causes were suicide and accidental poisoning (Figure 4.13).

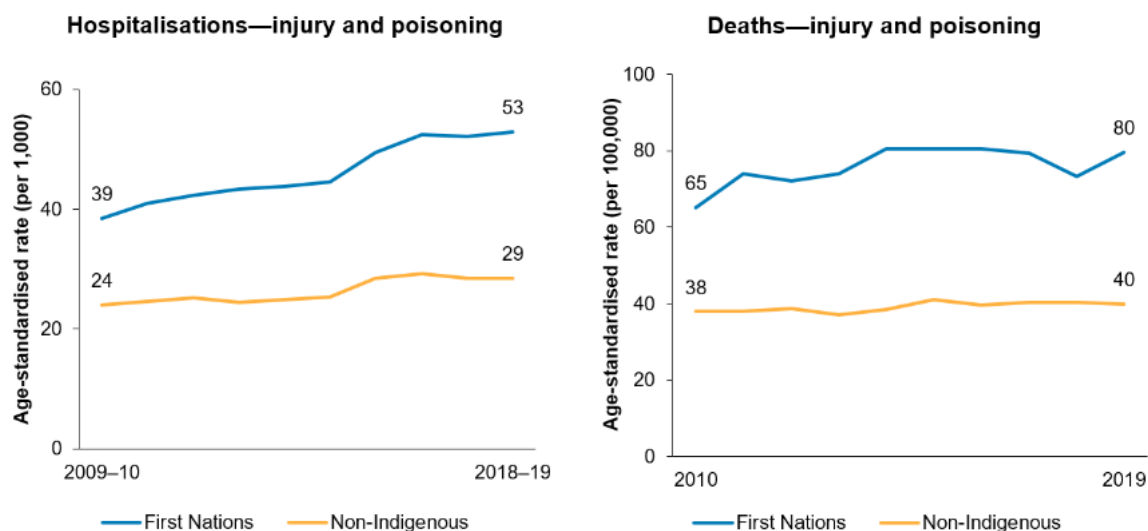
**Figure 4.13: Leading causes of death due to injury and poisoning for First Nations people, as a proportion of total deaths, by sex, 2015–2019**



Note: Data from New South Wales, Queensland, Western Australia, South Australia, and the Northern Territory combined.  
 Source: Measure 1.03, Table D1.03.1 – AIHW National Mortality Database.

In 2017–19, injury and poisoning was the most common broad cause of hospitalisation for First Nations people (excluding dialysis). Between 2009–10 and 2018–19, the age-standardised hospitalisation rate due to injury and poisoning increased by 34%. The age-standardised death rate due to injury and poisoning among First Nations people increased by 14% between 2010 and 2019 (Figure 4.14).

**Figure 4.14: Rate of injury and poisoning hospitalisations (2009–10 to 2018–19) and deaths (2010–2019), by Indigenous status (age-standardised)**



**Notes**

1. Data on hospitalisations from New South Wales, Queensland, Western Australia, South Australia, and the Northern Territory combined.

2. Data on deaths New South Wales, Queensland, Western Australia, South Australia, and the Northern Territory combined.

Source: Measure 1.03, Table D1.03.5 – AIHW analysis of National Hospital Morbidity Database; and Measure 1.23, Table D1.23.19 – AIHW National Mortality Database.

For further information, see:

- [1.03 Injury and poisoning](#)

## Cancer

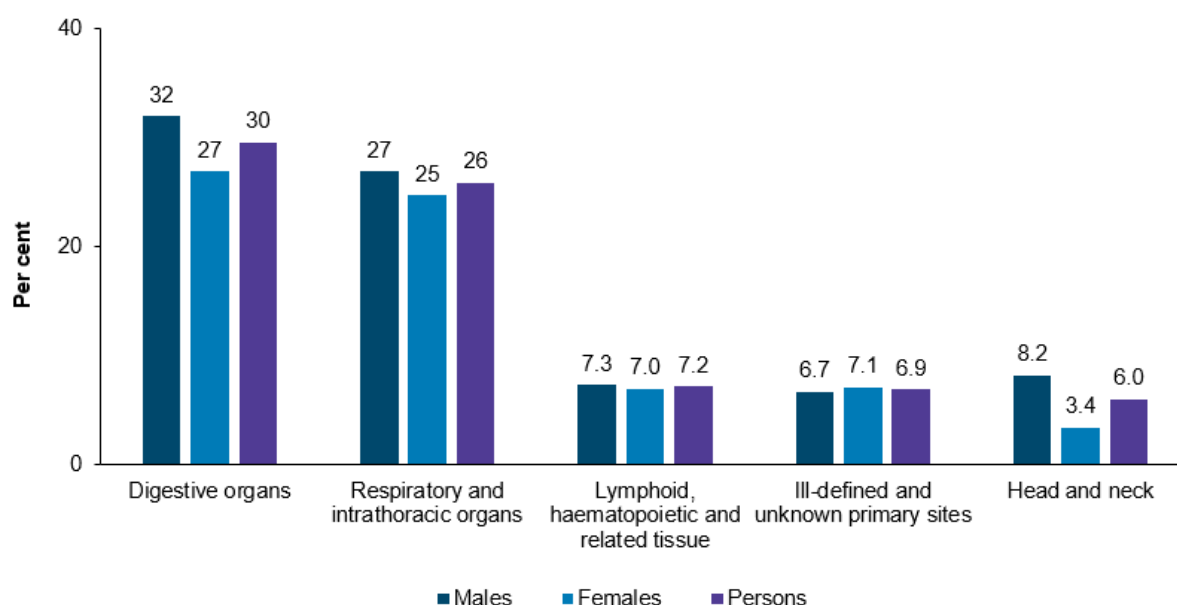
In 2018, cancer and other neoplasms accounted for 10% of the total disease burden among First Nations people, and in the 5-year period 2015–2019 was the leading broad cause of death. Smoking is a risk factor for many types of cancer – in 2018, tobacco smoking accounted for around two-fifths of the cancer burden (37%).

In 2015–2019, 3,612 First Nations people died from cancer and other neoplasms (23.4% of all deaths), the vast majority of which were caused by cancer (that is, malignant neoplasms). Cancer accounted for 23.1% of all deaths, with a rate of 99 cancer deaths per 100,000 population.

For First Nations people, the most common broad types of cancer deaths were:

- cancers of digestive organs (including liver cancer), accounting for 30% of cancer deaths
- cancers of respiratory organs (including lungs), 26% of cancer deaths (Figure 4.15).

**Figure 4.15: Leading causes of cancer and other neoplasm deaths for First Nations people, as a proportion of total cancer and other neoplasm deaths, by sex, 2015–2019**



Note: Data from New South Wales, Queensland, Western Australia, South Australia, and the Northern Territory combined.

Source: Measure 1.23, Table D1.23.12 – AIHW and ABS analysis of National Mortality Database.

For First Nations people living in non-remote areas, the death rate due to cancer was 90 per 100,000 population, compared with 126 per 100,000 in remote areas.

There are several national cancer screening programs available free of charge for Australians to reduce the risk of death through early detection of cancer when treatment is likely to be more effective. However, First Nations people have lower rates of participation in breast and bowel cancer screening programs than non-Indigenous Australians (Table 4.3).

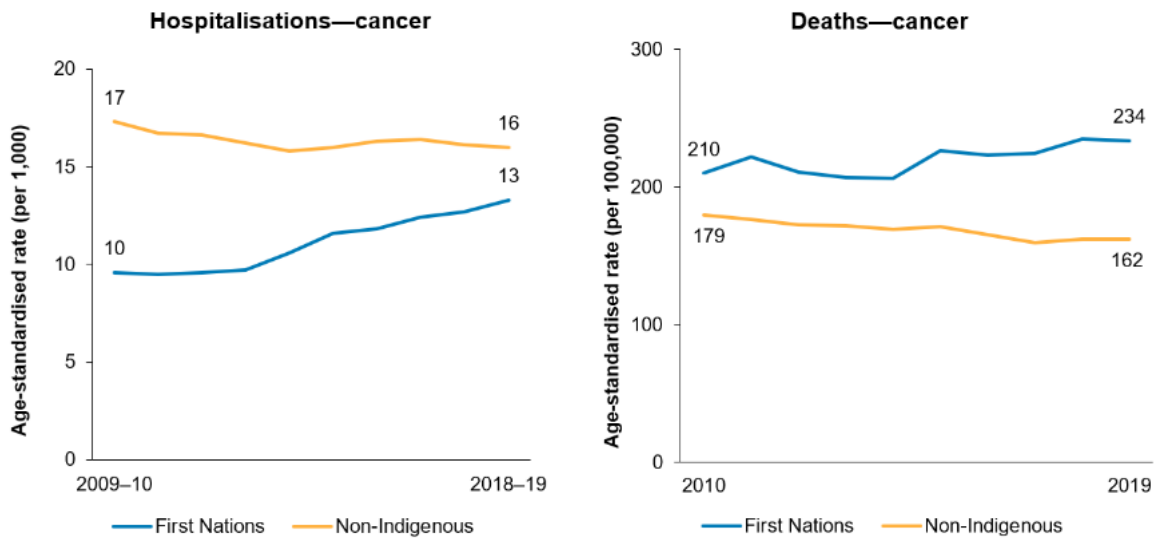
**Table 4.3: Participation in cancer screening programs**

	First Nations	Non-Indigenous
	Per cent	
Women aged 50–74 screened for breast cancer – age-standardised, 2019–20	36	50
People aged 50–74 participating in National Bowel Screening Program, 2019–2020 <sup>(a)</sup>	35	46
People aged 50–74 having follow up colonoscopy, where appropriate, 2017–2018	51	62

(a) Given the limitations in the data available to estimate Indigenous Australians' participation in the NBCSP, caution should be used when interpreting these data (see Appendix F of AIHW 2021a).

Sources: Measure 3.04, Table D3.04.9 – AIHW analysis of BreastScreen Australia data; National Bowel Cancer Screening Program: monitoring report 2021.

**Figure 4.16: Rate of cancer hospitalisations (2009–10 to 2018–19) and deaths (2010–2019), by Indigenous status (age-standardised)**



**Notes**

1. Data on hospitalisations from New South Wales, Queensland, Western Australia, South Australia, and the Northern Territory combined.  
 2. Data on deaths from New South Wales, Queensland, Western Australia, South Australia, and the Northern Territory combined.  
 Source: Measure 1.08, Table D1.08.15 – AIHW analysis of National Hospital Morbidity Database; and Measure 1.23, Table D1.23.20 – AIHW National Mortality Database.

For many people, cancer diagnosis will lead to multiple hospitalisations for treatment and recovery. Between July 2017 and June 2019, there were 11,970 hospitalisations with a principal diagnosis of cancer for First Nations people, equivalent to a hospitalisation rate of 7.2 per 1,000 population. First Nations males had a higher hospitalisation rate than First Nations females, at 7.9 and 6.5 per 1,000 population, respectively.

Over the decade between 2009–10 and 2018–19, the age-standardised rate of hospitalisation with a principal diagnosis of cancer among First Nations people increased by 47% from 9.6 to 13 per 1,000 population (data from New South Wales, Victoria, Queensland, Western Australia, South Australia, and the Northern Territory combined). Among First Nations people, age-standardised death rates from cancer increased by 12% between 2010 and 2019 (data from New South Wales, Queensland, Western Australia, South Australia, and the Northern Territory combined) (Figure 4.16).

For further information, see:

- [1.08 Cancer](#)
- [3.04 Early detection and early treatment](#)

## Cardiovascular disease

Cardiovascular disease is a disease of the circulatory system, namely the heart (cardio) or blood vessels (vascular). This includes heart attack, angina, stroke and peripheral arterial disease. It is the second leading cause of death among First Nations people, accounting for 23% of deaths (3,471) in 2015–2019 (data from New South Wales, Queensland, Western Australia, South Australia, and the Northern Territory combined).

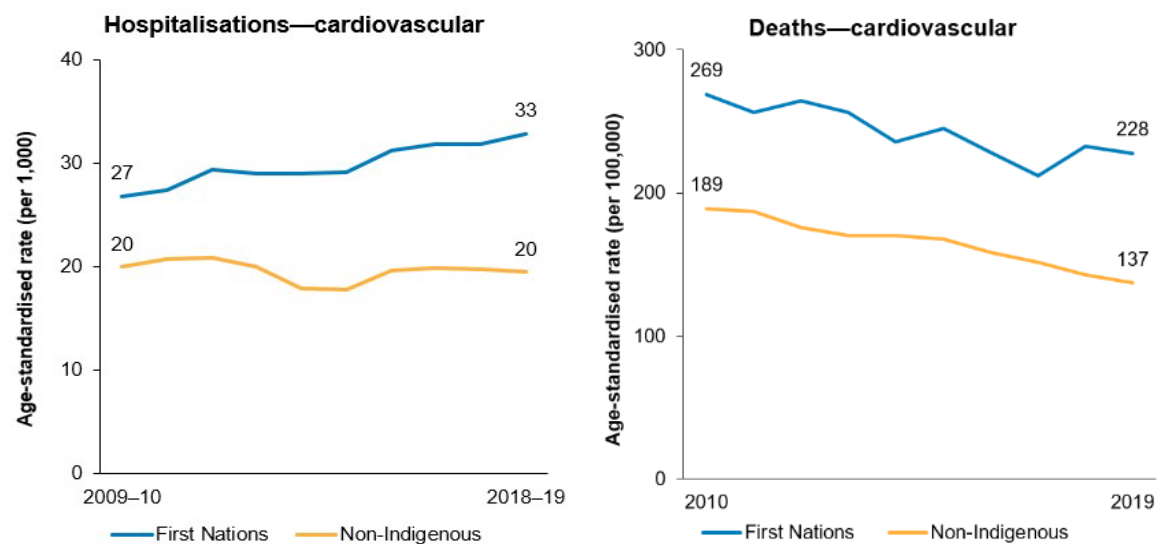
In 2018–19, an estimated 16% (122,100) of First Nations people aged 2 and over had a cardiovascular condition, based on self-reported data from the 2018–19 National Aboriginal and Torres Strait Islander Health survey.

The age-standardised rate of hospitalisations from cardiovascular diseases among First Nations people increased by 21% over the decade from 2009–10 to 2018–19 (Figure 4.17).

Between 2010–11 and 2019–20, the age-standardised proportion of hospitalisations of First Nations adults involving procedures for acute coronary syndrome that included diagnostic coronary angiography (X-ray imaging of blood vessels) and/or a definitive revascularisation procedure (including, for example, procedures to dilate blood vessels and heart bypass surgery) increased from 49% to 64% (AIHW 2023c).

The age-standardised death rate from cardiovascular diseases among First Nations people decreased by 18% over the decade from 2010 to 2019 (Figure 4.17). There was also a decline in the death rate from cardiovascular diseases among non-Indigenous Australians, with no significant change in the gap.

**Figure 4.17: Rate of cardiovascular disease hospitalisations (2009–10 to 2018–19) and deaths (2010–2019), by Indigenous status (age-standardised)**



**Notes**

1. Data on hospitalisations from New South Wales, Victoria, Queensland, Western Australia, South Australia, and the Northern Territory combined.
  2. Data on deaths from New South Wales, Queensland, Western Australia, South Australia, and the Northern Territory combined.
- Source: Measure 1.05, Table D1.05.11 – AIHW analysis of National Hospital Morbidity Database; and Measure 1.23, Table D1.23.18 – AIHW National Mortality Database.

For further information, see:

- [1.05 Cardiovascular disease](#)

## Respiratory diseases

Chronic respiratory diseases, such as asthma and chronic obstructive pulmonary disease, make a large contribution to disease burden among First Nations people.

In 2015–2019, 1,498 First Nations people died from respiratory diseases (10% of all deaths), corresponding to 42 deaths per 100,000 population, making this the fourth leading cause of

death (data from New South Wales, Queensland, Western Australia, South Australia, and the Northern Territory combined). Most of these deaths were from chronic obstructive pulmonary disease (COPD) (63% of all respiratory disease deaths), pneumonia and influenza (17%), and asthma (5%).

In 2018–19, almost 1 in 3 First Nations people (29% or 238,000) had a long-term respiratory disease (lasting 6 months or more), based on self-reported survey data.

First Nations people living in non-remote areas (32%) reported a higher rate of respiratory disease than those in remote areas (15%). The most commonly reported respiratory conditions for First Nations people were asthma (16%), chronic sinusitis (7.4%) and COPD (3.4%).

After adjusting for differences in the age structure between the 2 populations, First Nations people were 2.2 times as likely to report COPD (5% and 2%, respectively) and 1.6 times as likely to report asthma as non-Indigenous Australians (18% and 11%, respectively).

### **Chronic respiratory diseases**

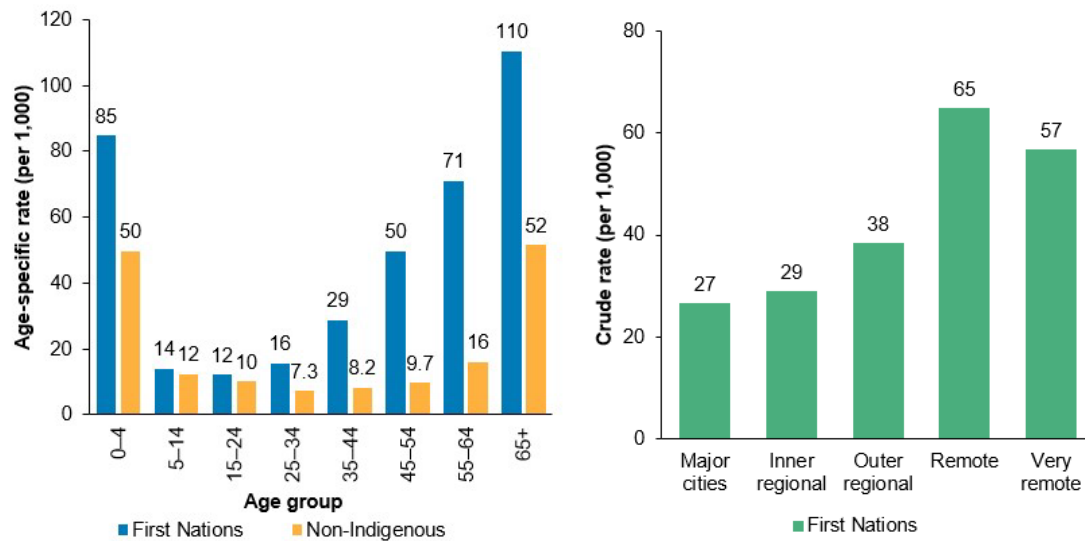
Chronic respiratory diseases are long-lasting with persistent effects.

- Chronic obstructive pulmonary disease is a serious long-term lung disorder that limits airflow in the lungs. It includes emphysema and bronchitis, and is not fully reversible, even with treatment.
- Asthma is chronic inflammation of the airways, causing wheezing, breathlessness, and chest tightness. Asthma can usually be managed through appropriate treatment.

The hospitalisation rate for respiratory diseases for First Nations people was highest for those aged 65 years and over (110 hospitalisations per 1,000 population), followed by those aged 0–4 years (85 hospitalisations per 1,000 population) between July 2017 and June 2019. The rate of hospitalisations due to respiratory diseases was higher among First Nations people living in *Remote* and *Very remote* areas than among those in non-remote areas (Figure 4.18).

Across all age groups, the hospitalisation rate for respiratory diseases was higher for First Nations people than for non-Indigenous Australians. After adjusting for differences in the age structure between the 2 populations, the hospitalisation rate of First Nations people for respiratory diseases was 2.4 times the rate for non-Indigenous Australians.

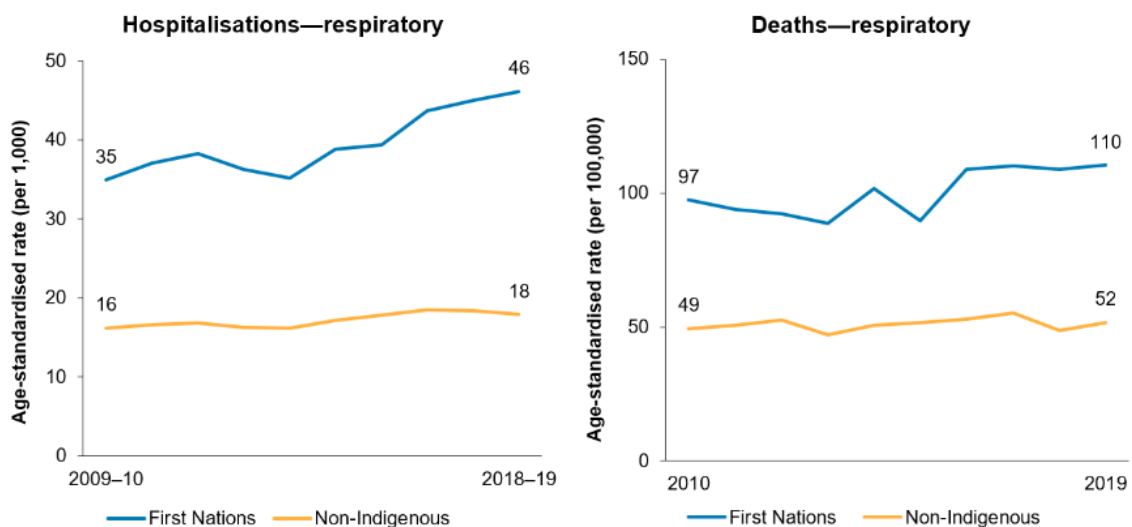
**Figure 4.18: Rate of hospitalisations due to respiratory disease by Indigenous status and age group, and for First Nations people by remoteness, July 2017 to June 2019**



Source: Measure 1.04, Table D1.04.6 – ABS and AIHW analysis of National Aboriginal and Torres Strait Islander Health Survey 2018–19 and National Health Survey 2017–18; and Measure 1.04, Table D1.04.9 – AIHW analysis of National Hospital Morbidity Database.

Age-standardised rates of hospitalisation from respiratory disease among First Nations people increased over the decade from 2010–2019 to 2018–19. From 2010 to 2019, and the age-standardised rate of deaths from respiratory disease increased by 22%. The gap in the death rates due to respiratory diseases for First Nations people and non-Indigenous Australians widened by 43% (Figure 4.19).

**Figure 4.19: Rate of hospitalisations (2009–10 to 2018–19) and deaths (2010–2019) due to respiratory disease, by Indigenous status (age-standardised)**



**Notes**

1. Data on hospitalisations from New South Wales, Victoria, Queensland, Western Australia, South Australia, and the Northern Territory combined.
  2. Data on deaths from New South Wales, Queensland, Western Australia, South Australia, and the Northern Territory combined.
- Source: Measure 1.04, Table D1.04.11– AIHW analysis of National Hospital Morbidity Database; and Measure 1.23, Table D1.23.21 – AIHW National Mortality Database.

For further information, see:

- [1.04 Respiratory disease](#)
- [3.02 Immunisation](#)

## Acute rheumatic fever and rheumatic heart disease

Rheumatic Heart Disease (RHD) is a disease of disadvantage that is both preventable and treatable. RHD is caused by damage to the valves of the heart as a result of one or repeated episodes of acute rheumatic fever (ARF). Both ARF and RHD are associated with socioeconomic and environmental factors such as poverty and overcrowded housing (AIHW 2023b; Coffey et al. 2018).

Over the 5-year period from 2017 to 2021, in the 5 jurisdictions with state-based ARF and RHD registers (New South Wales, Queensland, Western Australia, South Australia, and Northern Territory), 2,570 cases of ARF were diagnosed among First Nations people (69 cases per 100,000 population). First Nations people accounted for 92% of all ARF cases (2,570 of 2,781 cases, excluding cases where Indigenous status was unknown).

Of 2,570 ARF cases among First Nations people:

- 71% (1,814 cases) were first known episodes
- 28% (728 cases) were recurrent (a repeated episode of ARF or had existing RHD)
- 44% (1,142 cases or 140 per 100,000) occurred among First Nations children aged 5–14, the highest of any age group.

As at 31 December 2021, in the 4 jurisdictions where ARF and RHD register data were available for people of all ages (Queensland, Western Australia, South Australia, and Northern Territory), nearly 8 in 10 (78%, 5,221) people with RHD were First Nations people (1,080 cases per 100,000 population).

The proportion of all RHD cases among First Nations people was highest for those aged 35 and over (45% or 2,366) followed by those aged 15–34 (44% or 2,305). In the 3 jurisdictions where data are available by sex (Queensland, South Australia, and Northern Territory), the rate of RHD was around twice as high for First Nations females as for First Nations males.

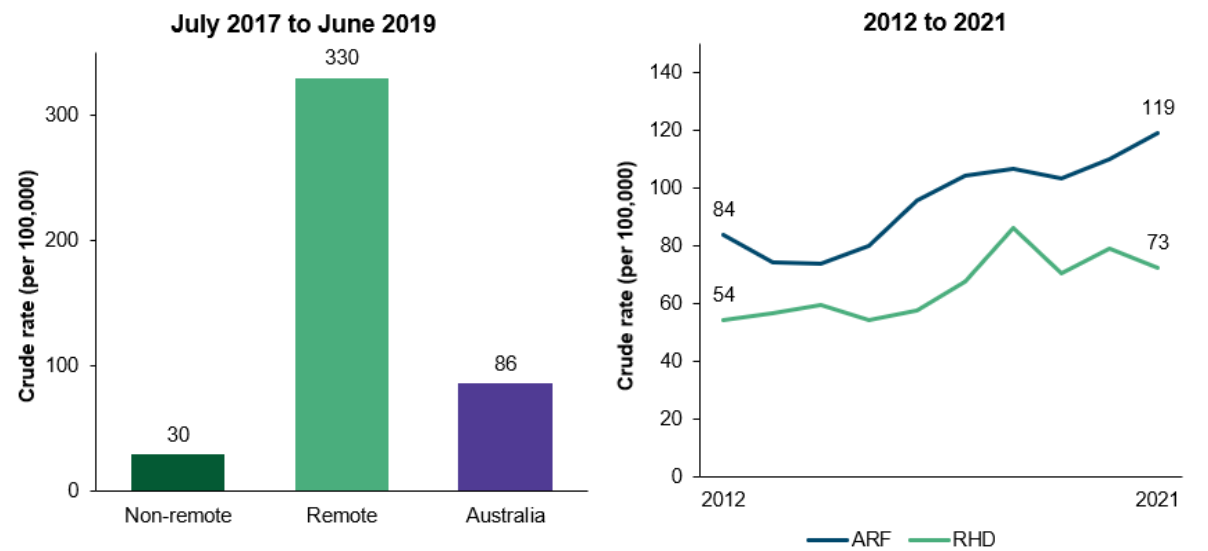
Antibiotics (Benzathine Penicillin G or BPG) can be given to people who have been diagnosed with ARF and/or RHD to prevent further Strep A infections, thereby reducing the risks of developing ARF again and of developing or worsening RHD. In 2021, in Queensland, Western Australia, South Australia and the Northern Territory combined, of the 4,816 First Nations people who were prescribed antibiotics as secondary prophylaxis, 31% (1,513) received at least 80% of the prescribed doses.

Between July 2017 and June 2019, 1,428 First Nations people were hospitalised for ARF or RHD, a rate of 86 per 100,000 population. Among the 5 jurisdictions (New South Wales, Queensland, Western Australia, South Australia, and Northern Territory), the Northern Territory (481 per 100,000) had the highest rate, followed by Western Australia (108 per 100,000). Hospitalisation rates for ARF or RHD were higher for First Nations people living in remote areas (*Remote and very remote areas combined*) than for those living in non-remote areas (*Major cities, inner regional and outer regional areas combined*) (330 per 100,000 compared with 30 per 100,000) (Figure 4.20).

Over the decade from 2012 to 2021, in the 4 jurisdictions with data available (Queensland, Western Australia, South Australia, and the Northern Territory combined), the incidence rates of ARF and RHD among First Nations people both increased. The incidence rates of ARF among First Nations people increased from 84 per 100,000 to 119 per 100,000 population, driven by an increase in the Northern Territory, where the rate of ARF approximately doubled (108% increase, based on linear regression analysis). The incidence rates of RHD among First Nations people fluctuated between 54 and 86 new cases per 100,000 population with an overall upwards trend. Based on linear regression, there was a 50% increase in the rate of RHD, reflecting increases in RHD incidence in the Northern Territory (98% increase), and in Queensland (40% increase) (Figure 4.20).

Note that the increase may reflect a real increase in the number of cases occurring, but may also be due to improved detection and diagnosis of cases, increases in the number of people being recorded on the registers, or a combination of these.

**Figure 4.20: Hospitalisations for ARF/RHD by remoteness (2017–2019)<sup>(a)</sup>, and incidence rates of ARF and RHD over time (2012 to 2021)<sup>(b)</sup>, among First Nations people**



(a) Data shown for hospitalisations of ARF/RHD are from all jurisdictions combined.  
 (b) Data shown for incidence rates of ARF and RHD are from Queensland, Western Australia, South Australia, and the Northern Territory combined.  
 Source: Measure 1.06, Table D1.06.6, Table D.06.15, Table D1.06.17 – National Hospital Morbidity Database & National Rheumatic Heart Disease data collection.

For further information, see:

- [1.06 Acute rheumatic fever and rheumatic heart disease](#)

## Diabetes

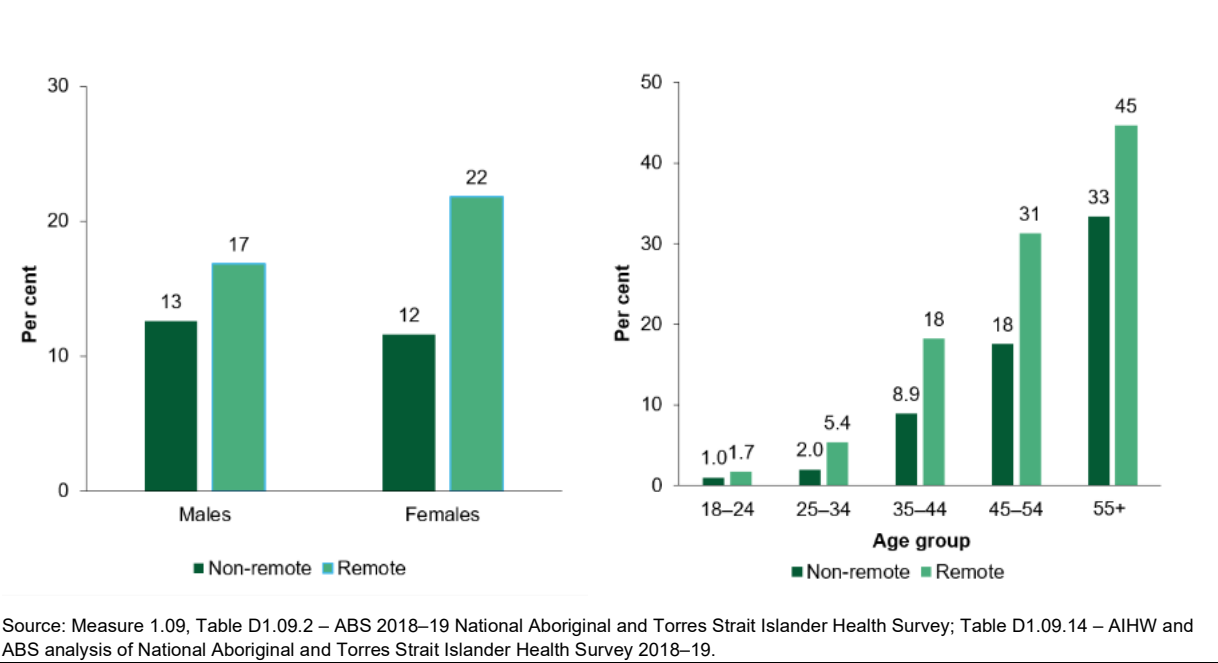
Diabetes is a chronic condition that can cause serious health complications. Some types of diabetes can be prevented through a healthy lifestyle – getting enough exercise, having a healthy diet, and not smoking. Diabetes is a risk factor for cardiovascular disease, and can lead to kidney damage. Often, people have all 3 of these conditions (AIHW 2015a).

In 2018–19, about 65,300 (13%) First Nations adults reported having diabetes or high sugar levels. Based on age-standardised rates, in 2018–19, First Nations adults were 2.8 times as

likely to report having diabetes or high sugar levels as non-Indigenous adults (17% compared with 6.1%).

The prevalence of diabetes/high sugar levels increases with age, and was higher among First Nations people in remote areas than in non-remote areas (Figure 4.21).

**Figure 4.21: Diabetes/high sugar levels among First Nations people, by remoteness and sex, and by remoteness and age group, 2018–19**



In the 5-year period 2015–2019, 7.3% (1,124) of total deaths of First Nations people were due to diabetes. The proportion of total deaths due to diabetes was higher for First Nations females (608 deaths or 8.7% of all First Nations female deaths) than First Nations males (516 deaths or 6.1%).

Between July 2017 and June 2019, 7,664 First Nations people were hospitalised with a principal diagnosis of diabetes, corresponding to a rate of 4.6 hospitalisations per 1,000 population. Based on age-standardised rates, First Nations people were hospitalised due to diabetes at a rate nearly 4 times that of non-Indigenous Australians (6.1 compared with 1.8 per 1,000 population).

Between 2010 and 2019, the age-standardised death rate from diabetes for First Nations people did not change significantly. There was also no significant change in the age-standardised rate of deaths due to diabetes among non-Indigenous Australians. However, death rates from diabetes remain relatively high for First Nations people compared with non-Indigenous Australians, with First Nations people dying from diabetes at about 4.7 times the rate (age-standardised) of non-Indigenous Australians in the period 2015–2019 (data from New South Wales, Queensland, Western Australia, South Australia, and the Northern Territory combined).

For further information, see:

- [1.09 Diabetes](#)

## Kidney disease

While chronic kidney disease is often detected too late to be reversible, it can be prevented by a healthy lifestyle, or treated if detected early.

Between July 2017 and June 2019, care involving dialysis was the leading cause of hospitalisation among First Nations people, accounting for 44% (474,745) of all hospitalisations. Excluding dialysis, there were 6,710 hospitalisations for First Nations people due to chronic kidney disease.

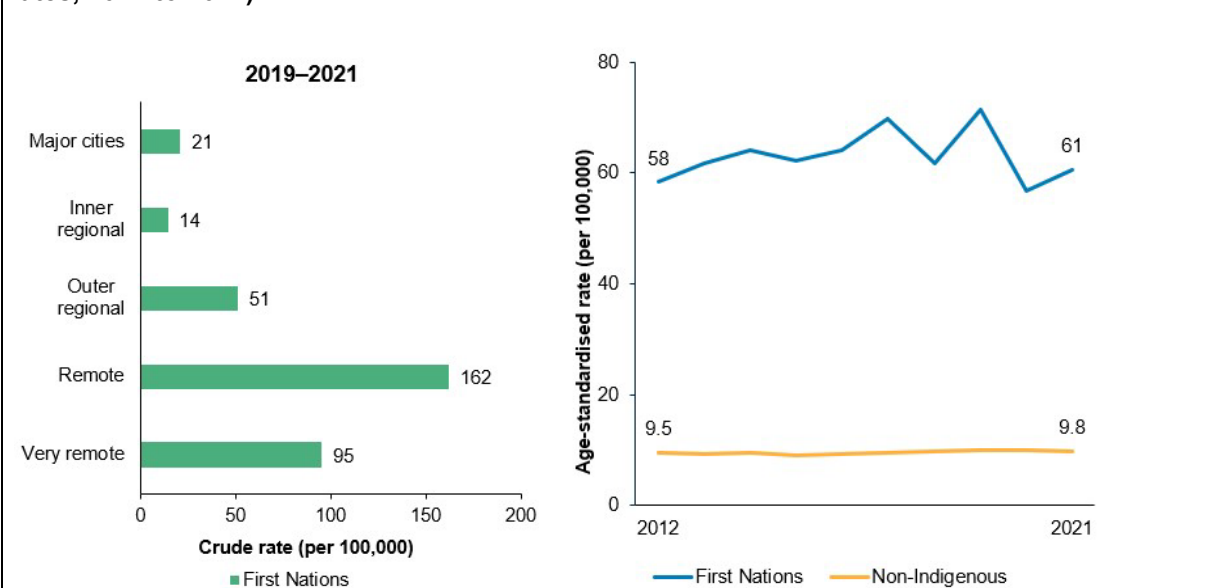
Patients with kidney failure, also known as end-stage kidney disease, require either a kidney transplant or dialysis to maintain the functions normally performed by the kidneys. These treatments are collectively known as 'kidney replacement therapy'.

In the 3-year period 2019–2021, 1,063 First Nations people began kidney replacement therapy for kidney failure. This corresponds to an incidence rate of 41 new cases of kidney failure with replacement therapy for every 100,000 First Nations people.

In 2019–2021, among First Nations people who began receiving kidney replacement therapy, the most common type of primary kidney disease was diabetic kidney disease (also known as diabetic nephropathy) – experienced by 71% (753) of the 1,063 new First Nations kidney replacement therapy patients. This was followed by glomerulonephritis (77 or 7.2%) and hypertension (61 or 5.7%).

The incidence of kidney failure with replacement therapy was 6 times as high for First Nations people as for non-Indigenous Australians (63 compared with 10 per 100,000 population, based on age-standardised rates). Between 2012 and 2021, the age-standardised incidence rate for kidney failure with replacement therapy did not change significantly for First Nations people. For non-Indigenous Australians, there was a 7.8% increase in the age-standardised incidence rate for kidney failure with replacement therapy, which was mainly driven by increases among non-Indigenous males (10% increase over the period) (Figure 4.22).

**Figure 4.22: Incidence of kidney failure with replacement therapy among First Nations people by remoteness (crude rates, 2019–2021), and by Indigenous status over time (age-standardised rates, 2012 to 2021)**



Source: Measure 1.10, Table D1.10.13 and Table D1.10.12 – AIHW analysis of Australia and New Zealand Dialysis and Transplant Registry data.

As at 31 December 2021, there were 2,568 First Nations people with kidney failure who were receiving kidney replacement therapy, a prevalence rate of 289 per 100,000 population. Most First Nations patients with kidney failure (85% or 2,170 patients) were receiving dialysis, while 15% (or 398 patients) had received a kidney transplant. In comparison, about one-half (49%; 12,063 of 24,774 patients) of non-Indigenous patients received a kidney transplant.

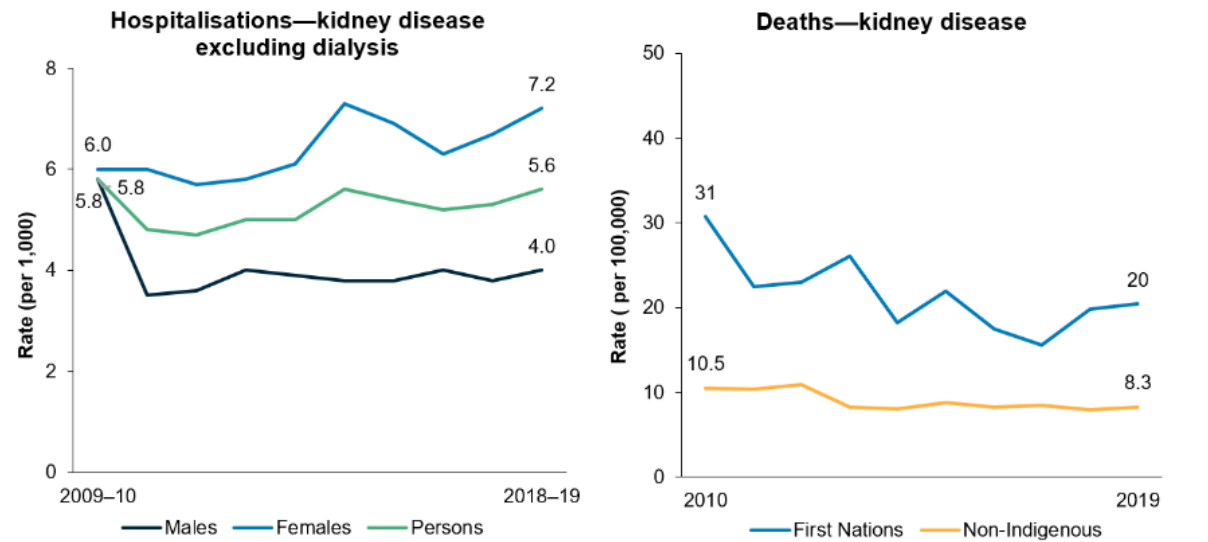
In the 6-year period 2016–2021, 1,381 First Nations people were reliant on dialysis to manage their kidney failure at the time of their death, based on underlying cause of death. The primary cause of death in over one-third (466 deaths or 34%) of these cases was cardiovascular diseases, a further one-fifth (307 deaths or 22%) was due to withdrawal from dialysis and 12% (161 deaths) was due to infections. Among First Nations people who had received a transplant to manage their kidney failure, there were 49 deaths in 2016–2021 – the leading cause of these deaths was cardiovascular disease (13 deaths or 27%), followed by cancer (7 deaths or 14%), infections, and withdrawal (both 6 deaths or 12%).

Kidney diseases were the 10th leading cause of death for First Nations people (1.8% of deaths). First Nations females accounted for 58% of deaths due to kidney disease among First Nations people.

Between 2010 and 2019, the age-standardised death rate from kidney disease among First Nations people decreased by 36%. However, there was no significant reduction in the gap between First Nations people and non-Indigenous Australians over this period (data from New South Wales, Queensland, Western Australia, South Australia, and the Northern Territory combined) (Figure 4.23).

Over the decade from 2009–10 to 2018–19, the age-standardised hospitalisation rate for a principal diagnosis of chronic kidney disease increased by 6% for First Nations people. This trend was driven by the increases for First Nations females (by 22%) as the rate among First Nations males declined (by 16%) (Figure 4.23).

**Figure 4.23: Rates of hospitalisations due to kidney disease (2009–10 to 2018–19) among First Nations people, and deaths due to kidney disease by Indigenous status and sex (2010–2019) (age-standardised)**



Notes  
 1. Data on hospitalisations from New South Wales, Victoria, Queensland, Western Australia, South Australia, and the Northern Territory combined.  
 2. Data on deaths from New South Wales, Queensland, Western Australia, South Australia, and the Northern Territory combined.  
 Source: Measure 1.10, Table D1.10.20 – AIHW analysis of National Hospital Morbidity Database; and Measure 1.10, Table D1.23.23 – AIHW National Mortality Database.

Kidney disease is more likely to be recorded as an additional diagnosis on hospitalisation administrative records or recorded on death certificates as an associated cause compared with other diseases. The above estimations of the impact of kidney disease are based on the principal diagnosis of hospitalisation or underlying cause of death, and therefore likely underestimate the true extent of chronic kidney disease among First Nations people.

For further information, see:

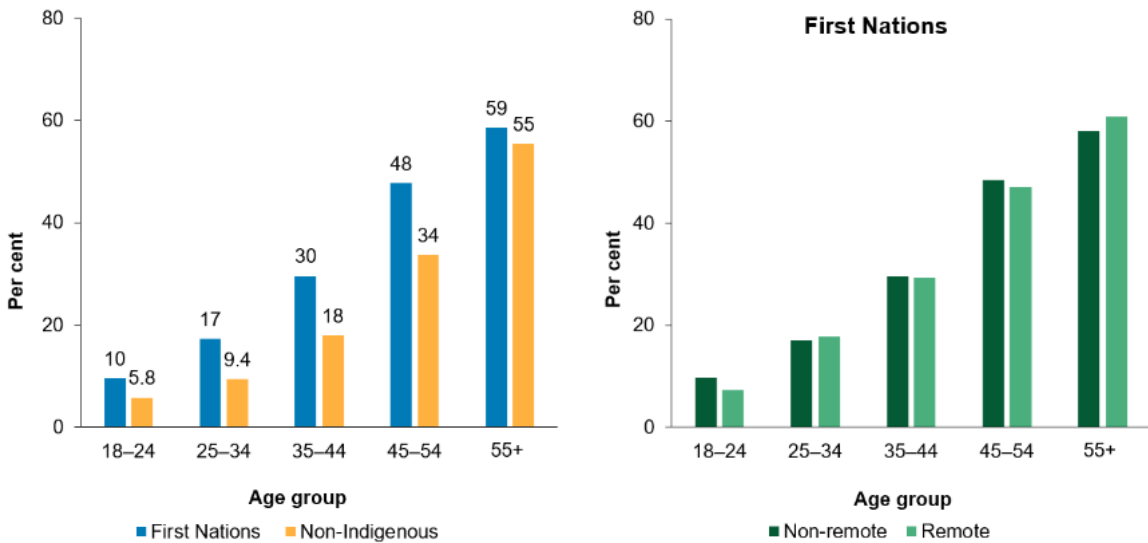
- [1.10 Kidney disease](#)

## High blood pressure

High blood pressure is a leading risk factor for cardiovascular diseases, including coronary heart disease, which is the leading cause of avoidable deaths among First Nations people (AIHW 2022d).

In 2018–19, almost 1 in 3 (31%) First Nations people (151,000) had high blood pressure (based on both measured and self-reported data). The prevalence of high blood pressure increased with age for both First Nations and non-Indigenous adults. The greatest relative difference in rates of high blood pressure between First Nations people and non-Indigenous Australians was found among those in the 25–34 age group, with the rate for First Nations people nearly twice as high as non-Indigenous Australians. Rates of high blood pressure are similar among First Nations people in non-remote and remote areas (Figure 4.24).

**Figure 4.24: High blood pressure prevalence, by Indigenous status and age group, and by remoteness and age group for First Nations people, 2017–19**



Source: Measure 1.07, Table D1.07.7 – AIHW and ABS analysis of National Aboriginal and Torres Strait Islander Health Survey 2018–19 and National Health Survey 2017–18.

### **Many people with high blood pressure do not know they have the condition**

People with high blood pressure may not know they have the condition – often there are no symptoms.

The 2018–19 National Aboriginal and Torres Strait Islander Health Survey asked participants whether they had been told they had high blood pressure by a doctor or nurse, and their blood pressure was measured.

Of the First Nations adults with *measured* high blood pressure (140/90 mmHg or greater):

- 25% (an estimated 28,400) had already been told they had high blood pressure by a health professional.
- 75% (83,600) had not been told they had high blood pressure by a health professional.

For further information, see:

- [1.07 High blood pressure](#)

## **HIV, hepatitis and sexually transmissible infections**

HIV, chlamydia, infectious syphilis, gonorrhoea, hepatitis B and hepatitis C are notifiable diseases in Australia, with registers aiming to monitor, control and prevent the occurrence and spread of infectious diseases. Early detection and treatment of sexually transmissible infections (STIs) and bloodborne viruses are vital to preventing further spread and serious long-term health consequences (Department of Health 2019; Department of Health and Aged Care 2021b).

The completeness rate for Indigenous status information varies by disease, year, and by jurisdiction. Data are limited to jurisdictions where Indigenous status completeness was greater than 50% for the specified disease for all years between 2020 to 2022.

In 2020–2022, for First Nations people, there were:

- 985 chlamydia notifications per 100,000 population (23,138 notifications, excludes data for Tasmania and Victoria)
- 572 gonorrhoea notifications per 100,000 population (13,967 notifications, excludes data for Victoria)
- 109 infectious syphilis notifications per 100,000 population (2,881 notifications).
- 21 hepatitis B notifications per 100,000 population (322 notifications, excludes data for New South Wales and Victoria)
- 175 hepatitis C notifications per 100,000 population (2,735 notifications, excludes data for New South Wales and Victoria).

Among First Nations people, in 2020–2022:

- the notifications rates for chlamydia, syphilis, gonorrhoea, hepatitis B, and hepatitis C generally decreased with age.
- the age-standardised notification rates of gonorrhoea, hepatitis C and infectious syphilis were higher, compared with rates for non-Indigenous Australians (rate ratios ranging from 8.6 for hepatitis C to 2.0 for hepatitis B).
- the age-standardised notification rates for chlamydia, infectious syphilis, gonorrhoea and hepatitis B were higher in remote than non-remote areas. For hepatitis C, the notification rate was lower in remote than non-remote areas.

Among First Nations people in 2019–2021:

- there were 59 newly diagnosed HIV notifications (2.3 per 100,000 population).
- the age-standardised notification rate for HIV was lower for First Nations people than non-Indigenous Australians (rate ratio 0.9).

Between 2013 and 2022, notification rates among First Nations people decreased for chlamydia and hepatitis B, increased for infectious syphilis, and there was no statistically significant change for gonorrhoea and hepatitis C.

Between 2010–2012 and 2019–2021, there was no statistically significant change in HIV age-standardised notifications rates for First Nations people, or in the gap between First Nations people and non-Indigenous Australians.

Note that changes in notification rates over time are influenced by a range of factors including access to health care, improved screening and improved accuracy of tests.

For further information, see:

- [1.12 HIV, hepatitis and sexually transmissible infections](#)

## 5. Tier 2 – Determinants of health

Health is influenced by social determinants and individual health risk factors. Social determinants of health refer to the circumstances in which people are born, grow up, live, work and age, and the systems put in place to deal with illness. These circumstances are in turn shaped by a wider set of forces such as economics, social policies, and politics (Commission on Social Determinants of Health 2008).

Using a composite measure based on a number of survey questions about self-assessed health, long-term health conditions, and emotional wellbeing, AIHW analysis of ABS survey data for 2017–19 estimated that around 3 in 10 (29%) First Nations people aged 18–64 had ‘good health’.

After accounting for the differences in average age, sex, marital status, remoteness, and state and territory between First Nations and non-Indigenous survey respondents, the health gap between First Nations people and non-Indigenous Australians was 24 percentage points – a decrease from 27 percentage points in 2011–13.

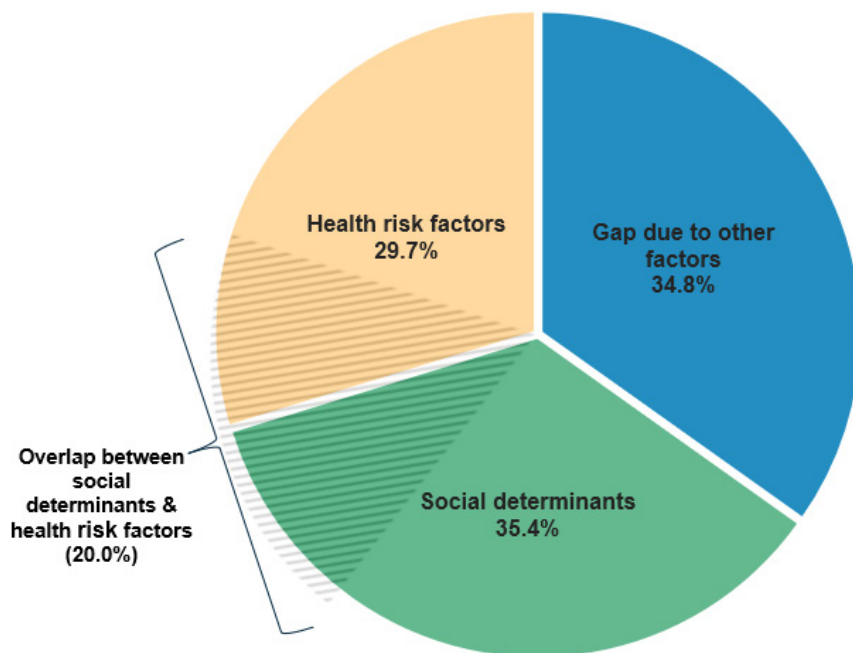
Almost two-thirds (65%) of the health gap was explained by a set of 11 selected factors that were broadly classified into 2 groups: social determinants of health (35%, 5 factors) and health risk factors (30%, 6 factors). An estimated 20% of the explained health gap was attributed to the overlap, or interactions, between the social determinants and health risk factors.

Of the 35% of the health gap due to social determinants, the largest effects were due to differences in employment status and hours worked (contributing to 14% of the health gap), equivalised household income (contributing to 13% of the health gap), and the highest level of school attainment (8.9% of the health gap).

Of the 30% of the health gap due to risk factors, the largest effects were due to differences in current smoking rates (contributing 13% of the health gap) and overweight and obesity rates (contributing to 11% of the health gap).

This analysis did not explain about 35% of the health gap. The unexplained health gap includes possible effects from factors that might have contributed to good health but were not available in the survey data analysed. For example, these factors could include access to affordable and culturally appropriate health care services, connection to country and language, and effects of structural disadvantage and racism.

**Figure 5.1: Proportion of the adjusted health gap explained by differences in social determinants and health risk factors between First Nations people and non-Indigenous Australians aged 18–64, 2017–19**



Note: Gap due to other factors refers to the component of the gap unexplained by differences in the factors included in this study. This reflects the fact that the available data do not provide a complete picture of the differences between the two populations.

Source: AIHW analysis of ABS NATSIHS 2018–19 and ABS NHS 2017–18, as published in *Australia's Health 2024: data insights* (AIHW 2024 forthcoming).

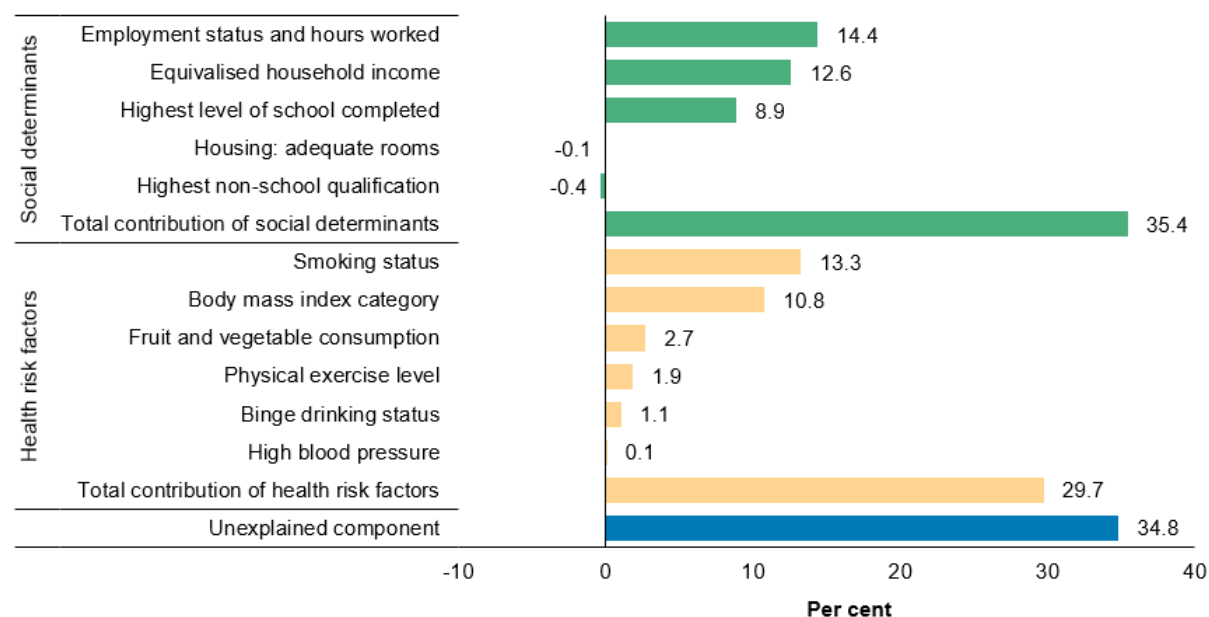
Together, household income (adjusted for household size and composition), employment status or number of hours worked, and smoking status account for 40% of the total health gap.

If First Nations adults were to have the same average equivalised household income, same average employment rate and hours worked, and same average smoking rate levels as non-Indigenous adults, the health gap would be reduced by more than a third—from 24 percentage points to around 14 percentage points.

In comparison with the previous analysis of data from 2011–13 (AIHW 2018):

- the overall size of the adjusted health gap has decreased by 2.9 percentage points (from 27 to 24 percentage points).
- the unexplained component of the adjusted health gap has decreased by 12 percentage points from 47% to 35%, largely due to a substantial increase of 11 percentage points in the proportion of the health gap explained by health risk factors, which rose from 19% to 30%.
- the proportion explained by social determinants has increased, by 1 percentage point from 34% to 35%.
- among the health risk factors, the largest changes were in the proportions of the health gap explained by Body Mass Index (BMI) and smoking status. The proportion of the health gap explained by BMI has increased by 3.6 percentage points from 7.2% to 11%, and the proportion explained by smoking has increased by 3.3 percentage points from 10% to 13%.

**Figure 5.2: Contribution of individual social determinants and health risk factors to the adjusted health gap between First Nations people and non-Indigenous Australians aged 18–64, 2017–19**



Note: For additional analyses, see *Australia's health 2024: data insights* (AIHW 2024 forthcoming).

Source: AIHW analysis of ABS NATSIHS 2018–19 and ABS NHS 2017–18, published in *Australia's Health 2024: data insights* (AIHW 2024 forthcoming).

## Education

A person's educational qualifications can influence their health status and health outcomes. Higher levels of education can lead to:

- greater health literacy (a person's ability to find, understand, and apply health information), which can have a direct impact on a person's health
- better prospects for employment and income, which can help people access good quality housing, healthy food, and health care services.

Health also influences education. Poor health through life, and health conditions such as vision and hearing impairment (especially in childhood) can disrupt a person's schooling and affect their ability to learn (Department of Prime Minister and Cabinet 2020).

The importance of education is also reflected in 4 Closing the Gap targets:

- Target 4: By 2031, increase the proportion of Aboriginal and Torres Strait Islander children assessed as developmentally on track in all 5 domains of the Australian Early Development Census (AEDC) to 55 per cent
- Target 5: By 2031, increase the proportion of Aboriginal and Torres Strait Islander people (age 20–24) attaining Year 12 or equivalent qualification to 96 per cent
- Target 6: By 2031, increase the proportion of Aboriginal and Torres Strait Islander aged 25–34 years who have completed a tertiary qualification (Certificate III and above) to 70 per cent
- Target 7: By 2031, increase the proportion of Aboriginal and Torres Strait Islander youth (15–24 years) who are in employment, education or training to 67 per cent.

See Targets 4, 5, 6 and 7 in the [Closing the Gap Information Repository](#).

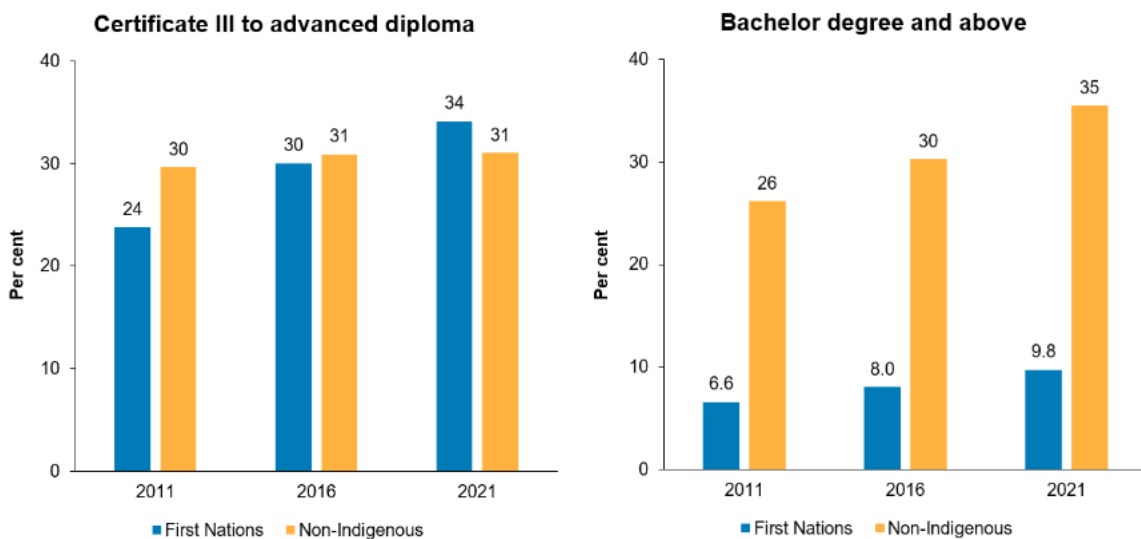
Over the decade from 2012 to 2021:

- The proportion of First Nations school students in Year 5 who were at or above the national minimum standards increased for numeracy (13%) and spelling (9.9%).
- The proportion of First Nations students achieving the national minimum standards increased for Year 7 in spelling (5.7%) and for Year 3 in reading (11%).
- The proportion of First Nations students staying in school from the first year of secondary school (Year 7 in most states and territories, and Year 8 in South Australia) to Year 12 increased by 7.9 percentage points to 59%.

Between 2011 and 2021, rates of highest education or training level completed have also improved significantly. The proportion of First Nations young adults aged 20–24:

- who had completed Year 12 qualification or equivalent, or attained a non-school qualification at Certificate III level or above, increased from 52% to 68%.
- who had completed a non-school qualification at Certificate III or above, and/or were currently studying for a non-school qualification at any level, increased from 35% to 48%. This was mainly due to increased attainment of certificate III or advanced diploma qualifications (Figure 5.3).

**Figure 5.3: Attainment of post-school qualifications among Australians aged 20–64, as proportion of population, by Indigenous status, 2011 to 2021**



Source: Measure 2.06, Table D2.06.13. AIHW analysis of ABS Census of Population and Housing 2021 (AIHW 2022c).

Educational attainment among First Nations people was highest in *Major cities*. In 2021, the proportion of First Nations people aged 20–24:

- with a Year 12 or a non-school qualification (Certificate III level or above) was 76% (23,400 people) in *Major cities*, compared with 42% (2,500) in *Very remote areas*
- with a Certificate III to Advanced diploma was 37% (60,800 people) in *Major cities*, compared with 16% (6,100) in *Very remote areas*
- with a Bachelor Degree or above was 14% (22,800) in *Major cities*, compared with 2.2% (830) in *Very remote areas*.

Educational achievement for all students tends to decrease with increases in remoteness of usual residence, the disparity being more pronounced among First Nations students compared to non-Indigenous students.

For further information, see:

- [2.04 Literacy and numeracy](#)
- [2.05 Education outcomes for young people](#)
- [2.06 Educational participation and attainment of adults](#)

## Employment

### COVID-19 and employment data

The COVID-19 pandemic has had a substantial impact on employment (see also [Australia's Welfare: employment and unemployment](#)).

In 2021, the Census was held on August 10, during which most states and territories in Australia were under restrictions due to the COVID-19 pandemic. COVID-19 restrictions affected people's labour force status, working hours, and attendance at their usual workplace (AIHW 2022f). For example, in 2021, 6.5% of employed people worked 0 hours, the highest ever recorded (with 4.1% in the 2011 Census being the second highest).

There were instructions on the Census website and online form to guide people in how to respond to questions on employment while in lockdown (AIHW 2022d). If the person was employed in the last four weeks prior to lockdown, but was unable to work in the last week due to lockdown, they were instructed to select 'Yes, but absent on holidays, on paid leave, on strike or temporarily stood down'. However, complexities in interpretation of employment during lockdown may have affected how people responded to questions about their labour force status.

The employment rate – the number of employed people as a proportion of the population – remains much lower among First Nations people than non-Indigenous Australians. Education attainment is associated with employment outcomes, with people who have completed tertiary level education generally having better employment opportunities than those who have not completed further education after leaving school (National Skills Commission 2021). Two of the Closing the Gap targets relate to employment:

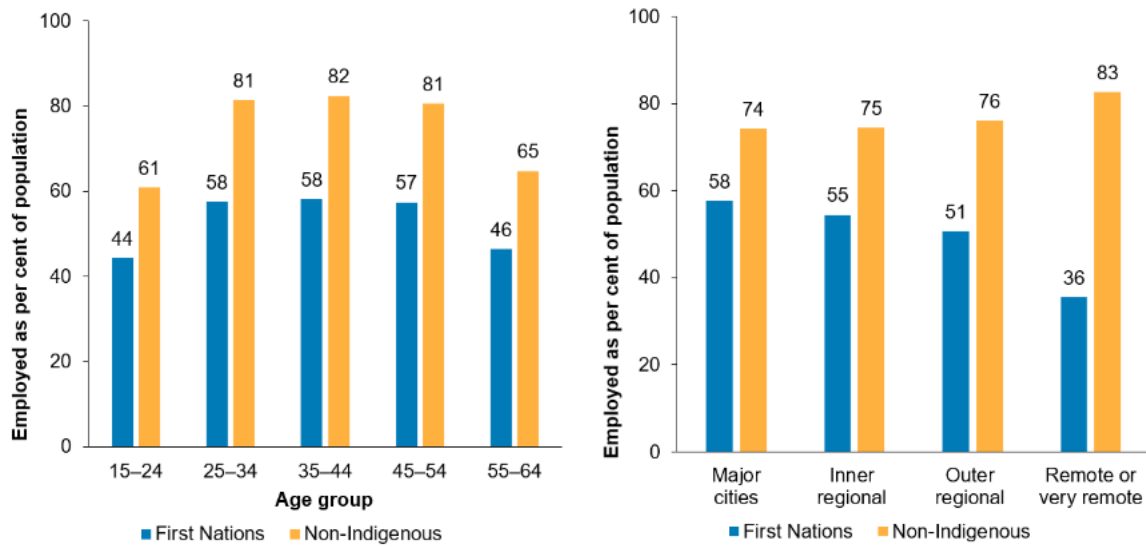
- Target 7: By 2031, increase the proportion of Aboriginal and Torres Strait Islander youth (15–24 years) who are in employment, education or training to 67 per cent
- Target 8: By 2031, increase the proportion of Aboriginal and Torres Strait Islander people aged 25–64 who are employed to 62 per cent

See Targets 7 and 8 in the [Closing the Gap Information Repository](#).

In 2021, 52% (253,600) of First Nations people aged 15–64 (working age) were employed. The employment rate for First Nations people at working age was highest in *Major cities* at 58% and the lowest in *Very remote* areas at 32%. The employment rate was lower for First Nations people in remote areas (*Remote and very remote areas combined*) and decreased from less remote areas to more remote areas (Figure 5.4).

First Nations people aged 15–64 had a lower employment rate than non-Indigenous Australians (52% compared with 75%), and this was true across all age groups (Figure 5.4). The gap in employment rates between First Nations people and non-Indigenous Australians aged 15–64 was higher in more remote areas, ranging from 17% in *Major cities* to 47% in *Remote and very remote areas combined* (Figure 5.4).

**Figure 5.4: Employment rate (people aged 15–64), by Indigenous status and age group, and by Indigenous status and remoteness, 2021**



Source: Measure 2.07, Table D2.07.3 and Table D2.07.6. AIHW analysis of ABS Census of Population and Housing 2021 (AIHW 2022c).

For First Nations people aged 25–64 (the target age group for the employment Closing the Gap target), the employment rate increased from 51% in 2016 to 56% in 2021. Between 2016 and 2021, the gap in the employment rates between First Nations people and non-Indigenous Australians aged 25–64 narrowed from 24.7 to 22.0 percentage points.

The employment rate for First Nations people aged 25–64 increased with each level of educational attainment. From 24% of those with no educational attainment or a Year 9 or below qualification combined, 45% of those with a secondary education at a Year 10 to 12 level, 72% of those with a Certificate III or IV level qualification, and 85% of those with a bachelor’s degree as their highest level of education were employed in 2021 (Table 5.1).

**Table 5.1: Employment rate (%) for First Nations people aged 25–64, by highest level of educational attainment and remoteness, 2021**

	Bachelor Degree Level or higher	Advanced Diploma and Diploma Level	Certificate III and IV Level	Year 10 to 12	Certificate I & II Level	Year 9 or below/no education attainment	Total
Major cities	86	76	72	52	30	28	62
Inner regional	84	76	73	48	32	28	58
Outer regional	84	76	73	45	34	25	54
Remote	85	80	75	37	46	20	46
Very Remote	82	78	64	30	48	17	35
<b>Australia</b>	<b>85</b>	<b>76</b>	<b>72</b>	<b>45</b>	<b>34</b>	<b>24</b>	<b>56</b>

Note: Total includes people for whom educational attainment was inadequately described or not stated.

Source: Measure 2.07, Table D2.07.22. AIHW analysis of ABS Census of Population and Housing 2021 (AIHW 2022c).

First Nations people aged 25–64 with one or more long-term health condition(s) and who needed assistance with core activities had lower employment rates than those with no long-term condition, and those who did not need assistance. The employment rate:

- ranged from 17% to 53% for those with one or more long-term health condition(s), compared with 65% for those with no long-term condition
- was 14% for those who needed assistance with core activities, compared with 62% for those who did not need assistance.

Many First Nations people face conflicts between their family responsibilities and the challenges of finding and maintaining employment (Venn & Biddle 2018). A recent study found that education, disability, and having spent time in prison were the most important factors underlying labour force participation (Dinku & Hunt 2021).

A lack of job or not having a driver’s licence, among others, were reported as barriers in finding work. Among First Nations people aged 15–64 in remote areas who were unemployed in 2014–15:

- nearly 2 in 5 (38%) reported a lack of any jobs as a barrier to finding work, compared with 1 in 5 (22%) unemployed First Nations people in non-remote areas.
- nearly 1 in 5 (19%) reported not having a driver’s licence as a barrier to finding work, compared with 1 in 3 (33%) unemployed First Nations people in non-remote areas (Table 5.2).

**Table 5.2: Top 5 difficulties finding work, unemployed First Nations people aged 15–64, 2014–15**

Remote	Non-remote
No jobs in local area or line of work 44% (5,700)	No jobs in local area or line of work 38% (15,500)
No jobs at all 38% (4,900)	Don't have driver's licence 33% (13,500)
Transport problems/distance 27% (3,500)	Transport problems/distance 33% (13,300)
Insufficient education, training, skills 22% (2,800)	Insufficient education, training, skills 32% (13,000)
Don't have driver's licence 19% (2,400)	No jobs at all 22% (8,800)

Source: Measure 2.07, Table D2.07.10 – AIHW and ABS analysis of National Aboriginal and Torres Strait Islander Social Survey 2014–15.

For further information, see:

- [2.07 Employment](#)

## Income

An adequate income is fundamental to being able to live a healthy life – it gives a person greater access to nutritious food, better housing, and health and other services, as well as a greater ability for social participation (World Health Organization 2017).

**Equivalised household income:** Household incomes are adjusted to facilitate the comparison of income levels between households of different size and composition, reflecting the requirement of a larger household to need a higher level of income to achieve the same standard of living as a smaller household.

**Income quintiles:** Household incomes are ordered from lowest to highest income, and then divided into 5 equal-sized groups, or quintiles. The lowest income group is the first quintile, and the highest is the fifth quintile. Equivalised household income quintile boundaries are calculated for the total population.

In 2021, more than 1 in 3 (35% or 137,600) First Nations adults lived in households with incomes in the lowest 20% of incomes nationally (First income quintile; based on equivalised

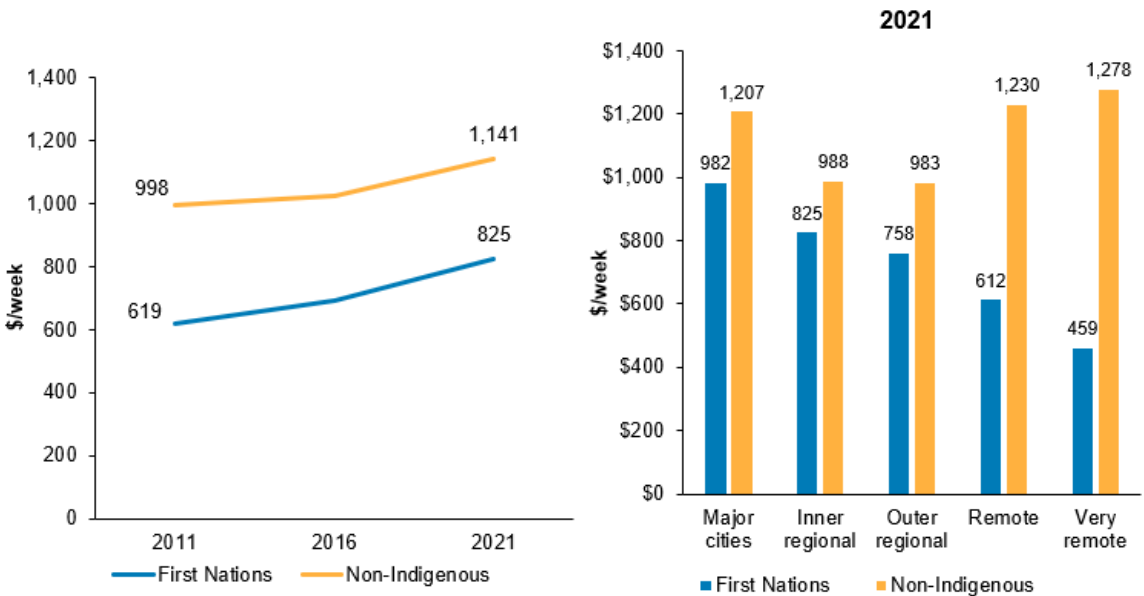
gross household income, an adjusted income measure used to compare households of different types and sizes).

Between 2011 and 2021, after adjusting for inflation, the median gross weekly equivalised household income increased:

- from \$619 to \$825 for First Nations adults
- from \$998 to \$1,141 for non-Indigenous adults.

Average weekly equivalised household income of First Nations adults was highest among those living in *Major cities* (\$982), and lowest among those living in *Very remote* areas (\$459) (Figure 5.5).

**Figure 5.5: Median gross weekly equivalised household income of adults by Indigenous status (2011–2021), and by Indigenous status and remoteness (2021)**



Source: Measure 2.08, Table D2.08.16 – AIHW analysis of the ABS Census of Population and Housing, data provided by the ABS, customised report, 2023 (ABS 2023b); and Measure 2.08, Table D2.08.12 – ABS Census of Population and Housing 2021 (AIHW 2022c).

Income and health have a 2-way relationship. People who have an adequate income can improve their health by spending more money to do so. At the same time, people who have good health are also more likely to find work and earn an income.

Comparing First Nations adults living in households with household income in the lowest income quintile (bottom 20% of incomes) nationally with those in the top 2 income quintiles (top 40% of incomes nationally), in 2018–19:

- 32% (49,100) of those in the lowest income quintile assessed their own health as fair or poor, compared with 13% (10,200) of those in the top 2 income quintiles
- 44% (65,700) of those in the lowest income quintile were assessed as experiencing high or very high psychological distress, compared with 18% (14,100) of those in the top 2 income quintiles.

In 2018–19, a government cash pension or allowance was the main source of personal income for 45% (200,200) of First Nations adults aged 18–64.

For further information, see:

- [2.08 Income](#)

## Housing

Stable and secure housing is fundamentally important to health and wellbeing. Housing circumstances – such as tenure, affordability, the amount of living space and location – are key determinants of physical and mental health (Foster et al. 2011; Marsh et al. 2000). However, causal relationships between poor housing and poor health are complex, and directionality is not always clear. For example, poor housing circumstances can contribute to poor health, and poor health can result in households living in worse housing circumstances (Brackertz & Wilkinson 2017).

### **Appropriately sized housing**

Overcrowding, according to the Canadian National Occupancy Standard (CNOS), is defined as a situation in which one or more additional bedrooms would be required to adequately house its inhabitants, given the number, age, sex and relationships of household members. It specifies that:

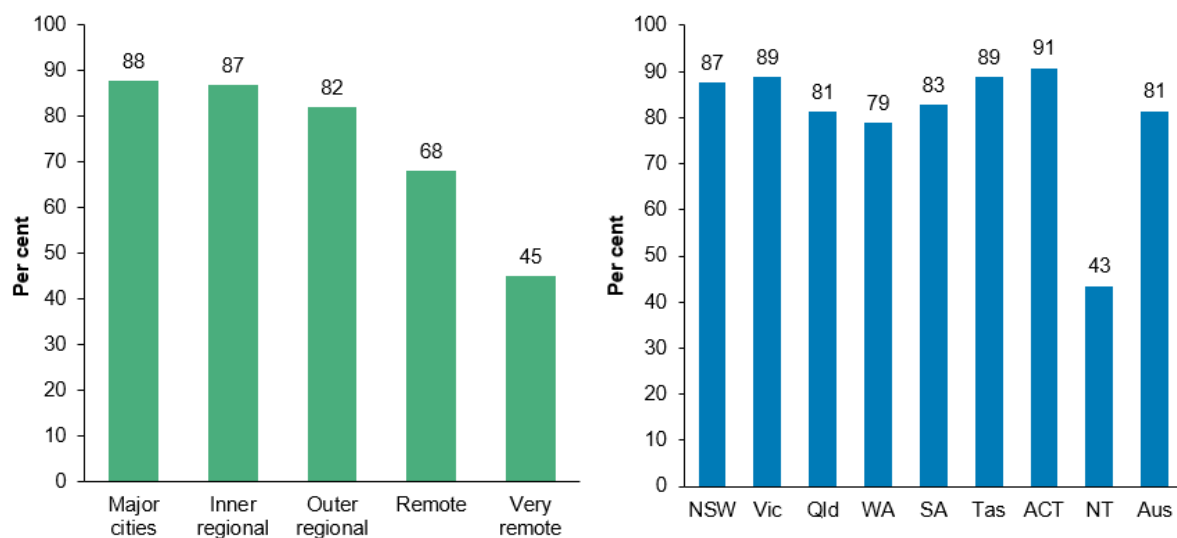
- there should be no more than 2 people per bedroom
- children aged less than 5 of different sexes may reasonably share a bedroom
- children aged 5 or over of the opposite sex should have separate bedrooms
- children aged less than 18 of the same sex may reasonably share a bedroom
- single household members aged 18 or over should have a separate bedroom, as should parents and couples
- a lone person household may reasonably occupy a bed sitter (AIHW 2014).

The importance of secure, appropriate and affordable housing is reflected in Target 9A of the National Agreement: By 2031, increase the proportion of Aboriginal and Torres Strait Islander people living in appropriately sized (not overcrowded) housing to 88 per cent – see Target 9A in the [Closing the Gap Information Repository](#).

According to the ABS Census of Population and Housing, in 2021, about 569,400 (81%) First Nations people lived in appropriately sized housing. This proportion ranged from 43% to 91% across states and territories (Figure 5.6). The proportion of First Nations people living in appropriately sized housing was lower than for non-Indigenous Australians (81% compared with 94%, respectively).

First Nations people in remote areas had higher rates of household overcrowding than those in non-remote areas. In 2021, the proportion of First Nations people living in appropriately sized housing ranged from 88% in *Major cities* to 45% in *Very remote* areas (Figure 5.6).

**Figure 5.6: Proportion of First Nations people living in appropriately sized housing (not overcrowded), by remoteness, and by jurisdiction, 2021**



Source: Measure 2.01, Table D2.01.10 and Table D2.01.9 – AIHW analysis of ABS Census of Population and Housing 2021 (AIHW 2022c).

## Housing assistance

The Australian and state and territory governments provide a range of assistance to people having difficulty with finding or sustaining affordable and appropriate housing in the private housing market. Housing assistance refers to both access to social housing (such as public housing) as well as targeted financial assistance for eligible Australians.

At 30 June 2022, there were around 79,166 First Nations households living in one of the 4 main types of social housing:

- 38,251 in public housing
- 13,424 in State Owned and Managed Indigenous Housing (SOMIH)
- 11,210 in community housing
- 16,281 in Indigenous community housing (AIHW 2023d).

Commonwealth Rent Assistance (CRA) may be available for eligible tenants who rent in private rental market or community housing to help reduce rental stress (defined as spending more than 30% of gross income on rent). At 30 June 2022, 89,485 CRA recipients reported having a First Nations member of the household (6.6% of all recipients).

## Housing tenure

Housing tenure – whether a person owns or is buying a home, is renting privately, or is living in social housing – can affect health. Home ownership can provide security, stability and autonomy, but housing costs can leave less money available for other necessities (Hulse et al. 2010).

Although First Nations households are less likely than non-Indigenous households to own or be buying their own home, the gap has narrowed.

In 2021, over 4 in 10 (42%) First Nations households were homeowners (owned outright and owned with a mortgage), compared with 37% in 2011 and 40% in 2016. In 2021, the

proportion of households that were home owners (owned outright and owned with a mortgage) was lower for First Nations households than for other households (42% compared with 68%) (Table 5.3).

**Table 5.3: Housing tenure trends for households, 2011–2021 (per cent)**

Housing tenure and landlord type	First Nations households <sup>(a)</sup> 2011	First Nations households <sup>(a)</sup> 2016	First Nations households <sup>(a)</sup> 2021	Other households 2011	Other households 2016	Other households 2021
Home owners (owned outright and owned with a mortgage)	37.4	39.6	42.3	69.6	68	67.9
Renters: real estate agent	21.6	25.4	27.6	16.3	18.9	20.2
Renters: State or territory housing authority	22.3	19.3	14.4	3.6	3.2	2.6
Renters: Person not in same household <sup>(b)</sup>	8.3	8.0	7.4	6.4	5.9	5.3
Renters: Community housing provider	4.8	3.0	4.0	0.5	0.5	0.7
Renters: Other landlord type <sup>(c)</sup>	2.8	2.4	2.3	1.3	1.1	1.2
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>

(b) A First Nations household is a household that has at least 1 First Nations person who is a usual resident.

(c) Comprises dwellings being rented from a parent/other relative or other person.

(d) Includes rented dwellings with a landlord such as an owner/manager of a residential park (including caravan parks and manufactured home estates) or employer.

Note: Table excludes other tenure types and tenure type not stated.

Source: Measure 2.01, Table D2.01.20. AIHW analysis of ABS Census of Population and Housing 2021 (AIHW 2022c).

## Homelessness

People are considered homeless if their current dwelling is inadequate; or if they have no tenure or their tenure is short and not able to be extended; or if their current living arrangement does not give them control of, or access to, space for social relations (ABS 2018).

In 2021, 24,900 First Nations people were homeless on Census night (3.1% of First Nations people) (ABS 2023c).

Among First Nations people experiencing homelessness:

- 60% (or 15,000) of homeless First Nations people were living in severely crowded dwellings (needing 4 or more extra bedrooms under CNOS)
- 19% (4,800) were living in supported accommodation for the homeless
- 9% (2,300) were living in improvised dwellings, tents or sleeping rough, and
- the remaining 12% (2,900) were staying temporarily with other households, living in boarding houses, or living in other temporary lodgings.

Between 2011 and 2021, the rate of homelessness among the First Nations population declined from 487 to 307 per 10,000 population.

The rate of homelessness among First Nations people was 8.8 times the rate for non-Indigenous Australians (306.8 compared with 34.9 per 10,000 population), however the absolute gap in homelessness rates between First Nations people and non-Indigenous Australians decreased between 2011 and 2021 (from 453 to 272 per 10,000 population).

Specialist homelessness services (SHS) provide a wide range of services to assist people who are experiencing homelessness or who are at risk of homelessness, ranging from general support and assistance to immediate crisis accommodation (AIHW 2022f).

In 2021–22, around 72,900 First Nations clients received support from SHS, which is equivalent to 8% of the First Nations population or 821 First Nations clients per 100,000 population nationally. First Nations people used specialist homelessness services at 11 times the rate of non-Indigenous Australians (74 per 10,000 population), after adjusting for differences in age structure between the two populations.

For further information, see:

- [2.01 Housing](#)

## Child protection

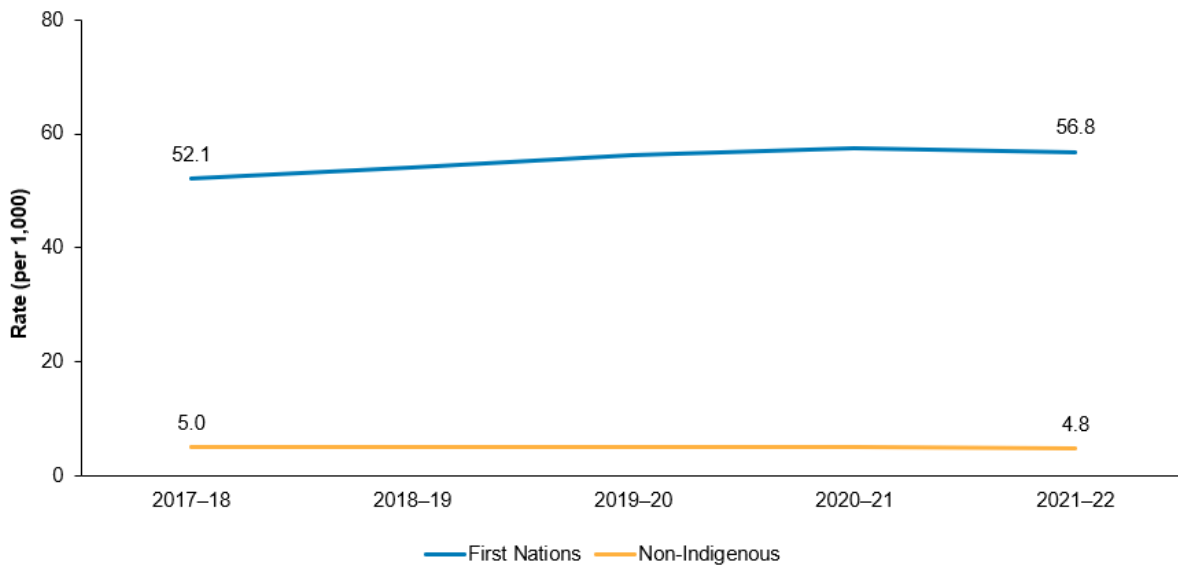
Experience of maltreatment during childhood has serious and long-term effects on social and emotional wellbeing and health (Emerson et al. 2015). In Australia, child protection functions are the responsibility of state and territory governments. Each jurisdiction has its own legislation, policies, and practices in relation to child protection (AIHW 2019a; Guthridge et al. 2014; AIHW 2019b).

First Nations people's experience of child welfare policies has historically been traumatic, with the policy of forcible removal of children known as the Stolen Generations (National Inquiry into the Separation of Aboriginal and Torres Strait Islander Children from Their Families 1997). Child protection issues continue to be very significant for First Nations communities. This is reflected by Target 12 of the National Agreement: By 2031, reduce the rate of overrepresentation of Aboriginal and Torres Strait Islander children (0–17 years old) in out-of-home care by 45 per cent – see Target 12 in the [Closing the Gap Information Repository](#).

According to the [Child Protection Collection data](#), as at 30 June 2022, there were 19,432 First Nations children in out-of-home care, corresponding to a rate of 57 per 1,000 children. Nearly 2 in 3 (63% or 12,258) First Nations children in out-of-home care were placed with relatives or a kin, or another First Nations carer, in accordance with the [Aboriginal and Torres Strait Islander Child Placement Principle](#) to ensure First Nations children remain connected to their family, community, culture, and Country.

Between 2017–2018 and 2021–2022, the rate of First Nations children who were in out-of-home care increased from 52.1 to 56.8 per 1,000 population, while there was no significant change in the rate among non-Indigenous children. Over this period, the gap between First Nations and non-Indigenous children widened from 47.1 to 52.0 per 1,000 children. On 30 June 2022, First Nations children were 11.8 times as likely as non-Indigenous children to be in out-of-home care (56.8 compared with 4.8 per 1,000 children, or 19,434 compared with 25,924) (Figure 5.7).

**Figure 5.7: Rate of out-of-home care for children aged 0–17, by Indigenous status, 2017–18 to 2021–22**



Source: Measure 2.12, Table D2.12.1 – AIHW analysis of Child Protection Collections 2017–18 to 2021–22.

For further information, see:

- [2.12 Child protection](#)

## Justice

Criminal justice systems are the responsibility of state and territory governments. Each jurisdiction has its own legislation, and policies and practices in relation to courts, corrections and policing. Education, employment, income, and housing disparities are not only associated with a large part of the health gap between First Nations people and non-Indigenous Australians, but also with imprisonment among First Nations people (Pricewaterhouse Coopers 2017).

Two Closing the Gap targets relate to over-representation of First Nations people in the criminal justice system:

- Target 11: By 2031, reduce the rate of Aboriginal and Torres Strait Islander young people (10–17 years) in detention by at least 30 per cent
- Target 10: By 2031, reduce the rate of Aboriginal and Torres Strait Islander adults held in incarceration by at least 15 per cent.

See Targets 10 and 11 in the [Closing the Gap Information Repository](#).

In 2021–22, a total of 4,217 First Nations young people were under youth justice supervision at some time during the year (including both community-based supervision and detention), which corresponds to 47% of all young people (8,982) in youth justice supervision.

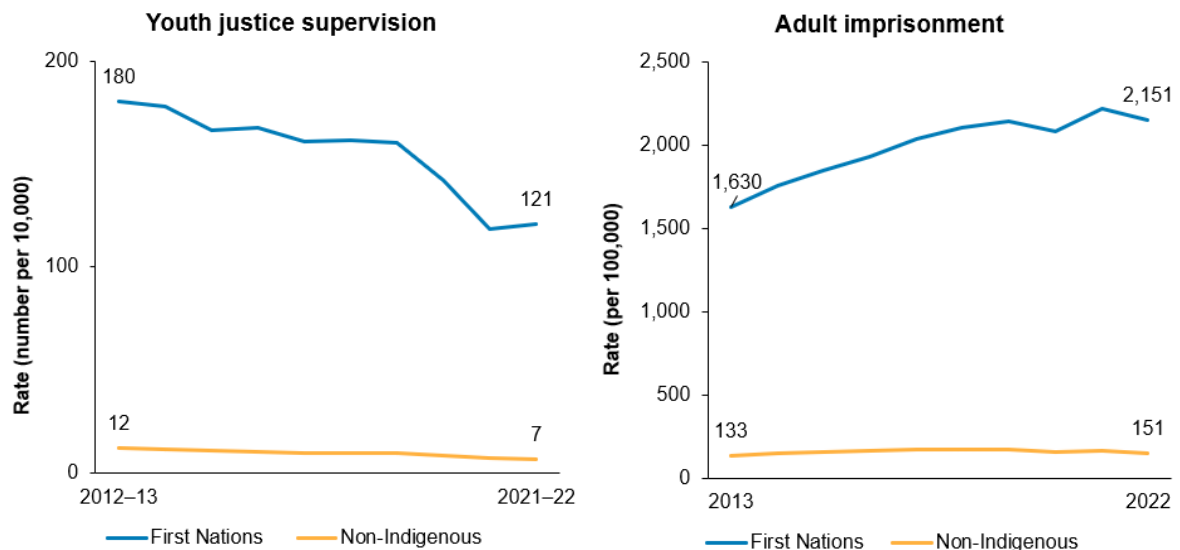
On an average day in 2021–22 there were 2,182 First Nations young people under youth justice supervision. Of these, 82% (1,781) were aged 10–17 and 18% (401) were aged 18 and over (AIHW 2023e).

Of First Nations young people under youth justice supervision during 2020–21, almost 2 in 3 (64%) had an interaction with the child protection system in the previous 5 years.

In 2021–22, on an average day, First Nations young people aged 10–17 (121.1 per 10,000 young people) were nearly 19 times as likely to be under youth justice supervision as non-Indigenous young people (6.5 per 10,000 young people).

Over the decade from 2012–13 to 2021–2022, the rate of First Nations young people aged 10–17 under youth justice supervision decreased by 32%, and the gap with non-Indigenous young people narrowed by 32% (Figure 5.8).

**Figure 5.8: National rate of supervision of young people aged 10–17 years on an average day from 2012–13 to 2021–22; and age-standardised adult imprisonment rate from 2013 to 2022, by Indigenous status**



Note: Youth justice supervision presents the rate of young people aged 10–17 under youth justice supervision on an average day. The ABS National Prisoner Census of adult imprisonment is a census of all persons in the legal custody of adult corrective services in all states and territories as at midnight 30 June of the reference year. Data in Queensland prior to 2019 include people aged 17.

Source: Measure 2.11, Table D2.11.1 – AIHW Youth Justice National Minimum Dataset (YJ NMDS); and Measure 2.11, Table D2.11.12 – AIHW analysis of ABS National Prisoner Census data.

Most First Nations people have never been imprisoned (ABS 2016). However, they have contact with the criminal justice system – as both offenders and victims – at much higher rates than non-Indigenous Australians (AIHW 2021b; SCRGSP 2020).

As at 30 June 2022, there were 12,902 First Nations adults in prison. This corresponds to about 2 in every 100 First Nations adults in prison. Of First Nations adults in prison:

- about 9 in 10 (91%, 11,744) were male
- nearly 4 in 10 (39%, 5,004) were unsentenced.

In 2022, the age-standardised rate of imprisonment among First Nations adults (2,151 per 100,000 adults) was over 14 times the rate of non-Indigenous adults (151 per 100,000 adults). The median aggregate sentence (total length of imprisonment if an offender committed multiple offences) was lower for First Nations adults in prison (2.5 years) than for non-Indigenous adults in prison (4.5 years). Three-quarters (72%) of sentences for First Nations adults in prison were under 5 years, compared with 50% for non-Indigenous adults in prison (ABS 2023d).

Over the decade between 2013 and 2022, based on linear regression, there was a 31% increase in the age-standardised imprisonment rate for First Nations adults but no

statistically significant change for non-Indigenous adults. The absolute and relative gaps in the adult imprisonment rate between First Nations and non-Indigenous adults widened.

Based on self-reported data from the 2014–15 National Aboriginal and Torres Strait Islander Social Survey:

- 47.6% of First Nations males aged 15 and over and 23.0% of First Nations females aged 15 and over were formally charged by the police at some time in their life.
- 20.4% of First Nations males aged 15 and over and 9.2% of First Nations females aged 15 and over were arrested in the past 5 years.
- 5.3% of First Nations males aged 15 and over and 1.1% of First Nations females aged 15 and over were incarcerated in the past 5 years (ABS 2016).

For further information, see:

- [2.11 Contact with the criminal justice system](#)

## Overweight and obesity

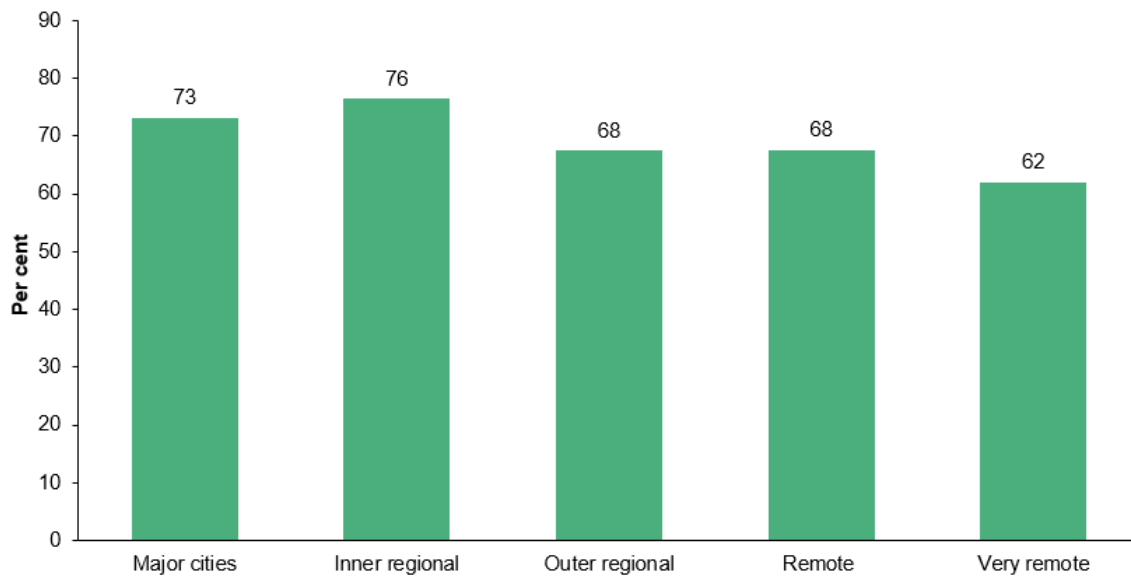
Worldwide, rates of overweight and obesity have increased substantially over the past 4 decades, due to diets higher in saturated fats and sugar, and to people being less active (World Health Organization 2020). Being overweight or obese is a risk factor for cardiovascular disease, diabetes, and kidney disease – health conditions that often occur together (AIHW 2015a, 2022d).

A poorer quality of diet – lacking in important nutrients and high in processed food – can contribute to obesity. Diet can be affected by what foods are affordable and readily available. For example, fresh fruit and vegetables can be difficult to access by people with low incomes and in more remote areas (Thurber et al. 2017).

In 2018–19, based on Body Mass Index (BMI) calculated using voluntary physical measurements, 71% (381,800) of First Nations people aged 15 and over were overweight (BMI 25.0–29.9) or obese (BMI ≥30.0). After adjusting for differences in the age structure between the 2 populations, First Nations people aged 15 and over were less likely than non-Indigenous Australians to be overweight (29% and 35%, respectively) but 1.5 times as likely to be obese (46% and 30%, respectively).

Across remoteness areas, the proportion of First Nations people who were overweight or obese ranged from 62% in *Very remote* areas to 76% in *Inner regional* areas (Figure 5.9).

**Figure 5.9: Proportion of First Nations people aged 15 and over who were overweight or obese, by remoteness, 2018–19**

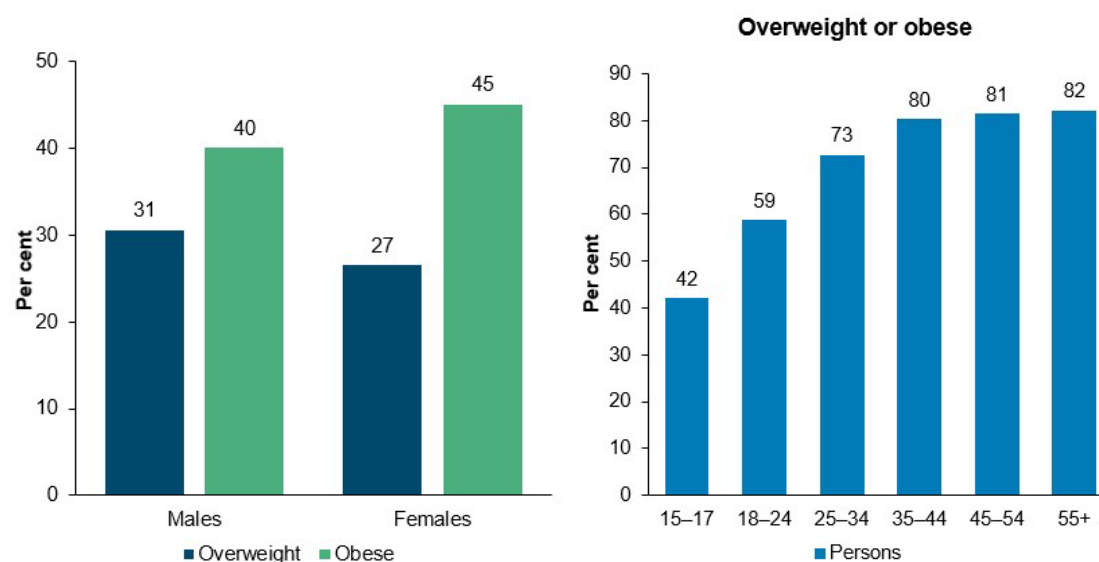


Note: Body Mass Index was derived from measured height and weight.

Source: Measure 2.22, National Aboriginal and Torres Strait Islander Health Survey 2018–19.

In 2018–19, 72% of First Nations females and 71% of First Nations males were overweight or obese. A higher proportion of First Nations females were obese than First Nations males (45% compared with 40%, respectively). For First Nations people, the proportion of overweight or obese people increased with age, ranging from 42% for those aged 15–17 to 80–82% for those aged 35 and over (ABS 2019) (Figure 5.10).

**Figure 5.10: Proportion of First Nations people aged 15 and over who were overweight or obese, by sex, and by age group, 2018–19**



Source: National Aboriginal and Torres Strait Islander Health Survey 2018–19.

For further information, see:

- [2.22 Overweight and obesity](#)

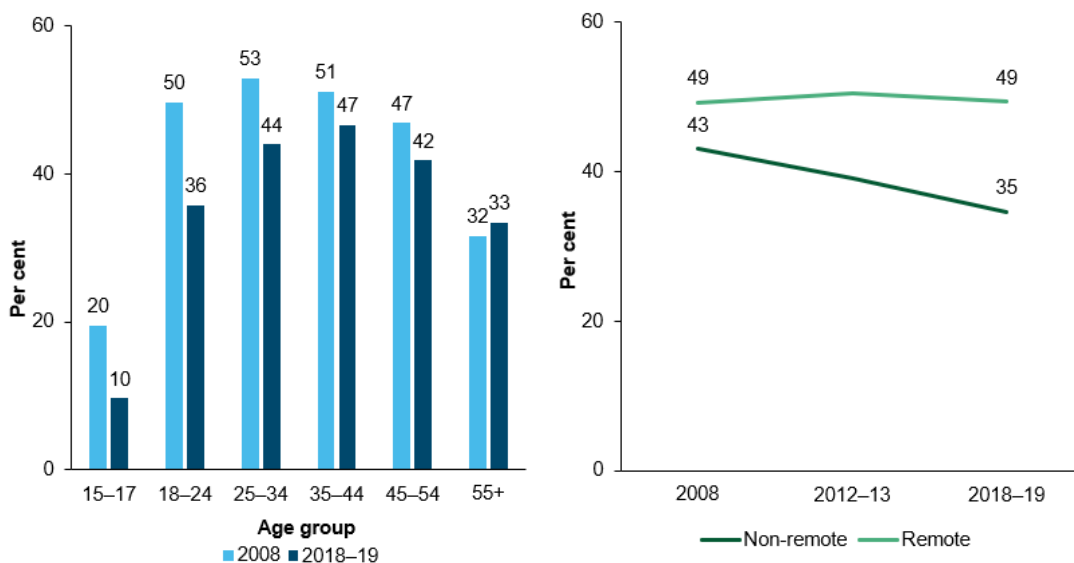
## Tobacco use

Smoking is a major risk factor for cancer, cardiovascular disease, and respiratory disease – in 2018, it accounted for 37% of the burden due to cancer, 34% of the burden due to cardiovascular disease, and 47% of the burden due to respiratory disease (ABS 2022). Overall, 12% of the total disease burden experienced by First Nations people in 2018 was attributed to tobacco use.

The proportion of First Nations people aged 15 and over who smoke every day has fallen substantially over the past decade, from 45% (about 145,800 people) in 2008 to 37% (200,400) in 2018–19.

The largest falls in daily smoking rates have occurred among younger First Nations people. In 2018–19, 85% of First Nations people aged 15–17 reported that they had never smoked, compared with 72% in 2008. Among First Nations people aged 15–17, while daily smoking rates declined in non-remote areas, there has been no significant change in remote areas over this period (Figure 5.11).

**Figure 5.11: First Nations people aged 15 and over who were current daily smokers, by age group (2008 and 2018–19), and by remoteness (2008 to 2018–19)**



Source: Measure 2.15, Table D2.15.4 – AIHW and ABS analysis of National Aboriginal Torres Strait Islander Social Survey 2008, Australian Aboriginal and Torres Strait Islander Health Survey 2012–13 and National Aboriginal Torres Strait Islander Health Survey 2018–19.

In 2014–15, general health (73%) and cost (56%) were reported as the 2 main reasons of quitting or reducing smoking by First Nations people aged 15 and over who tried to quit or reduce smoking in the past 12 months (Table 5.4).

**Table 5.4: Reasons First Nations people aged 15 and over tried to quit or reduce smoking, 2014–15 (proportion of those who tried to quit or reduce smoking in last 12 months)**

Reason	Per cent
General health	73
Cost	56
To improve fitness	31
Encouraged by family or friends to quit or reduce	27
Medical advice	17
Concerned about effect on others in household	16

Source: Measure 2.15, Table D2.15.11 – AIHW and ABS analysis of National Aboriginal and Torres Strait Islander Social Survey 2014–15.

For further information, see:

- [2.15 Tobacco use](#)

## Alcohol consumption

In 2018–19, about 30% of First Nations people aged 15 and over had not consumed alcohol in the previous 12 months or had never consumed alcohol – 27% in non-remote areas and 41% in remote areas (ABS 2019). The proportion of the First Nations population who had abstained from alcohol was higher than in the non-Indigenous population.

### Risky alcohol consumption

The National Health and Medical Research Council (NHMRC) published the latest [alcohol guidelines](#) in 2020: drink no more than 4 standard drinks on any one day to reduce alcohol-related injury from a single occasion; and no more than 10 standard drinks per week to reduce alcohol-related disease or injury over a lifetime.

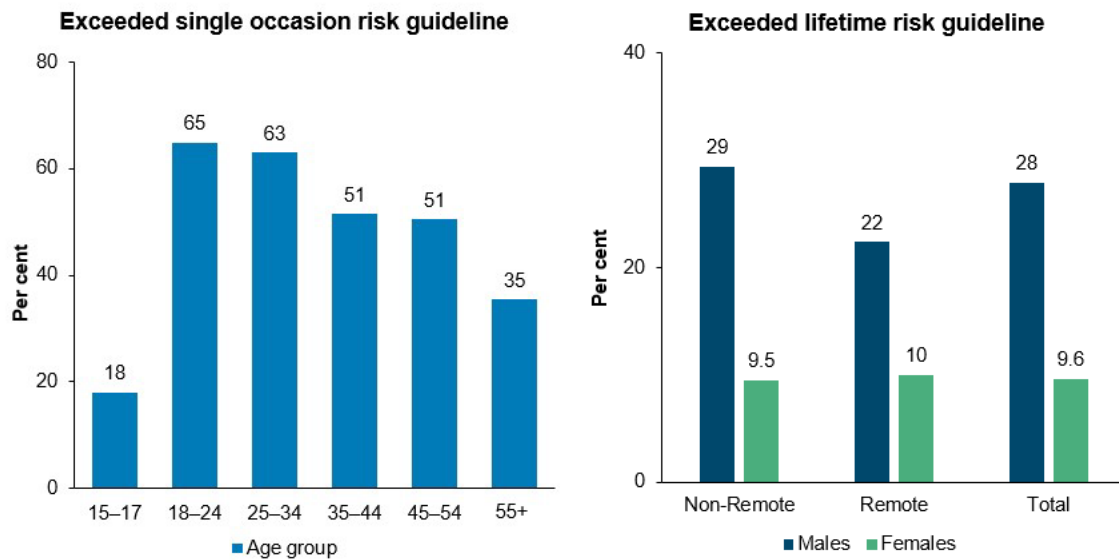
The 2018–19 National Aboriginal and Torres Strait Islander Health Survey reporting of single occasion risk and lifetime risk was based on the NHMRC’s previously released guideline in 2009. These were the guidelines that applied at the time the survey was undertaken: no more than 4 standard drinks on a single occasion (single occasion risk) and no more than 2 standard drinks on any day (lifetime risk). The following reporting of single occasion risk and lifetime risk are based on the 2009 alcohol guideline outlined above.

In 2018–19, 50% of First Nations people aged 15 years and over reported drinking alcohol at levels exceeding the single occasion risk guideline (more than 4 drinks) at least once in the 2 weeks prior to the survey. This was a decrease of 4 percentage points since 2012–13 (54%).

The proportion of First Nations people aged 18 and over who exceeded the single occasion risk guideline generally decreased with age from 65% of those aged 18–24 to 35% of those aged 55 and over (Figure 5.12). Among those aged 15–17, 18% reported drinking at levels that exceeded the single occasion risk guidelines.

In 2018–19, 18% of First Nations people aged 15 years and over drank at levels that exceeded the NHMRC lifetime risk guidelines that were current at the time the survey was conducted (no more than 2 standard drinks per day on average). A higher proportion of First Nations males (28%) exceeded the guidelines than First Nations females (10%) (Figure 5.12).

**Figure 5.12: Risky alcohol consumption among First Nations adults by age group, and by sex and remoteness, 2018–19**



Source: Measure 2.16, Table D2.16.19 – AIHW and ABS analysis of 2018–19 National Aboriginal and Torres Strait Islander Health Survey; Table D2.16.20 – AIHW and ABS analysis of 2018–19 National Aboriginal and Torres Strait Islander Health Survey

In 2014–15, about 1 in 20 (5.9%) First Nations people aged 15 and over in non-remote areas, and 1 in 10 (8.9%) in remote areas, reported alcohol-related problems as a personal stressor in the past 12 months.

For further information, see:

- [2.16 Risky alcohol consumption](#)

## 6. Tier 3 – Health system performance

To provide effective health care, health services must be accessible, responsive, and culturally respectful. Some aspects of health system performance for Aboriginal and Torres Strait Islander (First Nations) people have improved over the last decade. However, there are still barriers to, and disparities in level of, access for First Nations people compared with non-Indigenous Australians.

According to findings from the 2018–19 National Aboriginal and Torres Strait Islander Health Survey (NATSIHS), barriers to accessing health services for First Nations people include services not being available in their area (especially for those living in remote areas), services being too far away and lack of transport, cost, waiting times, and the availability of culturally safe and responsive health services.

For First Nations people to feel confident and safe in accessing health care, health services should ensure that they provide services equitably, and the level and range of accessible health care should be driven by patient needs. Cultural safety and cultural respect should be an integral part of all health services provided.

### **Cultural safety in the health system**

To measure progress in achieving cultural safety in the Australian health system, the [AIHW](#) has developed the *Cultural safety in health care for Indigenous Australians: monitoring framework*. This framework looks at 3 elements of cultural safety:

**Culturally respectful health care services** – cultural respect is achieved when the health system is a safe environment for First Nations people, and where cultural differences are respected. How health care is provided, and whether cultural respect is reflected in structures, policies and programs?

**Patient experience of health care** – what are the experiences of First Nations health care users? Is their cultural identity respected? Aspects of cultural safety include good communication, respectful treatment, empowerment in decision making and the inclusion of family members.

**Access to health care services** – do First Nations people have the same level of access to health services as non-Indigenous Australians? (AIHW 2022e).

## Access to primary health care

Primary health care is delivered in community settings, such as general practices, community health centres, First Nations health services, and allied health practices like physiotherapy. It is usually people's first point of contact with the health system, and the gateway to specialised health services. The evidence presented in this report shows that there is a relative lack of access to PHC services in general, and particularly in remote areas where people need health care the most. Moreover, 30% of First Nations people reported that they needed health care, but had not seen a health care provider on at least once in the past 12 months.

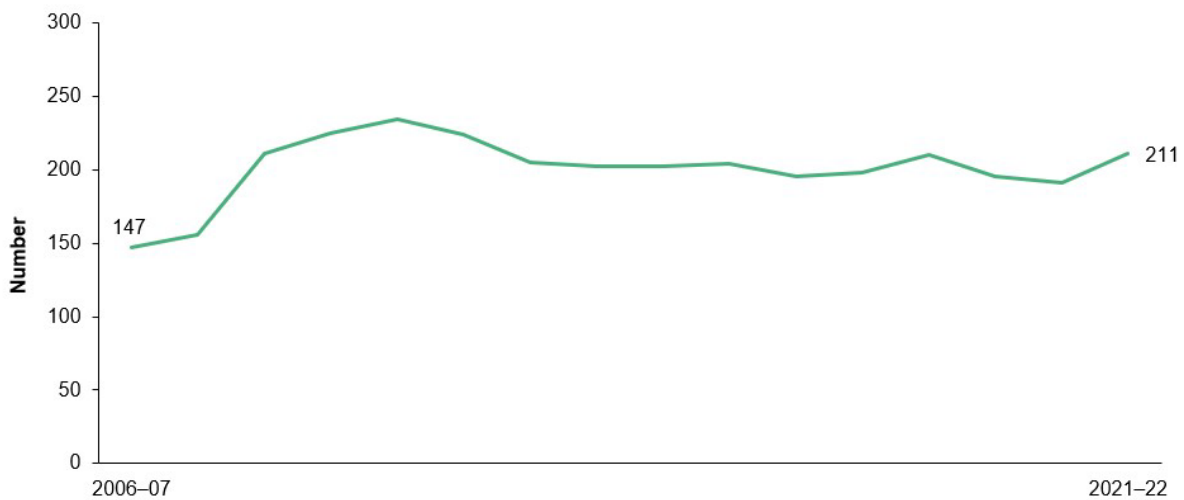
### **Use of First Nations-specific primary health care services**

The Australian Government provides funding to organisations to provide culturally appropriate primary health care services to First Nations people.

First Nations-specific primary health care services are run by Aboriginal Community Controlled Health Organisations (ACCHOs), state and territory, local health services, or non-government organisations.

Over the period 2006–07 to 2021–22, the number of First Nations-specific primary health care organisations increased from 147 to 211 (Figure 6.1). In 2021–22, an estimated 67% (or 142) were operated by ACCHOs. First Nations-specific primary health care organisations provided around 4.0 million episodes of care. Of these services, 84% (3.4 million) were provided to First Nations clients, and 88% (3.6 million) were provided by ACCHOs (AIHW 2023a).

**Figure 6.1: Number of First Nations-specific primary health care organisations, 2006–07 to 2021–22**



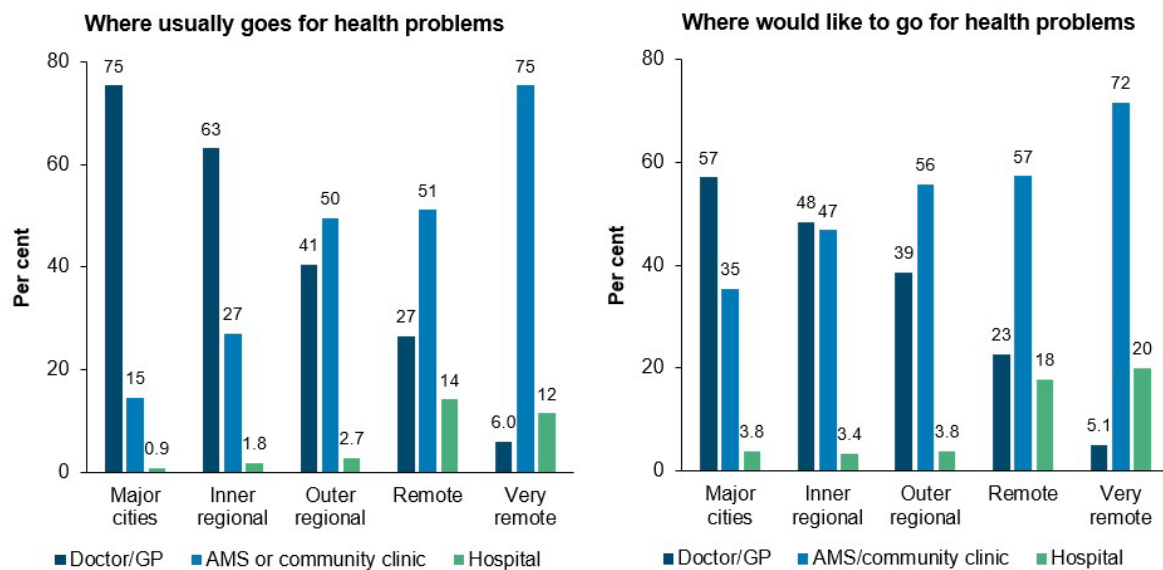
Source: Measure 3.14, Table D3.14.47 – AIHW analysis of Service Activity Reporting and AIHW Online Services Report data collections for 2006–07 to 2017–18, and AIHW Online Services Report data collection for 2018–19 to 2021–22 (from: AIHW 2023a).

Although 4 in 5 First Nations people live in *Major cities, inner and outer regional areas* combined where mainstream health services are typically located, these services are not always accessible, for geographic, social, and cultural reasons (AIHW 2016). Further, research indicates that these services outperform mainstream services in terms of identifying and managing risks for various diseases (Panaretto et al. 2014). As such, First Nations-specific primary health services are important providers of comprehensive primary health services for First Nations people across geographic areas.

In 2018-19 in *Very remote* areas, 3 in 4 (75%) First Nations people usually went to an Aboriginal Medical Service (AMS) or community clinic (which may have been the only primary health care option available in many cases) (Figure 6.2).

In contrast, in *Major cities*, while more than 1 in 3 (35%) First Nations people would like to go to an AMS or community clinic for health problems, fewer than 1 in 6 (15%) usually went to these types of services.

**Figure 6.2: Health service use and preferences among First Nations people, by remoteness, 2018–19**



Source: Measure 3.17, Table D3.17.2 – AIHW and ABS analysis of National Aboriginal and Torres Strait Islander Health Survey 2018–19.

For further information, see:

- [3.12 Aboriginal and Torres Strait Islander people in the health workforce](#)
- [3.14 Access to services compared with need](#)
- [3.17 Regular general practitioner or health service](#)

## General practitioner services and health checks

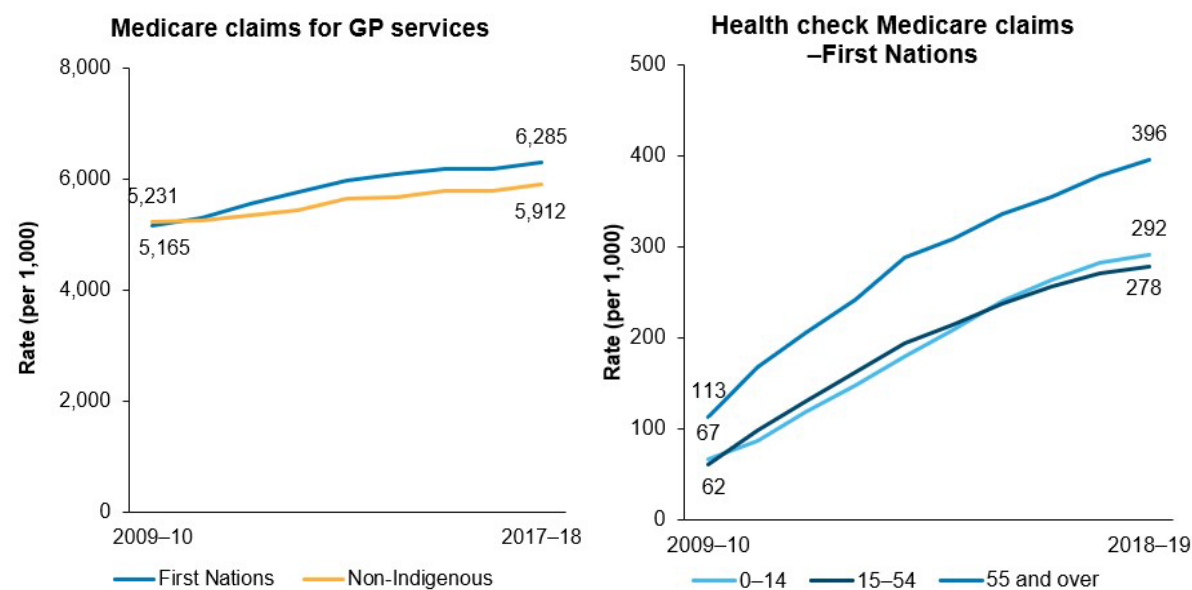
First Nations people have a slightly higher rate (ratio 1.1) of GP service use than non-Indigenous Australians, measured by the number of Medicare claims for GP services, but far less than the level of use required as indicated by the burden of disease (ratio 2.3).

For both First Nations people and non-Indigenous Australians, the rate of GP service use rose over the decade to 2017–18 (Figure 6.3).

In 1999, a health check especially for First Nations people aged 55 and over was introduced, and from May 2006, First Nations-specific health checks were available for people of all ages. In May 2010, the frequency of health checks was standardised so that First Nations people of all ages were able to have a health check every year (AHMAC 2017).

Between 2009–10 and 2018–19, the number of First Nations people accessing these health checks increased by about 5-fold, from 47,283 in 2009–10 to 248,841 in 2018–19. Health check rates increased across all age groups from 68 per 1,000 to 297 per 1,000 population over this period (Figure 6.3).

**Figure 6.3: GP service use by Indigenous status (2009–10 to 2017–18) and First Nations-specific health checks by age group (2009–10 to 2018–19)**



Source: Measure 3.04 and 3.14, Tables D3.04.5, D3.04.6, D3.04.7, D3.14.20 – AIHW analysis of Medicare Benefits Schedule data.

For further information, see:

- [3.04 Early detection and early treatment](#)
- [3.14 Access to services compared with need](#)

## Child immunisation

Immunisation is highly effective in reducing morbidity and mortality caused by vaccine-preventable diseases. According to the National Immunisation Program Schedule, Australian children are expected to have received specific immunisations by age 1, 2 and 5. First Nations people have higher rates of some vaccine preventable diseases than non-Indigenous people. For this reason, extra vaccines are available in addition to the routine vaccinations offered throughout life ([pregnancy](#), [children](#), [adolescents](#), [adults and seniors](#)).

As at December 2022, based on data from the Australian Immunisation Register (AIR), the proportion of First Nations children who were fully immunised was slightly less than non-Indigenous children for those aged 1 (91% compared with 94%, respectively) and 2 (89% compared with 92%, respectively). However, for those aged 5, the proportion of First Nations children who were fully immunised was higher than that of non-Indigenous children (96% compared with 94%).

The proportion of First Nations children aged 1 and 5 who were fully immunised increased from 2013 (86% and 93%, respectively) to 2022 (91% and 96%, respectively), with no statistically significant change for First Nations children aged 2. While there was an overall improvement in immunisation coverage over the decade for First Nations children aged 1 and 5, coverage rates decreased between 2020 and 2022, coinciding with the COVID-19 pandemic. The proportion of First Nations children aged 1 who were fully immunised decreased from 94% in 2020 to 91% in 2022. For First Nations children aged 5, the proportion who were fully immunised decreased from 97% in 2020 to 96% in 2022.

For further information, see:

- [3.02 Immunisation](#)

## Adult immunisation

As at 31 May 2023, of the 502,765 individuals aged 18 and over within the AIR who identified as being of Aboriginal and/or Torres Strait Islander origin, 7.3% (36,631) had received a COVID-19 vaccination in the previous 6 months, 79% (395,893) had received a COVID-19 vaccination more than 6 months ago, and 14% (70,241) were unvaccinated.

Until recently, data on influenza vaccination coverage had been based on population surveys. Since 1 March 2021, there has been mandatory reporting of influenza vaccines to the AIR. Note that these data may underestimate true coverage, due to under-reporting of adult vaccinations to the AIR, and relatively recent introduction of mandatory reporting (NCIRS 2022).

In 2021, based on data from the AIR, one-quarter (25.0%) of First Nations people aged 6 months and over received an influenza vaccination. Among older First Nations adults, 43.5% of those aged 50–64, 64.6% of those aged 65–74, and 67.7% of those aged 75 and over had an influenza vaccination in 2021 (NCIRS 2022).

In 2018–19, based on survey data, an estimated 32% of First Nations people aged 50 and over had been vaccinated against invasive pneumococcal disease in the last 5 years, with similar rates in remote and non-remote areas (34% and 32%, respectively).

For further information, see:

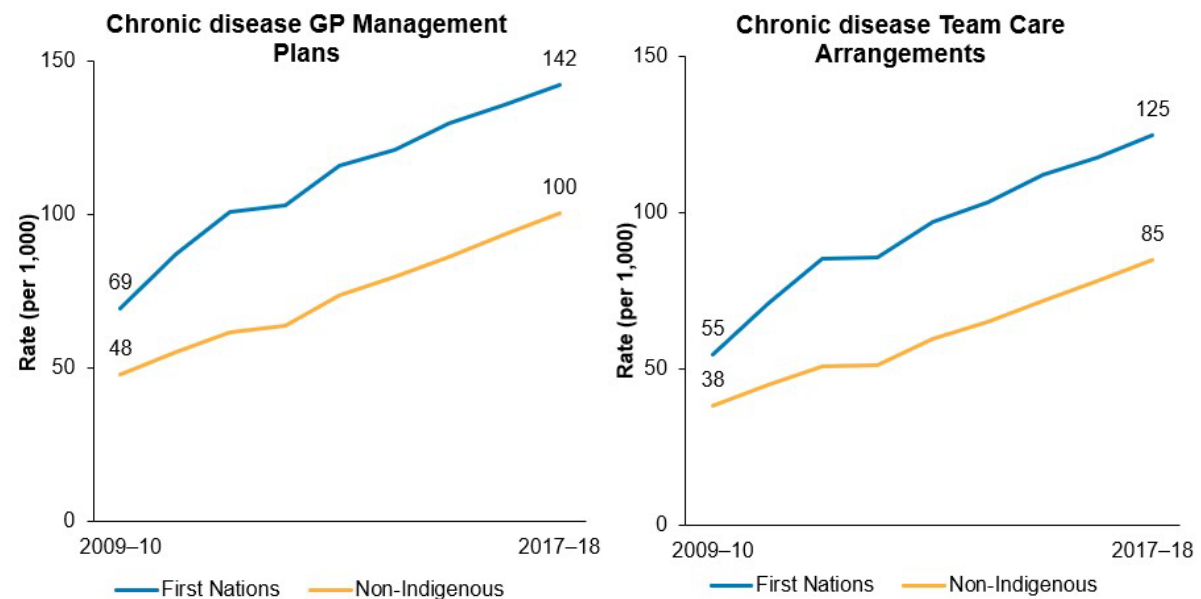
- [3.02 Immunisation](#)

## Chronic disease management

Good quality health care for people with chronic disease often involves multiple providers across multiple settings. [The Chronic Disease Management](#) GP services on the Medicare Benefits Schedule enable GPs to coordinate the health care of patients with chronic or terminal medical conditions, including patients who require multidisciplinary, team-based care from multiple providers. The Chronic Disease Management services include general practitioner management plans (GPMPs) and team care arrangements (TCAs).

In general, First Nations people have higher rates of chronic disease than non-Indigenous Australians, and hence, have a higher need for Chronic Disease Management services. Rates of Medicare claims for GPMPs and TCAs increased steadily from 2009–10 to 2017–2018 (Figure 6.4). The rate of increase has been higher among First Nations people than among non-Indigenous Australians (annual increase in the age-standardised rate of GPMPs and TCAs were 8.5 and 8.2 per 1,000 for First Nations people, compared with 6.5 and 5.7 per 1,000 for non-Indigenous Australians, respectively).

**Figure 6.4: Age-standardised rate of chronic disease GP management plans and team care arrangements, by Indigenous status, 2009–10 to 2017–18**



Source: Measure 3.05, Table D3.05.1 – AIHW analysis of Department of Health Medicare claims data.

For further information, see:

- [3.05 Chronic disease management](#)

## Access to primary health services in different areas

Measuring access to health services is complex. ‘Access’ can include:

- physical access (whether health services with sufficient capacity are located within a certain distance or drive time from where a person lives)
- approachability (awareness of a service and how it impacts health outcomes)
- appropriateness (fit between services and client needs)
- affordability
- cultural acceptability (AIHW 2014b; Levesque et al. 2013; Melbourne Vaccine Education Centre 2022).

The AIHW has modelled how First Nations people’s physical access to primary health care services (First Nations-specific primary health care services and other GP-based primary health services) varies geographically across Australia (see also AIHW 2014a, 2015b). This modelling can be used to identify areas where access to primary health care services appears to be relatively poor.

Physical access to services was modelled with reference to:

- First Nations-specific primary health care services, based on drive time to services.
- GP services in general, based on drive time to services, the capacity of GP services, the size of local populations, and their per person need for primary health care.

The need for primary health care was estimated using demographic and socioeconomic characteristics of the local population.

This work shows that, overall, Australian Government-funded First Nations-specific primary health care services appear to be well positioned relative to the geographic distribution of the First Nations population, and of other GP services. However, there are several areas where First Nations people have potentially limited access to both First Nations-specific services and GP services in general.

In total, 29 medium-sized areas were estimated to have at least 200 First Nations people with no First Nations-specific primary health care services within one hour's drive and relatively poor access to GP services based on drive times and local population needs. Table 6.1 shows specific areas with potentially poor access to primary health care services in each state and territory and remoteness classification. The areas are Statistical Areas Level 2 (SA2s) as described in the Australian Statistical Geography Standard (ASGS) (AIHW 2016). populations generally ranging from 3,000 to 25,000 people, SA2s are designed to reflect communities that interact socially and economically. The numbers of areas are presented in Table 6.2.

Across Australia, the number of areas with potentially poor access to primary health care services are almost same for regional (*Inner and outer regional* areas combined) and remote (*Remote and very remote* areas combined) areas (Table 6.2). Identifying areas based on the number of people in them with poor access rather than on average access for the whole area is a different approach to earlier reports (AIHW 2015b) and gives somewhat different results. This approach ensures that areas that have relatively good average access but also have substantial numbers of people with poor access are not overlooked.

For further information, see:

- [3.14 Access to services compared with need](#)

**Table 6.1: SA2s with potentially poor access to primary health care services, 2018**

State and territory	SA2 name (code)	Estimated First Nations population with low access to GPs and no ISPHCS within 1 hour's drive <sup>(a)(b)(c)(d)</sup>
NSW	Young (101061543)	555
NSW	Lithgow Region (103031071)	285
NSW	Narrabri (110031197)	270
NSW	Mudgee Region – West (103031074)	260
NSW	Bourke – Brewarrina (105011092)	250
NSW	Young Region (101061544)	215
NSW	Mudgee Region – East (103031073)	210
NSW	Scone Region (106041129)	210
Qld	Central Highlands – East (308011190)	670
Qld	Broadsound – Nebo (312011338)	360
Qld	Gympie Region (319031514)	295
Qld	Barcaldine – Blackall (315031408)	290
Qld	Cape York (315011396)	275
Qld	Cooloola (319031511)	275
Qld	Mount Isa Region (315021406)	205
Qld	Collinsville (312011340)	205
WA	Ashburton (510031271)	820
WA	Derby – West Kimberley (510011263)	755
WA	East Pilbara (510021267)	560
WA	Brookton (509031246)	405
WA	Cunderdin (509021237)	325
WA	Kununurra (510011265)	320
WA	Exmouth (511021277)	250
WA	Halls Creek (510011264)	250
SA	Outback (406021141)	255
Tas	North West (604031094)	355
NT	West Arnhem (702031061)	670
NT	Sandover – Plenty (702011052)	410
NT	Thamarrurr (702031059)	225

(a) With regards to this analysis, low access to GPs was defined by an AIHW Access score of less than 7 (for comparison, the average Access score measured for Sydney's residents was ~10.5). This analysis is part of a forthcoming AIHW publication. Previous analysis related to this can be found in the 'Access to primary health care relative to need for Indigenous Australians' report (AIHW 2014a).

(b) Indigenous-specific primary health care services (ISPHCSs) included in this analysis correspond to clinical services funded by the Department of Health's Indigenous Australians' Health Programme that reported a GP workforce in the 2017–18 Online Services Report.

(c) First Nations populations were estimated for small geographic areas (SA1) by the AIHW for years 2016 to 2018 using Iterative Proportional Fitting with available ABS data. The analysis in this table refers to 2018 population estimates (rounded to the nearest 5 persons).

(d) The results shown include only SA2s where a sum of at least 200 First Nations people live in SA1s with access scores below 7 and who seem to live further than 1 hour's drive from an ISPHCS clinic, based on simplified representation of peoples' usual addresses, and drive-times calculated with Pitney Bowes' MapInfo RouteFinder software.

#### Notes

1. These areas have been identified based on supporting analysis, which may be subject to small changes.
2. Areas are identified by 2 mechanisms. 1. The AIHW's access scores, which are derived from several estimated data inputs, including GP capacities, population sizes, population distribution, per capita need, drive-times, as well as modelling parameters. Uncertainties in all of these inputs affect the quality of the results. 2. The location of ISPHCSs. Due to data gaps, some relevant service locations may not have been included and other service locations may have been included that do not offer clinical services.
3. A small number of areas were removed from the list due to known data issues or the opening of new ISPHCS clinics.
4. NSW: New South Wales, Qld: Queensland, WA: Western Australia, SA: South Australia, Tas: Tasmania, NT: Northern Territory.

Source: AIHW analyses; Online Services Report (2017–18).

**Table 6.2: Number of areas with potentially poor access to primary health care services, by state and territory and predominant remoteness classification, 2018**

State and territory	Number of areas by predominant remoteness classification <sup>(a)(b)(c)</sup>		Total
	Inner and outer regional	Remote and very remote	
New South Wales	7	1	8
Queensland	4	4	8
Western Australia	2	6	8
South Australia	–	1	1
Tasmania	1	–	1
Northern Territory	–	3	3
<b>Australia</b>	<b>14</b>	<b>15</b>	<b>29</b>

(a) Areas correspond to the Australian Bureau of Statistics' SA2 boundaries (see Table 6.1 for detailed list).

(b) Predominant remoteness classification based on the distribution of the First Nations populations identified as having potentially poor access.

(c) None of the identified areas were part of Victoria or the Australian Capital Territory, nor were any of the areas predominantly classified as *Major cities* in terms of Remoteness.

Source: AIHW analyses; Online Services Report (2017–18).

## Potentially preventable hospitalisations

### Potentially preventable hospitalisations (PPH)

This section reports on selected potentially preventable hospitalisations, as defined in the National Healthcare Agreement Indicator [PI 18 Selected potentially preventable hospitalisations](#). These are hospital admissions that could have been avoided through preventive measures like vaccination, or through timely and effective diagnosis and treatment outside the hospital setting. For example, hospitalisations for conditions such as measles and tetanus can be prevented by primary health care through vaccination to prevent the conditions from occurring.

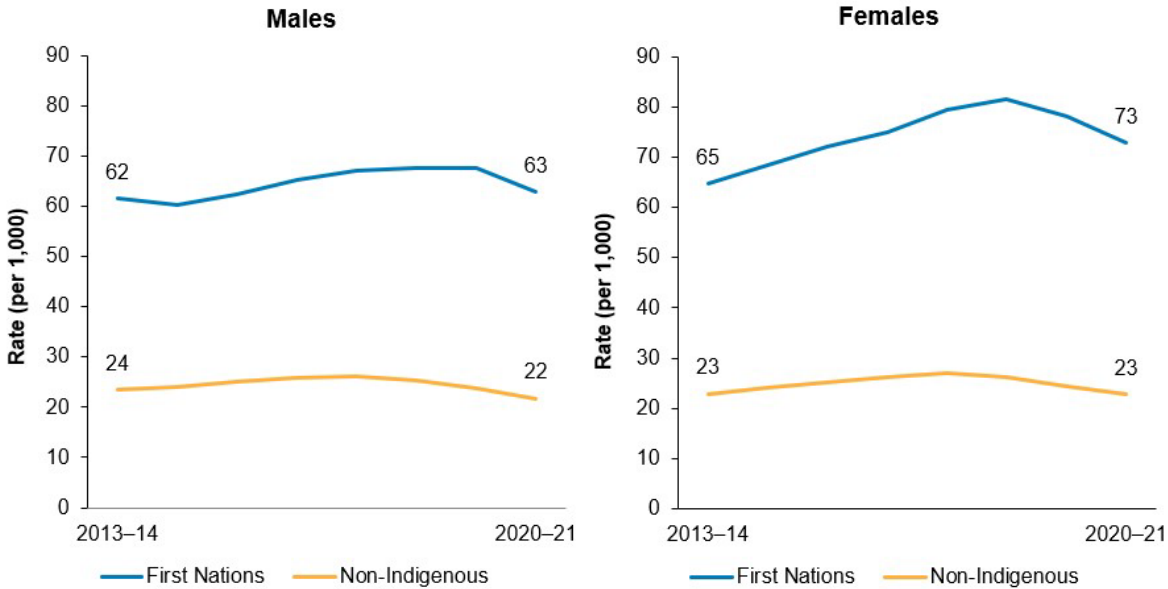
Potentially preventable hospitalisations is a key measure of the performance of the health system and serves as a proxy measure of access to timely, effective and appropriate primary and community-based health care. From July 2019 to June 2021, 91,703 hospitalisations of First Nations people were considered potentially preventable. This equates to a rate of 53 potentially preventable hospitalisations (PPH) per 1,000 First Nations people.

For First Nations males, the rate of PPH was lowest for those aged 15–24 (17 per 1,000) and for females the rate was lowest for those aged 5–14 (23 per 1,000). Among First Nations males and females the rate of PPH increased with age from those aged 25–34 (28 and 48 per 1,000, respectively) to those aged 65 and over (155 and 163, per 1,000) with the rate being higher for First Nations females in all these age groups. Among people of all ages, the age-standardised rate of PPH was 3.0 times as high for First Nations people as the rate for non-Indigenous Australians.

The age-standardised rate of PPH for First Nations people increased between 2013–14 and 2018–19 (from 63 to 75 PPH per 1,000 population), with a larger increase for First Nations females (from 65 to 82 PPH per 1,000) than males (from 62 to 68 PPH per 1,000) (Figure 6.5). However, the PPH rate decreased between 2018–19 and 2020–21, from 75 PPH per 1,000 to 68 PPH per 1,000 population (from 82 to 73 for females, and from 68 to 63 for males). This was mainly due to a decrease in vaccine-preventable hospitalisations (Figure 6.5). The decrease coincides with the COVID-19 pandemic, and the public health measures

put in place to control the pandemic (such as physical distancing, mask-wearing and handwashing) would have also affected the spread of other infectious diseases.

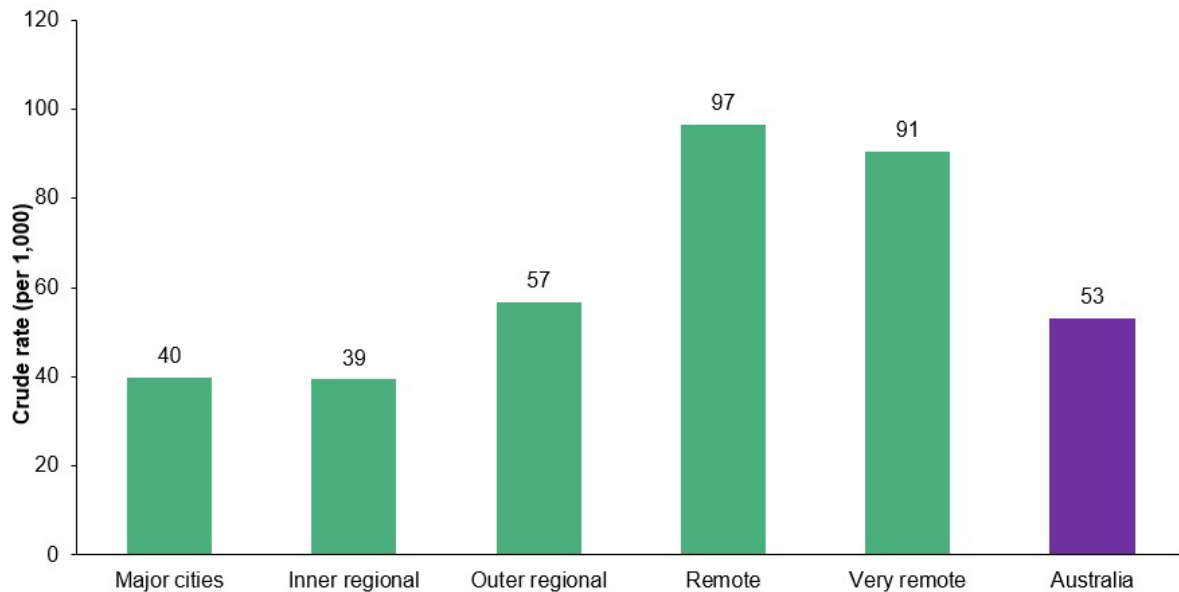
**Figure 6.5: Potentially preventable hospitalisation rates (age-standardised), by Indigenous status and sex, 2013–14 to 2020–21**



Note: Comparable data prior to 2013–14 is not available.  
 Source: Measure 3.07, Table D3.07.11 – AIHW analysis of National Hospital Morbidity Database.

Among First Nations people in 2019–21, the rate of PPH was highest for those living in *Remote* areas (97 hospitalisations per 1,000 population), followed by those in *Very remote* areas (91 per 1,000). The rate was lowest for those in *Major cities* and *Inner regional* areas (both around 40 per 1,000) (Figure 6.6).

**Figure 6.6: Potentially preventable hospitalisations for First Nations people, by remoteness, July 2019 to June 2021**



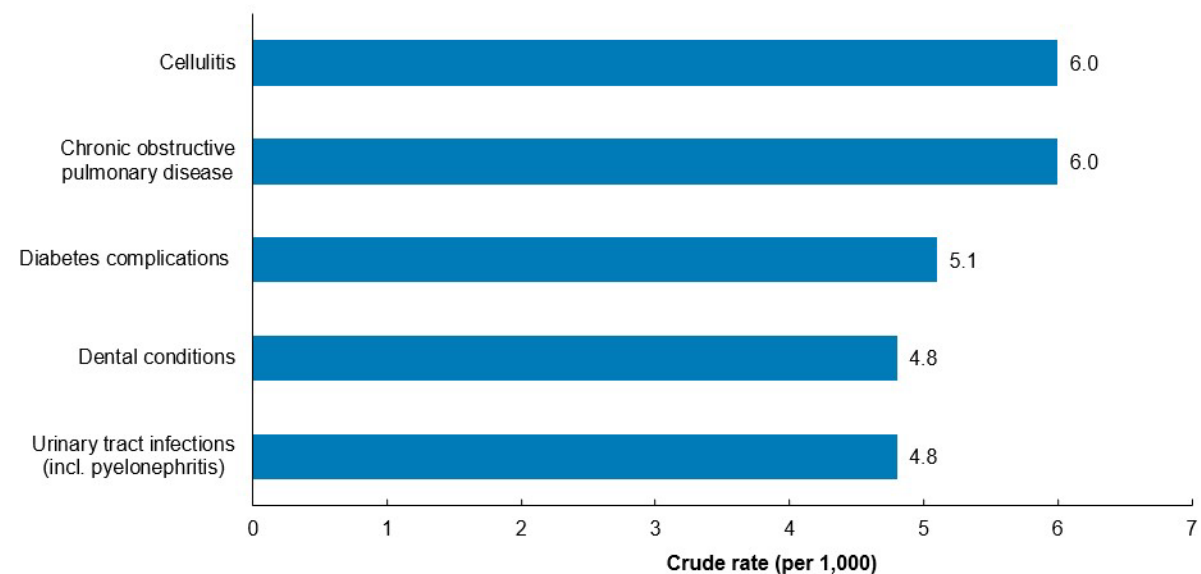
Note: 'Remote' excludes remote Victoria.

Source: Measure 3.07, Table D3.07.3 – AIHW analysis of National Hospital Morbidity Database.

From July 2019 to June 2021, the top 5 causes of PPH were:

- cellulitis (a bacterial skin conditions) – 10,324 hospitalisations (11.3% of PPH), at a rate of 6.0 per 1,000 population
- chronic obstructive pulmonary disease – 10,276 hospitalisations (11.2% of PPH), at a rate of 6.0 per 1,000
- diabetes complications – 8,829 hospitalisations (9.6% of PPH), at a rate of 5.1 per 1,000
- dental complications – 8,345 hospitalisations (9.1% of PPH), at a rate of 4.8 per 1,000
- urinary tract infections (including pyelonephritis) – 8,272 hospitalisations (9.0% of PPH), at a rate of 4.8 per 1,000 population (Figure 6.7).

**Figure 6.7: Top 5 causes of potentially preventable hospitalisations among First Nations people, July 2019 to June 2021**



Source: Measure 3.07, Table D3.07.5 – AIHW analysis of National Hospital Morbidity Database.

The age-standardised rate of hospitalisations for the top 5 potentially preventable conditions was higher for First Nations people than non-Indigenous Australians (ranging between 1.5 and 6 times as high).

For further information, see:

- [3.07 Selected potentially preventable hospital admission](#)

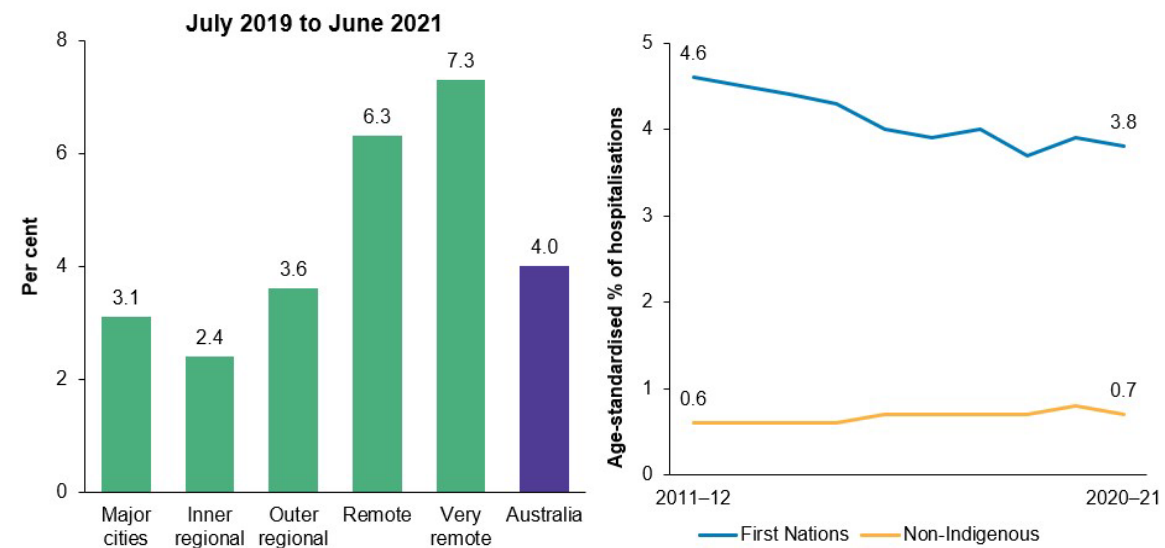
## Self-discharge from hospital

The number of people who leave hospital before discharge by their clinician can be interpreted as an indirect measure of patient dissatisfaction and reflects the extent to which health services are responsive to patients' needs.

Nationally, 26,985 hospitalisations for First Nations people over the period from July 2019 to June 2021 ended in discharge at own risk, equating to 4% of all First Nations hospitalisations (excluding dialysis). In general, the proportion of hospitalisations that ended in discharge at own risk for First Nations people increased with remoteness of usual residence (ranging from 3.1% of all hospitalisations for people living in *Major cities* to 7.3% in *Very remote areas*), the exception being for those living in *Inner regional* areas who were the least likely to leave at their own risk (2.4%) (Figure 6.8).

Over the decade 2011–12 to 2020–21, the age-standardised proportion of hospitalisations for First Nations people that ended in discharge at own risk decreased from 4.6% to 3.8%, while the proportion for non-Indigenous Australians remained similar (from 0.6% to 0.7%). The absolute difference in age-standardised proportions between First Nations people and non-Indigenous Australians decreased from 3.9 percentage points to 3.0 percentage points, narrowing the gap (Figure 6.8).

**Figure 6.8: Proportion of hospitalisations (excluding dialysis) ending in discharge at own risk, for First Nations people by remoteness (crude proportion, July 2019 to June 2021), and by Indigenous status (age-standardised, 2011–12 to 2020–21)**



Source: Measure 3.09, Table D3.09.4 and Table D3.09.6 – AIHW analysis of National Hospital Morbidity Database.

In the context of emergency department presentations, the terms ‘did not wait’ and ‘left at own risk’ are used. ‘Did not wait’ refers to presentations where patients did not wait to be attended by a health care professional. ‘Left at own risk’ refers to presentations where patients left at own risk after being attended by a health care professional but before the non-admitted patient emergency department service episode was completed.

There were 119,278 public hospital emergency department presentations for First Nations people where the patient did not wait or left at own risk, representing about 1 in 11 (9.4%) public hospital emergency department presentations in this period. Of these 119,278 emergency department presentations:

- in 75,185 (63.0%) presentations the patients did not wait, representing 5.9% of all emergency department presentations for First Nations people
- in 44,093 (37.0%) presentations, the patients left at own risk without completing treatment, representing 3.5% of all emergency department presentations for First Nations people.

Over the decade from 2011–12 to 2020–21, the age-standardised proportion of public hospital emergency department presentations where First Nations people left at own risk increased from 2.1% to 3.4%. There was also an increase for non-Indigenous Australians, from 1.6% to 2.4% over the same period.

In contrast, between 2011–12 and 2020–21, the proportion of public hospital emergency department presentations where First Nations people did not wait to be seen by a health professional decreased from 7.0% to 5.8%, and the proportion for non-Indigenous Australians decreased from 4.8% to 3.8%.

For further information, see:

- [3.09 Self-discharge from hospital](#)

# Access to hospital procedures

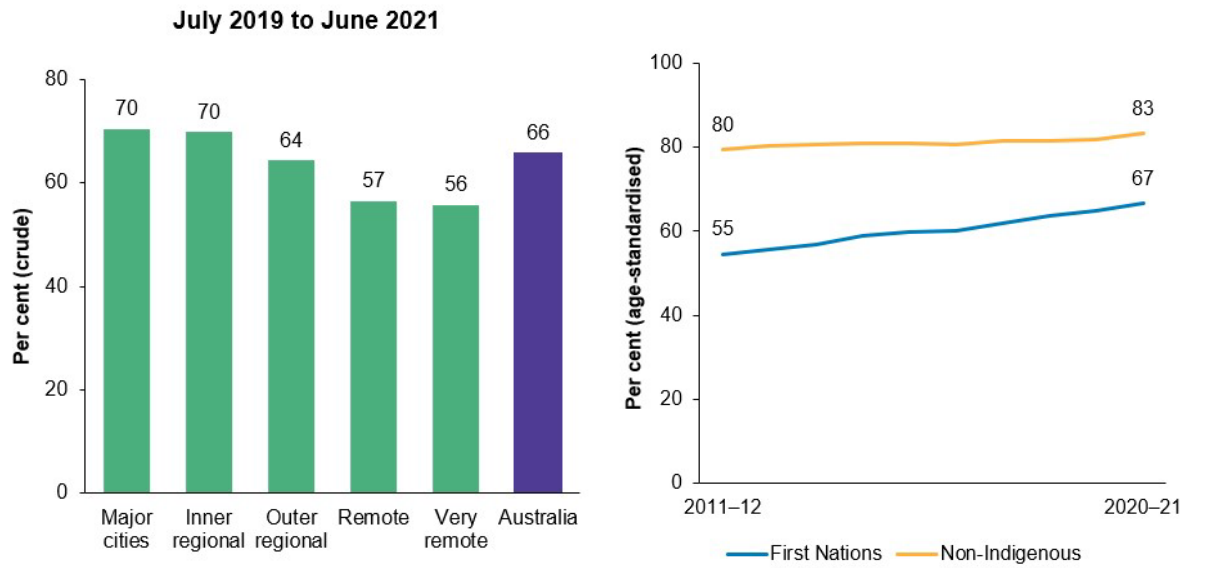
First Nations people are more likely to be hospitalised than non-Indigenous Australians, but are less likely to receive a medical or surgical procedure while in hospital.

Over the period July 2019 to June 2021, there were 444,091 First Nations hospitalisations (excluding dialysis) where a medical or surgical procedure was recorded in both private and public hospitals, accounting for two-thirds (66%) of all First Nations hospitalisations. After adjusting for differences in the age structure between the 2 populations, the proportion of hospitalisations that included a procedure for First Nations people was 0.8 times the rate of non-Indigenous Australians.

For First Nations people, the proportion of hospitalisations where a procedure was recorded decreased as remoteness of usual residence increased, declining from 70% in *Major cities* to 56% in *Very remote* areas (Figure 6.9).

Between 2011–12 and 2020–21, the age-standardised proportion of hospitalisations where a procedure was recorded increased by 19% for First Nations people, with a smaller increase for non-Indigenous Australians (2.3%) (Figure 6.9).

**Figure 6.9: Proportion of hospitalisations that included a procedure, for First Nations people by remoteness (crude proportion, July 2019 to June 2021), and by Indigenous status (age-standardised, 2011–12 to 2020–21)**



Source: Measure 3.06, Table D3.06.1 and Table D3.06.11 – AIHW analysis of National Hospital Morbidity Database.

Over the period from July 2019 to June 2021, First Nations people were most likely to have a procedure recorded where the principal diagnosis was cancer and other neoplasms (93.5% of all hospitalisations for such a diagnosis) and diseases of the eye and adnexa (93.2%). Respiratory diseases and infectious and parasitic disorders were the least likely to include a procedure (51.7% and 44.3%, respectively).

For further information, see:

- [3.06 Access to hospital procedures](#)

## Health expenditure

Health expenditure is defined as spending on health goods and services by all levels of governments as well as non-government entities such as individuals, private health insurers, and injury compensation insurers, which includes hospitals (both public and private); primary health care (unreferred medical services, dental services, other health practitioners, community health, public health, and medications); referred medical services; other services (patient transport services, aids and appliances, and administration); research; and capital expenditure (AIHW 2022a).

Health expenditure should reflect the relative need for health services – it should be higher for population groups with higher levels of need (AHMAC 2016; Whitehead 1991). One way to assess this is to compare differences in health status with differences in per person health expenditure.

This section presents information on health expenditure for First Nations people, with the exception of expenditure on medications as this information is not currently available by Indigenous status for the reported period.

The burden of disease and overall death rates for First Nations people are around twice those of non-Indigenous Australians. In 2019–20, the average health expenditure per person for First Nations people (excluding medications) was \$9,619, of which \$5,244 (55%) was spent on hospital services (Table 6.3). The average health expenditure per person for First Nations people was 1.5 times as high as for non-Indigenous Australians.

**Table 6.3: Average health expenditure per person (excluding medications), 2019–20<sup>(a)(b)</sup>**

	First Nations	Non-Indigenous	Ratio First Nations to non-Indigenous
Hospitals	\$5,244	\$3,227	1.6
Medicare services	\$1,162	\$1,156	1.0
Community health services	\$1,270	\$367	3.5
Dental services	\$396	\$376	1.1
Patient transport services	\$365	\$173	2.1
<b>Total health expenditure (excluding medications)<sup>(b)(c)</sup></b>	<b>\$9,619</b>	<b>\$6,473</b>	<b>1.5</b>

(a) Not age-standardised.

(b) Table excludes medications, as expenditure on medications by Indigenous status is not currently available. Ordinarily, this would include funding for the Pharmaceutical Benefits Scheme, Repatriation Pharmaceutical Benefits Scheme and other pharmaceutical related funding (such as under-copayment drugs, private scripts, over the counter medications and other schemes).

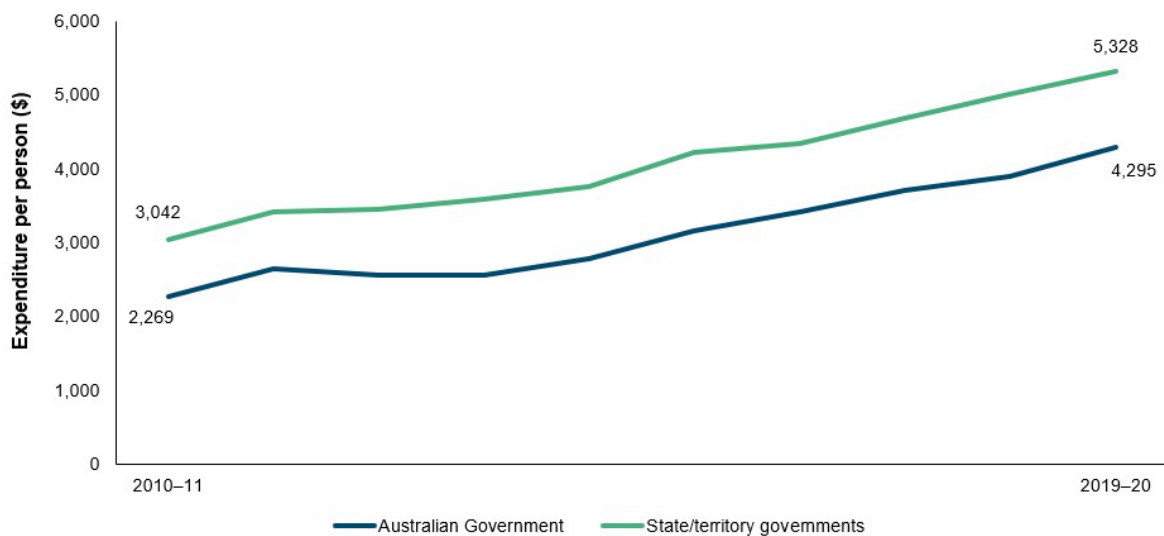
(c) Includes other health expenditure items not listed separately here, except medications – see Measure 3.21, Table D3.21.1.

Source: Measure 3.21, Table D3.21.1 – AIHW Health Expenditure Database.

Expenditure by the Australian Government on health services tailored to the needs of First Nations people increased from \$703 million in 2010–11 to \$972 million in 2019–20, a growth of 38%. In real terms, expenditure increased \$716 to \$923 million (29% increase).

Between 2010–11 and 2019–20, Australian Government health expenditure per person for First Nations people increased by 7.3% per year in real terms, from \$2,269 to \$4,295 per person (excluding expenditure on medications). Over the same period, state and territory government health expenditure per person for First Nations people increased by 6.4% per year in real terms, from \$3,042 per person to \$5,328 per person (Figure 6.10).

**Figure 6.10: Australian Government and state and territory governments health expenditure per person for First Nations people, 2010–11 to 2019–20 (constant prices)**



Source: Measure 3.21, Table D3.21.4 – AIHW Health Expenditure Database.

For further information, see:

- [3.21 Expenditure on Aboriginal and Torres Strait Islander health compared with need](#)

## Aboriginal and Torres Strait Islander health workers

It is the responsibility of the whole health system to provide culturally appropriate health care for Australians from diverse backgrounds. Increasing the representation of Aboriginal and Torres Strait Islander (First Nations) people in the health workforce is one way to improve access to culturally appropriate health services for First Nations people (AHMAC 2016).

In the 2021 Census of Population and Housing, around 3.1% of First Nations people aged 15 and over (about 16,700) were employed in health-related occupations. Between 2011 and 2021, the number of First Nations people aged 15 and over employed in health-related occupations increased from about 8,800 to about 16,700 people. As a population rate, for First Nations people aged 15 and over, this corresponds to an increase from 255 people working in health-related occupations per 10,000 population, to 309 per 10,000 population.

The National Registration and Accreditation Scheme regulates 16 health professions across Australia: Aboriginal and Torres Strait Islander Health Practitioners, Chinese Medicine Practitioners, Chiropractors, Dental Practitioners, Medical Practitioners, Medical Radiation Practitioners, Nurses, Midwives, Occupational therapists, Optometrists, Osteopaths, Paramedics, Pharmacists, Physiotherapists, Podiatrists, and Psychologists (AHPRA 2022). People may be registered in more than one health profession.

The National Health Workforce Data Set contains data on these registered health professionals. It shows that in 2021 there were 9,274 First Nations people registered as health professionals. This included 792 registered Aboriginal and Torres Strait Islander Health Practitioners (a person who has completed a Certificate IV in Aboriginal and Torres Strait Islander Primary Health Care (Practice) and is registered with the Aboriginal and Torres Strait Islander Health Practice Board of Australia). Relative to population size, First Nations people were employed in registered health professions at a rate that was about one-

third that of non-Indigenous Australians – 89 compared with 267 per 10,000 population respectively. Across registered health professions, the largest absolute gap in rates between First Nations people and non-Indigenous Australians was among nurses and midwives (rate difference of 87 per 10,000), followed by medical practitioners (37 per 10,000 population).

In 2021, there were 7,107 enrolments of First Nations students in Vocational Education and Training (VET) health-related courses, 77% of which were for females. First Nations students completed 1,772 VET health-related courses in 2021. The most common courses were in public health (804 course completions) and nursing (229 course completions). There were 304 VET qualifications completed in Aboriginal and Torres Strait Islander health worker occupations.

Between 2001 and 2018, the enrolment rates for First Nations students in health-related courses in the higher education sector increased from 27 to 61 per 10,000 population (157% increase, based on linear regression), and completion rates increased from 5 to 11 per 10,000 population (134%). In 2018, the completion rate for First Nations students studying health-related courses was 81% compared with 92% for non-Indigenous students.

For further information, see:

- [3.12 Aboriginal and Torres Strait Islander people in the health workforce](#)
- [3.20 Aboriginal and Torres Strait Islander people training for health-related disciplines](#)

## Barriers to accessing health services

In 2018–19, 30% (243,700) of First Nations people reported that they needed to, but did not see a health care provider on at least one occasion in the previous 12 months. Among those who did not see a health care provider when they needed to, the following reasons were given (more than one reason could be provided):

- 36% said they were too busy – higher in non-remote areas at 37%, compared with 30% in remote areas.
- 34% said cost was a factor – higher in non-remote areas at 36%, compared with 21% in remote areas.
- 23% said they disliked the service, or were embarrassed or afraid – higher in non-remote areas at 24%, compared with 15% in remote areas.
- About 1 in 3 (33%) said reasons related to service availability and/or transport/distance:
  - waiting times were too long or the service was not available at the time required (21%)
  - they did not have transport or the service was too far away (13%)
  - the service was not available in their area (7%) – higher in remote areas at 22%, compared with 4.7% in non-remote areas.

Among First Nations people who did not see a health care provider when they needed to, the proportion who said this was due to reasons related to service availability and/or transport/distance was higher in remote areas than non-remote areas (54% compared with 29%).

In 2018–19, about 1 in 8 (13% or 102,000) First Nations people did not go to the doctor when they needed to. A larger proportion of those living in non-remote areas (14%) did not go to the doctor when they needed to, compared with those in remote areas (8%).

Logistical barriers were more significant in remote areas, while personal reasons posed greater barriers in non-remote areas. The greatest difference between remote and non-remote areas were:

- deciding not to seek care – 31% in non-remote areas, and 9.3% in remote areas
- service not available in area – 0.9% in non-remote areas, and 10% in remote areas.

About 1 in 5 (19% or 146,700) First Nations people did not go to the dentist when they needed to. A larger proportion of those living in non-remote areas (20%) did not go to the dentist when they needed to than those in remote areas (15%).

Cost was the main barrier to going to the dentist for those in non-remote areas (44%). For those in remote areas who did not go to the dentist when they needed to, cost was also an important factor (29%). Other key barriers included:

- disliking service/professional, embarrassed or afraid (23% in non-remote areas compared with 13% in remote)
- waiting time too long or not available at time required (13% in non-remote areas compared with 24% in remote areas).

For further information, see:

- [3.14 Access to services compared with need](#)

## 7. Additional information

This summary report presents a small selection of key findings drawn from the full set of information compiled for reporting against the Aboriginal and Torres Strait Islander Health Performance Framework (HPF).

The detailed findings and data are presented across the [HPF website](#), including:

- comprehensive national, and state and territory reporting
- supplementary data tables
- interactive data visualisations.

The [Measures](#) section of the website provides a full list of HPF measures with links to the associated webpages.

### Data sources and limitations

The report draws on data from various sources, and the reference period reported varies between topic areas.

There are well-documented limitations with the availability and quality of data about the health of Aboriginal and Torres Strait Islander (First Nations) people. These include:

- the quality of data on all key health measures, including mortality and morbidity
- uncertainty about the size and composition of the First Nations population
- a lack of data on other health issues, such as access to health services.

In some cases, national data are based on combined information from states/territories with data of adequate quality, as specified.

Technical notes and information about data sources and quality is available from the [Resources](#) section of the website, including [Data sources and quality](#), [Data development](#) and [Statistical terms and methods](#).

## Data updates and changes

The summary report was first released in December 2020. Starting in January 2023, the summary report is being updated concurrent with updates to the HPF measures.

Release version	Date	Update/change
4.0	21 March 2024	Fourth release, incorporating website updates from across 12 measures (see '21 March 2024' section of <a href="#">Updates and Notes</a> page). Various edits to other sections (without data updates).
3.1	8 August 2023	Minor updates <ul style="list-style-type: none"> <li>Housing assistance: Social housing and CRA data updated from 30 June 2021 to 30 June 2022, to align with updates to measure 2.01 Housing.</li> <li>Housing tenure: Correction to Table 5.3: Housing tenure trends for households, 2011–2021. This table has been updated to correct a row label from 'private renters' to 'renters: real estate agent'. In addition, for completeness, two additional categories of renters were added to the table – 'renters: person not in the same household' and 'renters: other landlord type'.</li> </ul>
3.0	7 July 2023	Third release, incorporating website updates from 12 data sources across 14 measures (see '7 July 2023' section of <a href="#">Updates and Notes</a> page).
2.0	31 January 2023	Second release, incorporating website updates from 12 data sources across 27 measures (see '31 July 2023' section of <a href="#">Updates and Notes</a> page). Summary report was also converted from PDF format to a web (html) version.
1.0	8 December 2020	First release of the summary report in PDF format.

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