CHAPTER TWO STATE OF PUBLIC HEALTH 2020-2022

Chapter Two reports on the key public health trends in South Australia for the reporting period July 2020 to June 2022. The information within this chapter comes from a variety of sources. While some comparisons may be from outside the reporting period, they are included as they describe trends important to understand from a public health perspective.

Please note that this report has focused on drawing Aboriginal data predominantly from grey literature in the form of government reports and epidemiological data repositories. It needs to be highlighted that the majority of national, bi-national and state data repositories in Australia were established prior to knowledge and understanding of the importance of Indigenous Data Governance for Indigenous data⁴. As such these repositories do not conform to Indigenous Data Sovereignty principles or practices. This is a significant limitation in these repositories, as while they contain Indigenous data, they do not engage Indigenous Knowledges or recognise the sovereign rights of Aboriginal and Torres Strait Islander individuals and communities in their repositories or reporting mechanisms.

INDICATORS AT A GLANCE

South Australia's estimated resident population was 1.82 million (June 2022)	The population change was 1.2% compared with +1.3% in Australia 2020-22	19.9% of South Australians were aged over 65 years (June 2022) 18.4% in 2019	17.2% of South Australians were aged 0-14 years (June 2022) 17.7% in 2019	The median age of Aboriginal South Australians is 24 years of age (June 2021) 22.8 years in 2016
The population density in South Australia is 1.9 persons per km ² (June 2022)	>777.7% of South Australians live in the greater Adelaide region (June 2021) >75.7% in 2018	24.1% South Australians report being born overseas (June 2021) 23% from 2019	South Australia is home to 2004 culturally, linguistically and religiously diverse backgrounds	28.5% of South Australians live in a lone household (2021) Increase of 0.5% from 2016

SOUTH AUSTRALIA'S POPULATION PROFILE

Understanding South Australia's population profile is critical for developing strategies and policies to improve the health of our population. It is also important in understanding and preparing for requirements of our healthcare services. Demographic trends include age profile, where people live, population growth and decline, and cultural diversity.

As of 30 June 2022, the Australian Bureau of Statistics (ABS) estimates the resident population of South Australia to be 1.82 million people. This is an increase of 17,300 people (or 1%) since 30 June 2021. Australia's population growth rate over the same period was 1.1%⁵. During the 1 July 2020 to 30 June 2022 reporting period, South Australia's population increased by 1.2% while Australia's increased by 1.3%^{6,7}.

- South Australia's share of national population growth is declining (7.1% in 2016 to 6.9% in 2021)⁸.
- > Between 2011 and 2021, Adelaide had the lowest capital city growth rate in Australia at 10.9% (total capital cities at 17.1%, with Canberra having the fastest growth rate at 23.3%)⁹.

- > The South Australian population is ageing with the median age increasing from 27 years in 1971, 40 years in 2016 and 41 years in 2021¹⁰. Tasmania has the highest aging population at 41.8 years, followed by South Australia at 40.7 years while Australia's median age was 38.5 years¹¹.
- > The areas with the oldest median ages in South Australia are Goolwa - Port Elliot (61.2 years), Victor Harbor (60.4) on the Fleurieu Peninsula and Moonta (59.0 years) on the Yorke Peninsula¹².
- In June 2022, people aged 50 years and older accounted for 38.8% of South Australia's population, compared to 35.1% nationally¹³.
- In 2021, people aged 20 to 44 years made up 34% of the population in Adelaide compared with 26% in the rest of the state. This is indicative of young adults moving to the capital city for employment or education purposes¹⁴.
- > The proportion of children aged 0-14 years were highest in Davoren Park (27.2%), Roxby Downs (26.9%), Munno Para West - Angle Vale (25.7%), APY Lands (24.5%) and Elizabeth (23.3%).



Figure 2: Age and sex distribution, South Australia

- > As of June 2022, the population density of South Australia was 1.9 people per square kilometre, making it the third sparsest state or territory behind the Northern Territory (0.2 people per square kilometre) and Western Australia (1.1 people per square kilometre). Australia's population density was 3.4 people per square kilometre)¹⁵.
- > Over three quarters of South Australia's population reside in the greater Adelaide region¹⁶.
- > As of June 2022, the areas with the highest density per square kilometre were Unley - Parkside (3,000), Prospect (3,000) and Glenelg (2,900)¹⁷.
- From 1 July 2021 to 30 June 2022, the area with the highest resident population growth in the Greater Adelaide area was Adelaide Plains (4.9%), Mount Barker (3.6%), Gawler (3.2%) and Playford (2.8%)¹⁸.
- In the 12 months to 30 June 2021, regional South Australia grew at a faster rate than Greater Adelaide, with an increased preference towards coastal destinations during COVID-19. Yankalilla recorded the highest growth rate (2.8%), followed by Alexandrina (2.3%), Victor Harbor and Kangaroo Island (1.7%)¹⁹.
- South Australia has a higher proportion of lone households and households with two residents compared with Australia as a whole. In 2021, 28.5% of South Australian households had only one person, 25.6% in Australia. South Australian households with two residents made up 34.7%, compared to Australia 33.5%²⁰.
- Single parents with children represent 10.8% of South Australian households compared with 10.5% in Australia²¹.
- > The latest information, previously published in the Chief Public Health Officer's Report 2018-2020, identified the five most advantaged local government areas in South Australia as Burnside, Adelaide Hills, Walkerville, Mitcham and Unley. Conversely, the five most disadvantaged local government areas were identified as Peterborough, Playford, Coober Pedy and Whyalla, and the out of council area Anangu Pitjantjatjara Yankunytjatjara^{22, 23}.



ABORIGINAL SOUTH AUSTRALIANS

According to the 2021 Census, 43,000 people in South Australia identified as being Aboriginal and/or Torres Strait Islander, representing 2.4% of the state's population. This was an increase from 34,181 people in 2016 and is lower than the 2021 Australian percentage of 3.2%. The median age of Aboriginal people in South Australia was 24 years, much younger than non-Aboriginal people at 40.6 years.

The LGAs with the greatest proportion of Aboriginal people were, Anangu Pitjantjatjara Yunkunytjatjara (88.5%), Maralinga Tjarutja (70.8%), Ceduna (24.8%) and Port Augusta (20.4%).

Nearly three-quarters (73.4%) of Aboriginal South Australians live in metropolitan Adelaide²⁴.

Most Aboriginal households (76.3%) were living in family households, including 4.1% with more than one family living together. Around one in six households (18.1%) were made up of people who lived alone, while a small proportion were group households (5.6%)²⁵.

COUNTRY OF ORIGIN, LANGUAGE SPOKEN AT HOME AND RELIGION

South Australia is home to people from more than 200 culturally, linguistically and religiously diverse backgrounds²⁶. The migrant population in South Australia has comprised just under a quarter of the total population since the mid-1960s. In 2021-22, the net overseas migration in South Australia was 12,080, representing approximately 7% of the overall net overseas migration for Australia. In 2020-21, overseas migration contributed a net loss to the population in each state and territory during the COVID-19 pandemic²⁷. The most recent Census in 2021 showed:

- > Around 24.1% (426,570 people) of South Australians were born overseas. The most common overseas countries of birth were England 5.3%, India 2.5%, China (excludes Special Administrative Regions and Taiwan) 1.4%, Vietnam 1.09% and Italy 0.91%²⁸.
- > The most common ancestries in South Australia were English 38%, Australian 32.5%, Scottish 8.4%, Irish 7.6% and German 7.6%²⁹.
- In 2021, most people in South Australia only used English at home (77.6%)³⁰.

- > The LGAs with the highest proportion of people who use a language other than English at home (excluding Aboriginal communities) were the City of Adelaide (35.9%), Campbelltown City Council (35.9%), City of Port Adelaide Enfield (35.4%), City of Salisbury (32.5%) and the lowest was City of Onkaparinga (7.1%)³¹.
- In 2021, the main religious affiliation in South Australia was Christianity (40.0%). This proportion has decreased over time as people reporting non-Christian religions and no religious affiliation has increased. In 2016, Christian affiliation was 49.1%, and in 1971 it was 85.7%.
- In 2021, 7.8% of people in South Australia were affiliated with a non-Christian religion. The most common were Islam (2.3%), Hinduism (2.1%) and Buddhism (1.9%).
- > The percentage of people who identified as having no religious affiliation was 45.8% in 2021. This was an increase from 36.0% in 2016 and 8.1% in 1971³².



BIRTH AND LIFE EXPECTANCY

Birth and life expectancy are important metrics for assessing population health. Birth rate is a key indicator of population growth and change, while life expectancy captures mortality along the entire life course and tells us the average age of death in a population.

INDICATORS AT A GLANCE





FERTILITY AND BIRTH

The health of both mothers and their babies has important lifelong implications. Maternal demographics, such as maternal age and country of birth, can impact on maternal and perinatal health. Maintaining a healthy lifestyle during pregnancy and attending routine antenatal care contributes to better outcomes for both mother and baby. The health of a baby at birth is a key determinant of their health and wellbeing throughout life. For example, the gestational age of a baby and their birthweight have important implications for their health, with poorer outcomes generally reported for those born early and with a birthweight below 2,500 grams³³.

The health of a child starts before birth with the health and wellbeing of parents prior to conception and during pregnancy. Maternal factors such as attendance at routine antenatal care appointments and maintaining a healthy lifestyle are important factors influencing positive birth outcomes such as the gestational age of a baby and their birthweight.

In 2020, in South Australia:

- > There were very high levels of mothers attending routine antenatal care with 84.9% of mothers attending their first antenatal visit in the first trimester, and 83.1% of mothers attending at least seven antenatal visits during pregnancy.
- > The average age of mothers giving birth increased to 30.7 years.
- 92.8% of all babies born were with a normal birthweight (7.2% low birthweight).

The figures used in this section (Fertility and Birth) and within the 'Low Birthweight' and 'Perinatal Mortality' sections of this report come directly from the South Australian Perinatal Statistics Collection (SAPSC). The SAPSC data are submitted to the AIHW for national reporting purposes. SAPSC data relate to births that occurred in South Australia, whereas AIHW perinatal data are usually reported by state or territory of usual residence of the mother.

LOW BIRTHWEIGHT

Birthweight is a key indicator of infant health and a major determining factor in a baby's chance of survival and good health. Babies born with low birthweight (<2500grams) are at greater risk of poor health, disability and death³⁴.

- In 2019 in South Australia, the proportion of low birthweight babies remained stable for non-Aboriginal mothers (6.9% in 2019, compared to 7.3% in 2018) and decreased for Aboriginal mothers (13.6% in 2019 compared to 17.0% in 2018).
- > This continued in 2020, with 6.9% of babies to non-Aboriginal mothers and 13.8% to Aboriginal mothers being low birthweight.
- In 2020 in South Australia, the percentage of low birthweight babies was 7.2%.
- > The proportion of babies with a low birthweight born to Aboriginal mothers in South Australia has been decreasing since the early 2000s.





LIFE EXPECTANCY

The life expectancy at birth for Australians has risen quickly compared to other high-income countries. In 2020, Australia was ranked third in the world for life expectancy. Nevertheless, the increase in life expectancy has slowed down in Australia. One plausible explanation for this is the relatively high rates of obesity leading to increased risk of diabetes, high blood pressure, and high cholesterol levels and other chronic health conditions. In contrast, there have been improvements in early mortality due to reduction in rates of smoking in the community^{35, 36}.

In South Australia, the estimated life expectancy at birth was 81.0 for males and 85.3 for females according to 2019-2021 ABS data³⁷. This shows an increase of 1.3 years for both males and females over a decade. In comparison, life expectancy for males in Australia has increased by 1.6 years and for females by 1.2 years. The following table provides a comparison of life expectancy at birth for South Australia and Australia for selected years.

CAUSES OF DEATH

Death data are an important measure of a population's health and provide information on patterns of disease by population groups over time. Death rates are calculated using standardised age rates, a technique used to compare mortality rates across different populations and over time. The standardised death rate applied uses the age distribution of the total population in Australia as of 30 June 2001 as the standard population, and is expressed as deaths per 1,000 standard population. This technique allows for more accurate comparisons by removing the confounding effects of different age structures, enabling a comparison between populations over time. Examining death data can help explain differences and changes, evaluate health strategies, and guide planning and policy making.

In 2020 and 2021, there was a total of 28,101 registered deaths of usual residence recorded in South Australia. South Australia recorded an increase in death registrations in 2021. This follows lower death counts in 2020, after the introduction of public health measures to limit the spread of COVID-19. This was consistent in all states and territories³⁸.

Table 1: Life expectancy at birth, South Australia, and Australia – selected year

	2006-08	2009-11	2016-18	2019-21
Australia				
Male	79.2	79.7	79.7	81.3
Female	83.7	84.2	84.2	85.4
South Australia				
Male	79.2	79.7	79.7	81
Female	83.8	84	84	85.3

Data source: ABS, Life tables 2019-21

In 2021, the median age at death in South Australia for both males (80.2 years) and females (85.9 years) were the highest in Australia³⁹.

The standardised death rate for South Australia has gradually decreased from 2008 (6.1 per 1,000 standard population [sp]), 2011 (5.7 per 1,000 sp) to 2021 (5.2 per 1,000 sp)^{40, 41}. There was an anomaly in 2020 figures due to low death rates experienced by all jurisdictions following the introduction of public health measures to limit the spread of COVID-19. The experience in Australia was different from that of many other countries, where significant increases in mortality were recorded, due largely to deaths from COVID-19⁴². In 2021, taking into account South Australia's older population, the number of people who died compared with the rest of Australia was proportionally similar.

Causes of death are available to 2021. In total, the six leading causes accounted for 36.1% of all deaths in South Australia registered in 2021⁴⁴.



Figure 4: Standardised death rate per 1,000 standard population, South Australia 2008-2021

Data source: ABS, Deaths in Australia, Table 442

Note: Deaths per 1,000 standard population. Standardised death rates use the age distribution of total persons in the Australian population at 30 June 2001. Causes of death data are available to 2021. In total, the six leading causes accounted for 36.1% of all deaths in South Australia registered in 2021.

Dementia and Alzheimer's

The leading cause of death in South Australia was dementia (1,720 deaths), accounting for 11.9% of all deaths.

- > Dementia and Alzheimer's disease is the second leading cause of death for males (569 deaths) and first leading cause of death for females (1,151 deaths).
- > Females were 67% more likely to develop dementia and Alzheimer's than males, however, males were more likely to die from dementia and Alzheimer's at an earlier age than females.
- > The number of deaths from dementia and Alzheimer's disease has increased 61% over the past decade (2011-21)⁴⁵.

Ischaemic heart disease

Ischaemic heart disease is the leading cause of death in Australia, and, the second leading cause of death in South Australia. Ischaemic heart disease in South Australia accounted for 1,444 deaths or 10% of all deaths and the first leading cause for males (850 deaths) and the second leading cause of death for females (594 deaths).

While remaining the leading cause of death for males, the number of deaths from ischaemic heart disease has been steadily declining from 2011 (1,956 deaths) to 2018 (1,429 deaths). The period from 2018 to 2021 remains relatively consistent (1,429 deaths in 2018 and 1,444 deaths in 2021).

Other leading causes of death in 2021

- Cerebrovascular diseases 756 deaths or 5.2% of all deaths.
- > Cancer of the trachea, bronchus and lung 682 deaths or 4.7% of all deaths.
- > Chronic lower respiratory diseases 636 deaths or 4.4% of all deaths.
- Cancer of the colon, sigmoid, rectum and anus 445 deaths or 3.1% of all deaths.



Figure 5: Top six leading causes of death by sex, South Australia in 2021 (all causes 14,494)



Figure 6: Trend top six leading causes of death South Australia, 2012-2021

Data source: ABS, Table 13.5 manual calculations. Causes of Death, Underlying cause of death, All causes, Year of Occurrence, South Australia

POTENTIALLY AVOIDABLE DEATHS

Measuring and reporting potentially avoidable deaths helps with assessing the effectiveness of public health and healthcare systems in reducing premature deaths from various diseases and injuries that have modifiable risk factors. The most recent data (2016-20) show the potentially avoidable deaths (age-standardised) have been slowly decreasing. In 2020, there were 95.7 per 100,000 potentially avoidable deaths (age-standardised), while in 2016 there were 110.9. In 2020, there were 88.2 potentially avoidable deaths (age-standardised) for Adelaide and 117.5 in the rest of South Australia, again a downward trend from 2016⁴⁶.

PERINATAL MORTALITY

In 2019 and 2020, the South Australian perinatal mortality rates for all births of at least 400g birthweight or 20 weeks gestation were 7.2 and 7.7 per 1,000 births, respectively. This was a slight decrease from the 2018 rate of 9.2 deaths per 1,000 births. While the perinatal death rate increased for Aboriginal mothers in 2020, the perinatal mortality rate for Aboriginal births fluctuated widely due to the small number of deaths and shows a decreasing trend over the past two decades (Figure 7).



Figure 7: Perinatal mortality by maternal Aboriginal status, South Australia, 2002-2020

BURDEN OF DISEASE, DEATH AND INJURY

The human and economic costs that result from poor health are frequently described as 'burden of disease'. Burden of disease analysis measures the impact of fatal and non-fatal burden, which includes both deaths and living with poor health. It takes disease prevalence, severity of disease and age at death into account⁴⁷. Understanding the burden of disease helps public health practitioners and policy makers to plan interventions and deliver services that enhance prevention, control the spread of disease, improve disease outcomes and reduce health inequities.

The AIHW conducts the Australian Burden of Disease Study (ABDS) applying current health evidence for the Australian context and generated national estimates for 220 diseases and injuries in 2022⁴⁸. National results are updated regularly with periodic updates for regions within Australia and modifiable risk factors.

The most recent national ABDS study was in 2022. The most recent jurisdictional, remoteness, socioeconomic areas and risk factor results are for 2018⁴⁹.

INDICATORS AT A GLANCE

11.5%

of South Australian adults reported having been diagnosed with cardiovascular disease

2020-22

27.5%

of South Australian adults report having a mental health condition

2020-22 (29% in 2018-19

2.4%

Increase in children (5-15 years) reporting having a mental health condition

(20.3% in 2020-22 and 18.4% in 2018-20) The projected incidence of all cancers in 2020 is 595.6 for males and 433.7 for females (per 100,000)

97,658

hospital admissions in South Australia were potentially preventable over the reporting period

TOP 10 LEADING CAUSES

As a proportion of total Disability-Adjusted Life Years (DALY) within South Australia, the top ten leading causes of disease burden as reported in the 2018 ABDS are coronary heart disease (10.1%), back pain and problems (8.8%), other musculoskeletal (8.1%), dementia (7.4%), anxiety disorders (6.5%), depressive disorders (6.4%), asthma (6%), suicide and self-inflicted injuries (5.8%), chronic obstructive pulmonary disease (COPD) (5.8%) and lung cancer (5.2%)⁵⁰.

In South Australia, the standardised rate of burden decreased from 195.9 DALY per 1,000 in 2011 to 189.7 in 2018.

The AIHW has released the 2022 ABDS, however, the report did not describe information to jurisdictional level. Therefore, comparing 2018 information, the proportion of disease burden in all of Australia where these ten diseases accounted for 36.8%, South Australia accounted for only 37.4% of all disease burden⁵¹.

In 2022, Australians experienced more burden from living with illness (52% of total burden) than premature death (48%)⁵².

The burden of disease for Aboriginal people is 2.3 times that of non-Aboriginal Australians⁵³.

According to the 2018 ABDS, musculoskeletal conditions contributed to 13% of the total disease burden (fatal and non-fatal) in Australia. This disease group was the second leading non-fatal contributor to the total burden after cancer⁵⁴.

- > 24% of non-fatal burden (that is, the impact of living with illness and injury) was related to musculoskeletal conditions and was the leading disease group contributing to non-fatal burden.
- > Musculoskeletal conditions contributed to 15% of total female burden compared with 11% of total male burden.
- It was the largest component of non-fatal burden for people aged 50 to 84 years⁵⁵.
- > The South Australian Population Survey July 2020 to June 2022 reported 28.9% of South Australians having been diagnosed with arthritis.

In 2018, South Australians aged 65 years and over are overrepresented in the burden of disease data. This age group comprises 19.8% of the population but experienced almost half (46.8%) of the burden of ill health^{56, 57}. Chronic conditions (cancer and other neoplasms, musculoskeletal disorders, neurological conditions, cardiovascular diseases (CVD), including coronary heart disease, stroke and heart failure, and mental health diseases) accounted for 65.4% of the burden of disease in this age group.

BURDEN OF DISEASE DUE TO COVID-19

The ABDS 2022 included estimates of the burden due to COVID-19 infection. The estimated total burden from COVID-19, including long COVID was 151,388 DALY (5.83 per 1,000 population), which accounted for 2.7% of the total burden of disease in Australia and ranked as eighth most impactful among leading diseases.

COVID-19 was the fifth leading cause of fatal burden, contributing 4.1%. Premature death due to COVID-19 accounted for 111,042 years of life lost (4.28 per 1,000 population). People who had long COVID or other health issues after COVID-19 accounted for 40,346 years lived with disease (1.55 per 1,000 population). The burden was higher in males than females and greatest in those aged 75 to 84 years⁵⁸.

These estimates of burden of disease were based on information up until August 2022 and the estimates may be updated in the future as more data become available.



CHRONIC DISEASE CONTRIBUTION TO BURDEN OF DISEASE

Chronic diseases cause most of the burden. In 2022, the five disease groups causing the most burden in Australia were cancer, musculoskeletal conditions, cardiovascular disease (CVD), mental health conditions and substance use disorders, and neurological conditions. Together, these disease groups account for around two-thirds (62%) of the total burden. These disease groups include mostly chronic or long-lasting, conditions⁵⁹.

Chronic disease is characterised by often commencing with low-grade symptoms that if missed or neglected over time reach a tipping point of illness, disability and premature death. Chronic conditions are occurring earlier in life and Australians may live for longer with complex care needs. Nearly half of Australians of all ages (46.6%) had one or more chronic condition, and almost one in five (18.6%) had two or more chronic conditions. Almost half (49.0%) of all females had one or more chronic conditions, and one in five (20.7%) had two or more. Similarly, 43.9% of males had one or more chronic conditions and 16.4% had two or more⁶⁰.

South Australian Population Health Survey (SAPHS) data for 2020-22⁶¹ show clear trends in the impact of the social determinants of health on chronic disease:

- > 11.5 % of South Australian adults reported having been diagnosed with CVD.
- Men and those living in rural areas were more likely to report CVD compared to those living in urban areas.

- > The proportion reporting CVD increased with age and was higher in those living in lower socioeconomic areas.
- > 3.8% of adults reported having been diagnosed with chronic obstructive pulmonary disease (COPD).
- > Women were more likely to report COPD compared to men.
- > The proportion reporting COPD increased with age and was higher in those living in lower socioeconomic areas and among Aboriginal and Torres Strait Islanders.
- > 12.2% of adults reported having been diagnosed with diabetes, with 8.8% having type 2.
- Men and those living in rural areas were more likely to report diabetes compared to women and those in metropolitan areas.
- > The proportion reporting diabetes increased with age and was higher in those living in lower socioeconomic areas.
- > 7.3% of adults reported having been diagnosed with osteoporosis.
- > Women were more likely to report osteoporosis compared to men.
- > The proportion reporting osteoporosis increased with age.
- > 13.6% of adults reported having been diagnosed with asthma.
- > Women and those living in rural areas were more likely to report asthma compared to men and those in metropolitan areas.
- > The proportion reporting asthma was higher in the 30 to 69 age range and in those living in lower socioeconomic areas.
- > Aboriginal South Australians were more likely to report asthma.

Figure 8: Proportion of South Australian adults reporting two or more chronic conditions (diabetes, asthma, COPD, cardiovascular disease, arthritis, osteoporosis, mental health) by age group and sex – 2020-2022



CANCER INCIDENCE, SURVIVAL AND MORTALITY

As one of the leading causes of death in South Australia, cancer also has a heavy social and economic impact on individuals, families and the community. Cancer care represents a substantial and rapidly rising healthcare cost in Australia⁶². Costs are likely to increase, in part because of population ageing and as new, more effective but more costly treatments are adopted as standards of care.

Age-standardisation or adjustment is often used to enhance the comparability of rates to account for differences in age structure. Figures 9 and 10 show the trends in both numbers and rate of cancer incidence and mortality in South Australia since 1977, respectively. The age-adjusted (Australian population) incidence rate for South Australia in 2020 was 595.6 new cases per 100,000 for males and 433.7 for females (figure 8). Male incidence rates increased 1.7% per annum between 2016 and 2020, while female rates decreased by 0.6% (change in incidence calculated using a Poisson regression model). The age-adjusted (Australian population) mortality rate for South Australia in 2020 was 213.0 deaths per 100,000 population for men and 134.1 for women. Male mortality rates increased by 0.1% per annum between 2016 and 2020 while female rates decreased by 0.7% (change in mortality calculated using a Poisson regression model).



Figure 10: Trends in cancer mortality numbers and rates, South Australia 1977-2020



The number of cases, deaths and rates have been projected from 2020 to 2023 for all cancers and for each of the most common cancers based on the previous ten years of South Australian Cancer Registry (SACR) data. Prostate cancer incidence is the exception to this. It has been projected based on the previous five years of data due to non-linear trends. Accounting for the current age and sex patterns of cancer and changing populations over the projected years, SACR projections indicate an expected plateau from 2020 to 2023 in cancer incidences rates for males, and a slight increase in the incident rates for females. Mortality rates for both males and females are expected to decrease slightly over the same time period.

Table 2: Male cancer incidence, mortality rates (2020) and projections (2021-2023), South Australia Cancer Registry (2020)

Males		Incid	ence		Mortality			
Site/Year	2020	2021	2022	2023	2020	2021	2022	2023
Prostate	175.2	197.3	201.5	209.3	25.4	24.6	24.2	23.7
	(1898)	(2156)	(2245)	(2371)	(264)	(260)	(264)	(268)
Colorectal	58.2	56.9	53.8	50.4	21.5	20.2	19.2	18.8
	(580)	(578)	(554)	(521)	(217)	(206)	(199)	(198)
Lung	52.6	54.1	53.5	53.3	42.5	39.8	38.6	38.7
	(554)	(578)	(584)	(594)	(443)	(425)	(422)	(433)
Melanoma	52.0	50.7	51.3	51.1	4.1	3.0	2.7	2.3
	(527)	(520)	(538)	(548)	(42)	(31)	(29)	(25)
NHL	28.6	27.6	27.2	26.4	8.0	7.7	7.9	7.9
	(272)	(286)	(288)	(285)	(83)	(80)	(85)	(88)
All cancers	595.6	599.6	599.6	599.5	213.0	208.9	207.2	204.9
	(6175)	(6281)	(6406)	(6529)	(2212)	(2195)	(2233)	(2266)

Notes: Rates are expressed per 100,000 and standardised to the Australian 2011 population. Number of new cases and deaths are presented in brackets. NHL – Non-Hodgkin lymphoma

Table 3: Female cancer incidence, mortality rates (2020) and projections (2021-2023), South Australia Cancer Registry (2020)

Females		Incid	ence		Mortality			
Site/Year	2020	2021	2022	2023	2020	2021	2022	2023
Breast	130.2	139.8	137.3	135.7	18.2	17.6	17.3	16.7
	(1375)	(1489)	(1482)	(1482)	(215)	(210)	(209)	(205)
Colorectal	46.1	46.7	46.3	45.2	15.1	13.9	13.1	12.8
	(534)	(545)	(550)	(541)	(192)	(179)	(171)	(169)
Melanoma	31.3	30.9	31.0	31.4	2.4	1.4	1.2	1.3
	(337)	(341)	(348)	(359)	(30)	(18)	(16)	(17)
Lung	37.9	41.5	41.8	42.6	23.2	24.6	24.1	23.8
	(456)	(507)	(521)	(542)	(291)	(316)	(318)	(322)
NHL	16.3	16.1	15.9	15.1	4.1	3.9	4.0	4.0
	(185)	(187)	(188)	(181)	(53)	(51)	(53)	(54)
All cancers	433.7	451.5	448.0	445.8	134.1	132.6	130.1	128.5
	(4820)	(5072)	(5111)	(5158)	(1674)	(1673)	(1674)	(1691)

Notes: Rates are expressed per 100,000 and standardised to the Australian 2011 population. Number of new cases and deaths are presented in brackets. NHL – Non-Hodgkin lymphoma

Cancer survival reflects the cancer stage at diagnosis. It can be used as an indicator of cancer prognosis at a population level and of effectiveness of treatments. Relative survival refers to the probability of being alive for a given amount of time after diagnosis, compared with the experience of the general population.

One and five-year relative survival for South Australians who have been diagnosed with cancer were calculated for the two periods – 2011-15 and 2016-20 – using the period method, which allows for up-to-date and precise estimation of cancer survival and reflects recent changes in cancer survival trends. These data, from the SACR, show that five-year relative survival rates have improved gradually from 2011-15 to 2016-20 for colorectal cancer, female breast cancer, lung cancer, melanoma, and prostate cancer. This trend was also observed for all cancers combined. Fiveyear relative survival rate for cervical cancer has slightly decreased over time (72.7% in 2011-15 to 70.1% in 2016-20). Generally, males had poorer five-year relative survival rates compared to females. Among all cancers, lung cancer had the lowest five-year relative survival rate (20.1% for men and 28.9% for women during 2016-20), but these rates had improved since 2011-15 (15.2% and 18.9% for men and women, respectively).

Table 4: One and five-year relative survival rates (%) and 95% confidence intervals for South Australians diagnosed with selected cancers stratified by sex, during 2011-2015 and 2016-2020, South Australian Cancer Registry

	Men				Women							
	2	011-201	5	20	016-202	20	2011-2015		2016-2020		20	
Type of cancer	%	95%	СІ	%	95%	СІ	%	95%	СІ	%	95%	СІ
One-year survival												
Breast	-	-	-	-	-	-	98.0	97.5	98.4	98.2	97.7	98.5
Cervix	-	-	-	-	-	-	88.3	83.9	91.6	88.7	84.6	91.7
Colorectal	85.9	84.6	87.1	88.2	86.9	89.4	85.2	83.7	86.6	86.2	84.8	87.6
Lung	41.2	39.2	43.1	47.4	45.5	49.3	48.2	45.8	50.6	57.5	55.3	59.5
Melanoma	95.6	94.6	96.5	96.7	95.9	97.5	97.9	96.9	98.7	97.1	96.1	98.0
Prostate	99.1	98.6	99.4	99.5	99.1	99.8	-	-	-	-	-	-
All cancers	80.6	80.1	81.1	81.9	81.4	82.4	82.5	81.9	83.0	83.8	83.3	84.3
Five-year survival												
Breast	-	-	-	-	-	-	90.2	89.2	91.2	92.1	91.2	92.9
Cervix	-	-	-	-	-	-	72.7	66.8	77.9	70.1	64.3	75.2
Colorectal	68.3	66.3	70.2	69.9	68.0	71.8	68.9	66.8	71.0	72.8	70.7	74.8
Lung	15.2	13.7	16.8	20.1	18.4	21.9	18.9	16.9	20.9	28.9	26.7	31.1
Melanoma	84.7	82.7	86.6	90.1	88.4	91.8	91.1	89.1	93.0	92.3	90.4	94.1
Prostate	95.7	94.7	96.6	97.3	96.4	98.2	-	-	-	-	-	-
All Cancers	66.2	65.6	66.9	67.9	67.2	68.5	67.6	66.9	68.3	70.7	70.0	71.3

Data source: The South Australian Cancer Registry, provided by Wellbeing SA⁶³

MENTAL ILLNESS

Mental health is about being cognitively, emotionally and socially healthy – it relates to the way we think, feel and develop relationships and is not merely the absence of a mental health condition or disorder. The latter refer to clinically diagnosable conditions that interfere with a person's cognitive, social or emotional abilities. Mental health exists on a continuum with feeling good and functioning well at one end of the spectrum and mental health conditions (or mental illness) – represented by symptoms that affect people's thoughts, feelings or behaviour – at the other^{64, 65}.

The Kessler 10 (K10) psychological distress scale is a proxy measure for overall mental health and wellbeing in the community and is used by the SAPHS. The scale measures the extent to which a person has been affected by anxiety and depression during the previous four weeks. In the period July 2020 to June 2022:

- > 19.9% of adults reported having psychological distress.
- > Women and those living in metropolitan areas were more likely to report psychological distress compared to men and those in rural areas.
- > The proportion reporting psychological distress decreased with age and was lower in those living in higher socioeconomic areas.
- Aboriginal people were more likely to report psychological distress.

SAPHS measures the prevalence of adults living with doctor-diagnosed anxiety, depression, stress or any other mental health condition. Mental health concerns and mental illness can have a substantial personal, social and economic impact through disability, reduced quality of life and lost productivity⁶⁶. Information from SAPHS reports in 2020-22:

- > 27.5% of adults reported having a mental health condition in the last 12 months.
- > Women and those living in metropolitan areas were more likely to report a mental health problem compared to men and those in rural areas.
- > The proportion reporting a mental health problem decreased with age and was lower in those living in higher socioeconomic areas.
- Aboriginal people were more likely to report having a mental health problem.
- > 70% of adults reported they are currently receiving treatment for a mental health condition.
- > The proportion receiving mental health treatment was higher in those aged 30 to 69 compared to those in the 18 to 29 age groups.

Year	n	%	Lower Cl	Upper Cl	Lower EB	Upper EB
2018-19	1390	19.5	18.6	20.5	0.9	0.9
2019-20	1617	20.4	19.5	21.3	0.9	0.9
2020-21	2376	20.0	19.3	20.8	0.7	0.7
2021-22	1463	19.8	18.9	20.7	0.9	0.9

Table 5: Proportion of South Australian adults (18+ years) reporting high or very high psychological distress in the last four weeks, SAPHS July 2018 to June 2022

Data source: South Australian Population Health Survey



Figure 11 - Proportion of South Australian adults (18+ years) reporting receiving treatment for their mental health condition, SAPHS July 2018 to June 2022

Data source: South Australian Population Health Survey

SAPHS measures the prevalence of children living with a doctor-diagnosed mental health condition including depression, attention deficit hyperactivity disorder (ADHD), conduct disorder, anxiety and other mental health conditions. In 2020-22:

- > 20.3% of children aged 5 to 15 years reported having a mental health problem.
- Boys were more likely to report a mental health problem (22.5%) compared to girls (17.7%).
- > The proportion reporting a mental health problem was higher in the older age group and in those living in lower socioeconomic areas.
- > Aboriginal children were more likely to report having a mental health problem (40.4%) compared to non-Aboriginal children (19.6%).



NOTIFIABLE DISEASES

There were 41,017 notifiable infectious diseases recorded in South Australia over the period July 2020 to June 2022 (excluding COVID-19). The top ten notifiable infectious diseases for the reporting period July 2020 to June 2022 are shown in Figure 12. These ten diseases accounted for 93.1% of all notifications. The closed international border resulted in a significant reduction in notifications of diseases usually associated with overseas travel such as certain types of salmonella, shigella, hepatitis A, dengue and malaria. Since international borders re-opened at the end of 2021, notifications of these diseases have resumed at a more typical rate.



Figure 12: Top ten notifiable diseases reported in South Australia 2020-2022 (excluding COVID-19)⁶⁷

Data source: Communicable Disease Control Branch, SA Health



INFLUENZA

Influenza, commonly known as the flu, is a highly contagious infection of the nose, throat and lungs caused by influenza A or B (or rarely C) viruses. Influenza causes a spectrum of illness from asymptomatic infection to fatal pneumonia (primary viral or secondary bacterial). Severe disease is more common during pregnancy, people aged over 65 years, and in people with underlying chronic disease.

During the reporting period, there were six deaths reported due to influenza, noting that this data is subject to change as death registry data is received and reviewed. In the 2020-22 reporting period, there were 649 hospitalisations in patients who had a positive influenza result during their admission, regardless of whether it was their reason for admission. There was one in 2020 (July to December), two in 2021 and 646 in 2022 (January to June).

Influenza notifications were significantly lower in 2020 and 2021 than in recent years in South Australia, a trend that was observed across Australia. This is likely related to the response to the COVID-19 pandemic, including reduced rates of international travel, improved respiratory hygiene, people staying home when unwell with respiratory symptoms and an increase in influenza vaccination.

After international borders re-opened in November 2021, and other pandemic restrictions were reduced, rates of influenza returned to the usual seasonal trends.





SEXUALLY TRANSMISSIBLE INFECTIONS AND BLOOD BORNE VIRUS PREVENTION

Rates of notifiable sexually transmissible infections (STI) have increased significantly in South Australia and nationally, with concurrent escalating epidemics currently affecting multiple populations.

Of note, a global mpox (monkeypox) outbreak presented challenges in 2022 and there is particular concern regarding the re-emergence of syphilis as a public health threat.

Following this trend, historically rare but severe complications associated with these infections, including congenital syphilis (infection passed from mother to child during pregnancy or childbirth) and neurosyphilis (infections of the central nervous system by the bacterium that causes syphilis), requiring inpatient admission are occurring more frequently. COVID-19 impacts have further compounded these issues.

Building capacity across the health system to address these concerning trends and meet the South Australian Government's commitments under the National STI Strategy presents a key public health challenge.

Conversely, important progress has been made against some of the other National STI and Blood Borne Virus (BBV) Strategies. This includes the South Australian Government's commitment to eliminate HIV and hepatitis C as public health threats. Thanks to scientific advances and the tireless efforts of health workers and community organisations, these goals are now not only realistic but within reach.

- > Rollout of Human Immunodeficiency Virus (HIV) preventive medications (PrEP) since 2016 has contributed significantly to reducing HIV transmission. Uptake continues to increase on the back of efforts to educate the community and expand our network of PrEP prescribing clinicians.
- Reducing time to diagnosis and treatment initiation is also key to HIV and hepatitis C elimination efforts.
 To this end, there has been continued innovation in diverse and accessible testing models, including rapid and self-testing technologies.

> HIV treatment that maintains an undetectable viral load supports positive health outcomes at an individual level, and also reduces the risk of onward transmission through sexual contact to zero. This is an important pillar of the public health response to HIV, known as 'treatment as prevention' (TasP) and 'undetectable=untransmissible' (U=U). Thanks to community mobilisation as well as investment in patient-centred models of care and support services, the majority of South Australians living with HIV are on treatment and 'undetectable'.

Similarly, rollout of highly effective, curative antiviral medication has had a significant impact on the prevalence and transmission of hepatitis C. Indicative of the success of this TasP approach at a population level, a 60% reduction in hepatitis C notifications has been observed in South Australia since 2016.

While there is cause for optimism, challenges remain:

- For some communities, barriers to accessing BBV prevention, testing and treatment persist.
- > There is evidence of declines in access to health services including STI and BBV testing during the COVID-19 pandemic.
- Strengthening of the public health response to hepatitis B is also required, with the majority of South Australians living with hepatitis B currently not engaged in care and therefore at risk of poor outcomes including cirrhosis and liver cancer.

It is critical that we continue to work with our partners across the health sector to address these barriers, ensure sustained and equitable progress towards our shared goal of ending Australia's HIV and viral hepatitis epidemics and mitigate the escalating disease burden associated with STIs.

Notifications of infectious syphilis and gonorrhoea 2017-2022

Gonorrhoea and infectious syphilis are notifiable conditions under the *South Australian Public Health Act 2011* legislative instruments. Both diseases are STIs that can have severe adverse reproductive and general health outcomes, with untreated syphilis associated with irreversible damage to multiple organ systems.

Complications from gonorrhoea include pelvic inflammatory disease and disseminated disease with invasion of the bloodstream. Syphilis additionally poses a significant risk of transmission from mother to baby during pregnancy, with potentially severe health consequences for the baby.

During the period 2017-18 to 2021-22, the number of gonorrhoea notifications increased by 15%, while the number of infectious syphilis notifications increased by 29%. Temporary reductions in case numbers during the first two years of the COVID-19 pandemic are likely reflective of reduced testing and therefore decreased case ascertainment. This was due to increased barriers to accessing healthcare, and fewer new or casual partners due to social restrictions.

The increase in gonorrhoea was more pronounced among females compared to males as well as Aboriginal people who, as a group, already faced higher STI rates relative to population size and experienced a steeper rise than the non-Aboriginal population. Increases occurred across all remoteness areas, with the largest relative increases observed in remote and very remote South Australia followed by the Adelaide metropolitan area.

Infectious syphilis notifications doubled among females over the reporting period, while also increasing 21% among males. Of particular concern is a 46% increase in metropolitan Adelaide. At the same time, case numbers have fallen by one third in remote and very remote South Australia and by 13% overall in Aboriginal people.

These trends are reflective of a shift in the multijurisdictional syphilis outbreak that previously predominantly affected Aboriginal and Torres Strait Islander populations across Northern and Central Australia. While Aboriginal people remain disproportionately affected, the outbreak is increasingly well controlled in remote areas. By contrast, syphilis is increasing across multiple population groups in metropolitan Adelaide.

For both gonorrhoea and infectious syphilis notifications, increases have been more pronounced among people born overseas compared to those born in Australia. At the same time, notifications are increasing across metropolitan Adelaide, highlighting the need for geographically balanced and culturally and linguistically accessible sexual health services to adequately serve the diverse populations affected by STIs.







Figure 15: Number of gonorrhoea notifications by sex at birth, South Australia, January 2011 to December 2022

Access to STI and BBV testing

- There has been a significant and persistent decline in testing for STI and BBV during the COVID-19 pandemic.
 As of 30 June 2022, Medicare Benefits Schedule (MBS) data suggests that testing is yet to recover to 2019 levels.
- > Analysis of MBS data suggests that during quarter two 2022, rates of chlamydia/gonorrhoea testing in South Australia were at their lowest levels since 2015, 21.5% lower than the observed testing rate in 2019 (Figure 16).
- > These data provide important context for analysis of trends in notification data. They also highlight increasing risk of late or undetected infections, and delays to initiating treatment and partner notification. These are critical elements of effective control of STI and BBV at a population level.



Figure 16: Medicare rebated STI tests per 100,000 population, by quarter, South Australia, January 2015 to June 2022

DISABILITY

There are many kinds of disability resulting from accidents, illness and genetic disorders. A disability may affect mobility, ability to learn or to communicate easily. A disability may also be visible or hidden, may be permanent or temporary, and may have minimal or substantial impact on a person's abilities. Some people are born with disability, while others acquire a disability in their lifetime. Some people may have more than one disability. Disability data assists policy-makers to assess and respond to the diverse health and social needs of people with disabilities.

In 2020-22, the SAPHS shows:

- > 20.5% of South Australian adults reported having a disability.
- > Adults living in rural areas were more likely to report having a disability compared to those in metropolitan areas.
- > The proportion of adults reporting a disability increased with age and was higher in those living in lower socioeconomic areas.
- > Aboriginal adults were more likely to report having a disability.
- > The highest Socioeconomic Index for Areas (SEIFA) quintile had the lowest proportion of people that reported having disability (14.5%), compared to the lowest SEIFA at 25.8%.

- > 10% of children aged 0 to 17 years reported having a disability.
- > Boys and those living in rural areas were more likely to report having a disability compared to girls and those in metropolitan areas.
- > The proportion of children reporting a disability was higher from 10 years of age and those living in a low socioeconomic area.
- Aboriginal children were more likely to report having a disability.

Knowing the extent of informal care that is provided is important to understand the shift in disease burden from acute fatal diseases to long-term illness and the burdens placed on carers, which can impact on their health and ability to provide care.

- > The total number of carers in South Australia providing unpaid care to people with disability and people aged 65 years and over has decreased to 181,300 in 2018, down from 242,400 in 2015⁶⁸.
- > The average age of carers was 50.8 years in 2018, which is similar to 50.7 years in 2015, but is younger than the national average of 51.2 years in 2018⁶⁹.



INJURY

Injury is a major contributor to mortality, morbidity and permanent disability in Australia. Hospitalised injuries can range from single fractures to catastrophic injuries, such as spinal cord injury or traumatic brain injury, which may result in lifelong disability. Most injuries requiring hospitalisation are the result of falls, contact with objects (falling or moving objects, hard or sharp objects, household or industrial equipment) and transport accidents. Most deaths from injuries occur as a result of falls, intentional self-harm and transport accidents⁷⁰.

In Australia:

- > Falls accounted for 133,000 hospitalisations and 5,000 deaths among Australians 65 years of age or older in 2019-20.
- > Two in three falls for the over 65-year age group were female.
- > \$2.3 billion was spent on treating falls injuries for those aged 65 years and over⁷¹.
- > Contact with objects was the second most common cause of hospitalised injury in Australia.
- > 15% of injury hospitalisations (2020-21) and 0.9% of injury deaths (2019-20) were due to contact with objects, with male rates being 2.6 times higher than females⁷².

- > Transport accidents account for around 12% of all injuries requiring hospitalisation (2020-21) and 9.9% of injury deaths (2019-20). Males and young people are particularly at risk, and fracture is the most common type of injury sustained in hospital cases⁷³.
- Injuries happening at home increased after March 2020 and remained at a high level throughout 2020-21⁷⁴.

In South Australia:

- > 20.6% of South Australian adults reported having two or more falls in the last 12 months (June to August 2022).
- > Those aged 18 to 29 years were more likely to report two or more falls than those aged 30 years and over.
- In 2021-22, 12,735 people injured after a fall were admitted to South Australian public hospitals, and over 83% of these were aged 65 years and over⁷⁵.

Nationally available data on causes of unintentional death among young people (15-24 years) point to:

- > Transport-related (car crashes and driveway run-overs)
- Accidental poisoning by, and exposure to, noxious substances (pharmaceuticals)
- > Drowning (particularly in private swimming pools)
- > Falls
- > Exposure to inanimate mechanical forces
- > Other transport accidents⁷⁶.

Table 6: Proportion of South Australians who reported having two or more falls within the past12 months to June 2022

Full title		n/N	% (95% CI)
All		604/2934	20.6 (19.2-22.1)
Gender*	Male	308/1420	21.7 (19.6-23.9)
	Female	290/1505	19.3 (17.3-21.3)
Location	Metropolitan	413/2130	19.4 (17.8-21.1)
	Rural	191/804	23.7 (20.9-26.8)
Age	18-29	182/558	32.6 (28.8-36.6)
	30-49	158/907	17.4 (15.1-20.0)
	50-69	172/947	18.2 (15.8-20.7)
	70 and over	92/522	17.5 (14.5-21.1)
SEIFA	Lowest	128/546	23.5 (20.0-27.1)
	Low	141/624	22.6 (19.4-26.0)
	Middle	122/660	18.6 (15.7-21.6)
	High	101/495	20.4 (17.0-24.1)
	Highest	111/606	18.3 (15.4-21.5)
Aboriginal and/or	Yes	18/76	24.3 (15.2-34.1)
Torres Strait Islander	No	579/2840	20.4 (18.9-21.9)

Data source: South Australian Population Health Survey

SUICIDE

Suicide is a tragedy that affects families, communities and countries. It leaves long-lasting effects on the people left behind, and for every completed suicide there are many more attempts. Surveillance of deaths by suicide is a valuable evidence base to inform policy and population-level suicide prevention responses. The ABS preliminary data reports that 3,144 Australians died by suicide in 2021 and that suicide is the leading cause of death among 15-24 years of age in Australia⁷⁷.

In South Australia:

- > 226 people died by suicide in 2021⁷⁸.
- > The age-standardised death rate of suicide in 2021 was 12.3 per 100,000 people, slightly higher than the national rate of 12.0⁷⁹.

The most current data available shows that between 2014 and 2018, the age-standardised death rate of suicide for Aboriginal South Australians was 21.2 per 100,000 people, which was almost double that of non-Aboriginal South Australians (12.9 per 100,000 people)⁸⁰.

Suicidal ideation, which is a process of having ideas or ruminations about the possibility of ending one's own life⁸¹, and attempts can cause injury and hospitalisation and are strong predictors of future suicide attempts and suicide deaths. In 2020-22:

- > 9.1% of South Australian adults reported having suicidal ideation.
- > Those living in metropolitan areas were more likely to report suicidal ideation compared to those in rural areas.



ABORIGINAL HEALTH STATUS OUTCOMES

Disparities in outcomes for Aboriginal people are acknowledged in the Australian Government's Closing the Gap 2022 Annual Report. The report shows that while progress was made in areas like life outcomes for children and rates of school attendance, there are persistent and disappointing results in other areas such as out-ofhome care rates and adult imprisonment. Only four of the socioeconomic targets outlined in the report are currently on track. There is still little new data available to reliably track trends for many socioeconomic targets, although important work has been undertaken to improve the data⁸².

Measuring the 'gap' in disease burden between Aboriginal and non-Aboriginal Australians is reflected in the National Agreement on Closing the Gap's socioeconomic outcome target to close the gap in life expectancy within a generation (Joint Council on Closing the Gap 2020). This section reports results of the Aboriginal component of the ABDS 2018 and estimates of the gap in disease burden between Aboriginal and non-Aboriginal Australians. Data shows:

- > After considering differences in age structure, Aboriginal Australians experienced overall burden from disease and injury at 2.3 times the rate of non-Aboriginal Australians in 2018.
- > Dying early caused more of the gap than living with poor health. Aboriginal Australians were 2.5 times as likely as non-Aboriginal Australians to die early, and 2.1 times as likely to live with poor health.
- Mental and substance use disorders, cardiovascular diseases and injuries were the three largest disease group contributors to the gap in disease burden between Aboriginal and non-Aboriginal Australians (contributing 20%, 14% and 10% of the gap, respectively).
- > For children aged 0 to 14, infant and congenital conditions were the largest contributor to the gap (accounting for 36% of the gap).
- Mental and substance use disorders and injuries were the largest contributors to the gap for people aged 15 to 24 and 25 to 44 (together representing 82% and 57% of the gap in these age groups, respectively).
- > Cardiovascular diseases and cancer were the main contributors to the gap among people aged 45 to 64 and 65 to 74 (together representing 33% and 34% of the gap in these age groups, respectively).

- > The three leading individual disease contributors to the gap for Aboriginal males were coronary heart disease, alcohol use disorders, and COPD (accounting for 10%, 7% and 6% of the gap, respectively).
- For Aboriginal females, coronary heart disease, chronic kidney disease, and COPD were the three leading disease contributors to the gap (accounting for 7%, 7% and 6% of the gap, respectively)⁸³.

Mortality data can provide important insights into population health concerns relevant to different groups within the Australian population. Patterns of death among Aboriginal people differ to those of non-Aboriginal people.

- > Mortality rates for Aboriginal people are generally higher than those for non-Aboriginal people.
- The median age at death for Aboriginal people in 2021 was
 62.5, compared to 82.2 for the non-Aboriginal population.
- > Aboriginal people had rates 4.5 times higher than non-Aboriginal people for diabetes, and three times higher for chronic lower respiratory diseases, liver diseases, transport accidents and accidental poisonings⁸⁴.

The social determinants of health impact health status and outcomes for Aboriginal South Australians. The 2021 Census report shows:

- > Most Aboriginal households (76.3%) were family households, including 4.1% with more than one family living together. Around one in six households (18.1%) were made up of people who lived alone while a small proportion were group households (5.6%).
- > 17.2% of Aboriginal people in South Australia lived in a house that required one or more additional bedrooms to house the occupants.
- > 30.3% of Aboriginal households in South Australia reported an equivalised total household weekly income of \$1,000 or more in 2021, compared with 36.7% nationally.
- > The median equivalised total household weekly income for Aboriginal households in South Australia was \$716. This was lower than the national average of \$830.
- > The proportion of Aboriginal people aged 20 to 24 years in South Australia who had completed Year 12 or equivalent as their highest year of school was 54.4%.

POTENTIALLY PREVENTABLE HOSPITALISATIONS

Potentially preventable hospitalisations are those considered potentially avoidable through appropriate preventative health interventions and timely, adequate primary care.

Potentially preventable hospitalisations are identified from diagnoses recorded in hospital admission data. There are three broad categories – chronic, acute, and vaccine-preventable, consisting of 22 specific health conditions⁸⁵.

Information from SA Health's Enterprise Data and Information Services shows that for South Australian residents admitted to South Australian public and private hospitals:

- > There was a total of 97,658 potentially preventable hospitalisations for the period 1 July 2020 to 30 June 2022.
- > Of the 97,658 potentially preventable hospitalisations, acute conditions were the highest admission at 48,642, followed by chronic conditions at 45,762, then vaccinepreventable conditions at 3,739.

- > The highest rates of potentially preventable hospitalisations were experienced by the 45 to 69 years at 28,847 and 70 to 84 years at 27,135 groups, with the five highest conditions experienced being dental conditions (13.9%), COPD (13.6%), congestive cardiac failure (10.4%), urinary tract infection, including pyelonephritis (10.2%) and diabetes complications (9.9%).
- > Dental conditions (32%) were the highest overall potentially preventable hospitalisations admission, while congestive cardiac failure (22.8%) followed for all age groups over the period of July 2020 to June 2022.
- > Vaccine potentially preventable hospitalisations were lower from November 2019 to April 2022, likely due to reduced flu-related hospitalisations resulting from COVID-19 public safety measures. Potentially preventable hospitalisations started increasing in May 2022 after close contact quarantine rules were lifted on 30 April 2022.
- Remote and very remote areas made up 15.67% of potentially preventable hospitalisations, compared to those living in major cities and inner regional 11.64%.

Figure 17: Proportion of chronic and acute potentially preventable hospitalisations in South Australia – 2020-2022





Figure 18: Vaccine preventable presentations by month – 2019-2022

