

State of Our Health

Technical Appendix

19 Dec 2016

Health Performance Council



Government
of South Australia

Health Performance Council

State of Our Health – Technical Appendix

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Introduction

This technical appendix is published to complement the Health Performance Council's *State of Our Health* report, which was published on 04 April 2016 at http://hpcsa.com.au/state_of_our_health. The technical appendix provides rationale for selection and comprehensive detail of sources, methodology notes, important caveats, and other data issues relevant to the statistical measures presented in the report.

Data quality notes

Relevance

The Health Performance Council is required, under the Health Care Act 2008, to assess the health of South Australians, identify significant health status trends, and consider future priorities for the health system in regard to these trends – including particular illnesses and population groups. The *State of Our Health* report is designed to act in partial fulfilment of this requirement.

The content of the report has been set and adjusted following substantial stakeholder consultation and feedback. The report was completely refreshed in 2015 with updated data and a new online format and was further updated following a major stakeholder consultation exercise in early 2016. It is intended that future editions of the report will further incorporate consultation feedback.

Accuracy and reliability

Many of the data sources which have been used to derive statistics presented in *State of Our Health* are based on sample surveys. Data sourced from sample survey will be subject to 'sampling error', i.e., a random variation of the estimated statistic presented from the true value arising by virtue of being based (necessarily) on a sample and not the whole population. Sample survey sources have been noted in the sectional technical appendix below. Generally, the extent of variation due to sampling error has not been presented in this report, but in many cases is available from the underlying data source tables for which links have been given in all cases where the source is publicly accessible.

All data will be subject to non-sampling error, for reasons including biased non-response to surveys and censuses and from misunderstood, erroneous or omitted responses in data collections reliant on respondent self-assessment. Where the source agency of an underlying data source has identified a particular issue relating to non-sampling error which is liable to substantively and substantially affect figures presented in *State of Our Health*, these have been noted in the report or in the sectional technical appendix below; however, it is not feasible to ensure that all such cases are correctly identified.

In some of the data sources used, figures have been annualised or otherwise derived from the underlying collections or are intended to be interpreted as applying to a different period (for instance, where figures have been published for a calendar year from responses to a single point-in-time snapshot survey). Where practical, the periods or times applicable to the underlying data collections have been shown in the sectional technical appendix below as *time periods*.

Derived calculations in *State of Our Health* for statistical significance have been made at the 5% level. This means that, subject to modelling assumptions, there is a 5% chance in any case of a difference in figures (for example) being accepted as true when in fact one does not exist; not all tests for significance in *State of Our Health* are wholly independent so the true rate of 'false positive' across the whole report is hard to determine with accuracy, but it is very likely that some conclusions have been made where figures have been erroneously cited to be 'statistically significantly different' (or similar); there may also be cases where true differences at a population level do exist but the statistical theory has not been sufficiently powerful as to be able to detect this.

Timeliness

The *State of Our Health* report uses data from 77 different sources published by 8 different agencies and organisations. Each source has its own update cycle and provides coverage for a particular period or point in time.

Although *State of Our Health* is prepared using the latest figures available at the time of its production, the length of the production cycle and the disconnect with the update cycles of the primary sources mean that data may in some cases be slightly out of date. Based on estimated planned updates at the time that the sources were checked for the production of this edition, it is thought that four of the primary sources may have had new or updated releases issued since the *State of Our Health* report was prepared:

1. Australian Bureau of Statistics, *Regional Population Growth*, cat. no. 3218.0
source used released on 31 Mar 2015
updated release was expected on or around 30 Mar 2016
indicator(s) affected: 1-1-1
2. Australian Bureau of Statistics, *Australian Demographic Statistics*, cat. no. 3101.0
source used released on 26 Mar 2015
updated release was expected on or around 24 Mar 2016
indicator(s) affected: 1-1-1, 1-1-2
3. Australian Bureau of Statistics, *Australian Health Survey: First Results*, cat. no. 4364.0.55.001
source used released on 29 Oct 2012
updated release was expected on or around 08 Dec 2015
indicator(s) affected: 3-10-4, 3-11-4, 3-12-4, 3-13-4, 3-2-4, 3-3-4, 3-4-4, 3-8-7, 4-1-4, 4-2-4, 4-3-4, 4-4-4, 4-5-4, 4-6-4, 4-7-4, 4-8-1, 4-9-1
4. Australian Bureau of Statistics, *Participation in Sport and Physical Recreation, Australia*, cat. no. 4177.0
source used released on 19 Dec 2012
updated release was expected on or around 18 Feb 2015
indicator(s) affected: 3-5-4

The *State of Our Health* report uses the most timely data that is possible or reasonably practical to source. However, as a result of the multi-sourcing of data, there are some fourteen different periods or points in time for which the source data was the most recent that was able to be sourced for inclusion:

1. as at 31 Dec 2015
2. period 2010-14
3. period 2010-2012
4. period 2010-2014
5. period 2011
6. period 2011-12
7. period 2011-13
8. period 2012
9. period 2012-13
10. period 2012-2014
11. period 2013
12. period 2014
13. period 2014-15
14. period 2015

The times or periods to which each indicator's figures relate have been clearly noted in the report against each indicator. Future editions of *State of Our Health* will, where possible, use more recently updated source data in order to remain as timely as is feasible.

Comparability and coherence

Because the 77 data sources used for this edition of *State of Our Health* report each provide coverage for a particular period or point in time, figures presented throughout the report are for a variety of different reporting periods; there are some eighteen different reporting periods to which the data relate:

1. Calendar year
2. Calendar year, annualised from quarterly coverage data
3. Calendar year, derived from monthly snapshot surveys
4. Financial year
5. Financial year, derived from sample surveys conducted throughout the year
6. Five-year period
7. Point in time, as at 30 June of reference year
8. Point in time, as at Census night, 9 August 2011
9. Point in time, as at last day of quarter
10. Point in time; survey conducted during 2012
11. Point in time; survey conducted from 5 August 2012 to 2 March 2013
12. Point in time; survey conducted from April 2012 to February 2013
13. Point in time; survey conducted from August 2012 to March 2013
14. Point in time; survey conducted from July 2014 to June 2015
15. Point in time; survey conducted from July to December 2013
16. Point in time; survey conducted from March 2011 to March 2012
17. Quarter-year
18. Three-year period

As a result, there is likely to be some incoherence between figures in different indicators, even where definitions and methodologies being the same would otherwise lend coherence to the differently-sourced data. However, where practical, the *State of Our Health* report has been derived from publicly available sources and so the figures presented will, for the most part, be coherent with those in summary reports and detailed tables published by those source agencies.

Generally, different figures within any indicator may fairly be compared – such as between age bands, across regions or over time. In some cases, difference in methodologies or inconsistencies in quality of source data will make certain comparisons invalid; important cases of non-comparability have been noted in the report or in the sectional technical appendix below.

For some indicators, figures have been standardised, allowing for valid comparisons between populations with differences in the variables which have been standardised (such as age). However, standardised and non-standardised figures are not directly comparable and in some cases this will preclude valid comparisons being made between figures for different indicators in the same section.

Chapter 1 Demographic profile

1-1 Population

Rationale for reporting

Understanding the size and distribution (both in terms of demography and geography) of the South Australian population enables a greater understanding of health needs and provision.

Measures Reported

1. Population size, expressed as estimated number of persons by region, Aboriginal status and time.
2. Geographic distribution of population, expressed as percentage of estimated number of persons by region.
3. Demographic distribution of population, expressed as estimated median age in years and estimated number of persons in 5-year age bands by sex and Aboriginal status.

Source agencies

1. Australian Bureau of Statistics ('ABS')

Data sources and update frequency

1. ABS, *Regional Population Growth*, cat. no. 3218.0, updated annually
2. ABS, *Aboriginal and Torres Strait Islander Australians*, cat. no. 3238.0, update frequency irregular or not known
3. ABS, *Australian Demographic Statistics*, cat. no. 3101.0, updated every three months

Time period

1. Point in time, as at 30 June of reference year

Definitions

1. The *Estimated resident population* (ERP) is the official estimate of the Australian population used by the ABS, which links people to a place of usual residence within Australia. Usual residence within Australia refers to that address at which the person has lived or intends to live for six months or more in a given reference year. For the 30 June reference date, this refers to the calendar year around it. Estimates of the resident population are based on Census counts by place of usual residence.
2. The *median* is a commonly used measure of central tendency, like the average. The median, or 50th percentile, is the exact midpoint of a distribution, the number at which half the observations are smaller and the other half are larger. The median is less susceptible than the average to the influence of particularly large or small observations (outliers) in the dataset.

Important caveats

1. The Australian Census of Population and Housing is self-enumerated. This means that householders are required to complete the Census form themselves, rather than having the help of a Census Collector. The Census form may be completed by one household member on behalf of others. Error can be introduced if the respondent does not understand the question, or does not know the correct information about other household members. Self-enumeration carries the risk that wrong answers could be given, either intentionally or unintentionally.
2. Population figures for 2015 are based on preliminary estimated resident population figures for 30 June 2015 and may be subject to revision.
3. Median age figures reported in this indicator are estimates produced by the Health Performance Council Secretariat from the published ABS grouped data, using the method described on the

Vitutor website: vitutor.com/statistics/descriptive/median.html. This method assumes data is distributed evenly between cohorts.

4. Population age estimates for 2015 are based on preliminary estimated resident population figures for 30 June 2015 and may be subject to revision.

1-2 Demographic profile

Rationale for reporting

People from Culturally and Linguistically Diverse (CALD) backgrounds and carers are two relatively large population groups in the South Australian community who could be at increased risk of social isolation. Social isolation, due to language and cultural barriers or responsibilities providing informal assistance with core activities to an aged person or person with a disability, can lead to a low sense of wellbeing and poor health.

Measures Reported

1. Size of certain subgroups of the CALD population, expressed as per cent of persons in total population who were born overseas, and per cent of persons in total population who speak a language other than English at home.
2. Size of the carer population, expressed as number and per cent of carers in total population, for all carers and broken down by sex and whether primary carer.

Source agencies

1. Australian Bureau of Statistics ('ABS')

Data sources and update frequency

1. ABS, Community Profiles, *Census of Population and Housing*, cat. no. 2001.0, updated every five years
2. ABS, Expanded Community Profile, *Census of Population and Housing*, cat. no. 2005.0, updated every five years
3. ABS, *Caring in the community, Australia*, cat. no. 4436.0, update frequency irregular or not known

Time period

1. Point in time, as at Census night, 9 August 2011
2. Point in time; survey conducted from August 2012 to March 2013

Definitions

1. Non-English speaking countries are those excluding Australia, Canada, Ireland, New Zealand, South Africa, the United Kingdom and the United States of America.
2. The term *national average* and similar terms are used to refer to Australia-wide figures and should not be interpreted as being the average of the figures for each individual state and territory.

Important caveats

1. The Australian Census of Population and Housing is self-enumerated. This means that householders are required to complete the Census form themselves, rather than having the help of a Census Collector. The Census form may be completed by one household member on behalf of others. Error can be introduced if the respondent does not understand the question, or does not know the correct information about other household members. Self-enumeration carries the risk that wrong answers could be given, either intentionally or unintentionally.
2. Carers' data comes from a sample survey, the 2012 Survey of Disability, Ageing and Carers (SDAC) conducted by the ABS.
3. All sample surveys are subject to sampling and non-sampling error. Sampling error is a measure of the variability that occurs by chance because a sample, rather than the entire population, is surveyed. This can be expressed as a margin of error around the estimate. Non-sampling error may occur in any data collection, whether it is based on a sample or a full count such as a census. Sources of non-sampling error include non-response, errors in reporting by respondents or in recording of answers by interviewers, and occasional errors in coding and processing data.

4. Figures shown for main language spoken at home other than English are based on data for people who speak a language other than English (whether or not they also speak English) at home.

1-3 Health determinants

Rationale for reporting

People with low incomes or living in areas identified as disadvantaged could be at increased risk of having reduced access to healthcare and health outcomes. Globally, social and economic factors have been identified by the Australian Institute of Health and Welfare as being associated with overall health.

Measures Reported

1. Personal and household income, expressed as median amounts per week before tax, including some breakdowns by Aboriginal status.
2. Housing costs, expressed as median payments per week, with some breakdowns by Aboriginal status.
3. Socio-economic status, expressed as average Index of Relative Socio-Economic Disadvantage by region.
4. Extent of Year 12 (or equivalent) education attainment, expressed as percentage of population who completed school Year 12 (or equivalent), for overall and Aboriginal population.
5. Extent of private health insurance, expressed as percentage of population with private coverage and average out-of-pocket payments for services.

Source agencies

1. Australian Bureau of Statistics ('ABS')
2. Australian Prudential Regulation Authority ('APRA')

Data sources and update frequency

1. ABS, Community Profiles, *Census of Population and Housing*, cat. no. 2001.0, updated every five years
2. ABS, Aboriginal and Torres Strait Islander Peoples (Indigenous) Profile, *Census of Population and Housing*, cat. no. 2002.0, updated every five years
3. ABS, Socio-Economic Indexes for Areas (SEIFA), *Census of Population and Housing*, cat. no. 2033.0, updated every five years
4. APRA, *Private Health Insurance Quarterly Statistics*, updated every three months

Time period

1. Point in time, as at Census night, 9 August 2011
2. Point in time, as at last day of quarter
3. Quarter-year

Definitions

1. The *median* is a commonly used measure of central tendency, like the average. The median, or 50th percentile, is the exact midpoint of a distribution, the number at which half the observations are smaller and the other half are larger. The median is less susceptible than the average to the influence of particularly large or small observations (outliers) in the dataset.
2. The term *national average* and similar terms are used to refer to Australia-wide figures and should not be interpreted as being the average of the figures for each individual state and territory.
3. *Socio-economic status* summarises a range of information about the economic and social conditions of people and households within an area. The measure used here is the Australian Bureau of Statistics' Socio-economic Index for Areas (SEIFA), Index of Relative Socio-economic Disadvantage (IRSD), under which lower scores indicate relatively greater disadvantage in general.

4. An *episode* in relation to hospital care is a period of admitted patient care between an admission and separation.

Important caveats

1. The Australian Census of Population and Housing is self-enumerated. This means that householders are required to complete the Census form themselves, rather than having the help of a Census Collector. The Census form may be completed by one household member on behalf of others. Error can be introduced if the respondent does not understand the question, or does not know the correct information about other household members. Self-enumeration carries the risk that wrong answers could be given, either intentionally or unintentionally.
2. Socio-economic index figures for 2014 use preliminary estimated resident population figures for 30 June 2014 and may be subject to revision.
3. Median weekly mortgage repayments shown are calculated for this report as one-quarter of monthly figures in the source dataset.
4. Quoted out-of-pocket payments for medical services are per hospital episode or medical service.

Chapter 2 Starting well

2-1 Fertility rate

Rationale for reporting

Knowledge of fertility rates provides insight to determine healthcare service needs and expected service burden over time. Understanding variances in fertility rates across our population can help to identify inequalities in health and healthcare needs.

Measures Reported

1. Fertility rates, expressed as births per woman, overall and by region, state, Aboriginal status and over time.

Source agencies

1. Australian Bureau of Statistics ('ABS')

Data sources and update frequency

1. ABS, *Births, Australia*, cat. no. 3301.0, updated annually

Time period

1. Calendar year

Definitions

1. The term *national average* and similar terms are used to refer to Australia-wide figures and should not be interpreted as being the average of the figures for each individual state and territory.
2. *Total fertility rate* is number of births per woman.

Important caveats

1. Fertility rates for 2014 use preliminary estimated resident population figures for 30 June 2014 and may be subject to revision.
2. Regional figures, below state-level geography, for fertility rates and median ages of mother at birth are based on averages of annual figures over a three-year period ending in the reference year.
3. Numbers of Aboriginal births, and thus fertility rate, are based on responses to the by the parent(s) to the Aboriginal and Torres Strait Islander question on the birth registration form and so the level of Aboriginal births may be underestimated.
4. Comparisons over time for Aboriginal maternity data may be unreliable as a result of birth registration lags and changes in the completeness and coverage of responses by the parent(s) to the Aboriginal and Torres Strait Islander question on the birth registration form.

2-2 Maternal age

Rationale for reporting

The ages of mothers giving birth can affect maternal and paediatric health service needs. Knowledge of the distribution of mothers' ages and changes over time provides insight into population health needs and future service provision.

Measures Reported

1. Average age of mothers at time of birth, expressed as median years of age, by region, state, Aboriginal status, and over time.
2. Extent of teenage motherhood, expressed as percentage of mothers/births for mothers under 20, by state, Aboriginal status and over time.
3. Extent of teenage motherhood, expressed as percentage of mothers/births for mothers under 20, by region, state, Aboriginal status and over time.
4. Extent of motherhood at age 35 and over, expressed as percentage of mothers/births for mothers aged 35 or over, by state, Aboriginal status and over time.

Source agencies

1. Australian Bureau of Statistics ('ABS')

Data sources and update frequency

1. ABS, *Births, Australia*, cat. no. 3301.0, updated annually

Time period

1. Calendar year

Definitions

1. The *median* is a commonly used measure of central tendency, like the average. The median, or 50th percentile, is the exact midpoint of a distribution, the number at which half the observations are smaller and the other half are larger. The median is less susceptible than the average to the influence of particularly large or small observations (outliers) in the dataset.

Important caveats

1. Regional figures, below state-level geography, for fertility rates and median ages of mother at birth are based on averages of annual figures over a three-year period ending in the reference year.
2. Comparisons over time for Aboriginal maternity data may be unreliable as a result of birth registration lags and changes in the completeness and coverage of responses by the parent(s) to the Aboriginal and Torres Strait Islander question on the birth registration form.
3. Figures for teenage mothers are for all aged 19 or less, including those (if any) who were under 13.

2-3 Folate intake

Rationale for reporting

Women are advised to take folic acid before and during the first three months of pregnancy to reduce the chance of having a baby with spina bifida. Understanding the extent of awareness of this advice enables a better understanding of information needs and health provision.

Measures Reported

1. Awareness of advice to take folic acid before and during early pregnancy, expressed as percentage of population with this awareness, by region and over time.
2. Demographic distribution of awareness of advice to take folic acid before and during early pregnancy, expressed as percentage of population, by sex and 10-year age bands.
3. Socio-economic status distribution of awareness of advice to take folic acid before and during early pregnancy, expressed as percentage of population in socio-economic status quintiles.
4. Popularity of folic acid intake methods, expressed as percentage of consumption of common folic acid intake types.

Source agencies

1. South Australian Monitoring and Surveillance System Online, SA Department of Health ('SAMSS')

Data sources and update frequency

1. SAMSS, Health Information Portal database, 'Management Reporting, Reports, Folate Awareness', update frequency irregular or not known

Time period

1. Calendar year, derived from monthly snapshot surveys

Definitions

1. *Socio-economic status* summarises a range of information about the economic and social conditions of people and households within an area. The measure used here is the Australian Bureau of Statistics' Socio-economic Index for Areas (SEIFA), Index of Relative Socio-economic Disadvantage (IRSD), under which lower scores indicate relatively greater disadvantage in general.
2. A *quintile* is one of five subsets of a population, providing information about the distribution of observations. Each quintile contains the same number of observations, dividing the population into five equal subsets.

Important caveats

1. Data from the South Australian Monitoring and Surveillance System (SAMSS) is based on a sample survey conducted monthly.
2. All sample surveys are subject to sampling and non-sampling error. Sampling error is a measure of the variability that occurs by chance because a sample, rather than the entire population, is surveyed. This can be expressed as a margin of error around the estimate. Non-sampling error may occur in any data collection, whether it is based on a sample or a full count such as a census. Sources of non-sampling error include non-response, errors in reporting by respondents or in recording of answers by interviewers, and occasional errors in coding and processing data.
3. Rates shown for awareness of folic acid intake benefits are for proportion of people who gave the correct answer of 'Before pregnancy and in first three months of pregnancy' to the question 'Do you know when folic acid needs to be taken by a woman to reduce her chance of having a baby with spina bifida?'. Other responses that nevertheless indicate some awareness, such as 'Before

pregnancy' and 'Throughout pregnancy' are not treated as correct responses and such respondents are for this purpose regarded as not being aware of the benefits of folic acid intake.

2-4 Pregnancy outcomes

Rationale for reporting

Data on timeliness of antenatal visits provides insights into equality of access to and provision of antenatal services which may also assist in monitoring and planning for perinatal and childhood health needs. Data on smoking, diabetes and overweight/obesity prevalence during pregnancy and their changes over time provide insight into the need for and effectiveness of public health programmes and for maternal and perinatal health needs.

Measures Reported

1. Extent of first antenatal visits being within 14 weeks of pregnancy, expressed as percentage of women having first antenatal visit within first 14 weeks of pregnancy, by Aboriginal status and over time.
2. Prevalence of smoking during pregnancy, expressed as percentage of mothers who smoked at time of first antenatal visit, by state, Aboriginal status and over time.
3. Prevalence of gestational diabetes, expressed as percentage of women giving birth who experienced gestational diabetes, over time.
4. Prevalence of being overweight in pregnancy, expressed as percentage of pregnant women measured as being overweight or obese, by state and over time.

Source agencies

1. Pregnancy Outcome Unit, SA Department of Health ('SA Health POU')
2. Australian Institute of Health and Welfare ('AIHW')

Data sources and update frequency

1. SA Health POU, *Pregnancy outcome in South Australia*, Scheil W, Jolly K, Scott J, Catcheside B, Sage L, Kennare R, updated annually
2. AIHW, National Perinatal Data Collection, Antenatal period module, Perinatal data portal, updated annually

Time period

1. Calendar year

Definitions

1. The term *national average* and similar terms are used to refer to Australia-wide figures and should not be interpreted as being the average of the figures for each individual state and territory.
2. *Body Mass Index* (BMI) is mass (in kilograms) divided by the square of height (in metres). The resulting BMI figure may be categorised as one of: underweight, normal, overweight, obese, severely obese and morbidly obese.

Important caveats

1. Percentages of women/births have been calculated based on figures adjusted to exclude those where data was unknown.
2. Ranking order of the states and territories for rates of smoking at first antenatal visit may be affected by differences in methods and definitions between the jurisdictions.
3. The AIHW advises that the BMI categories do not take into account factors such as frame size, muscularity, varying proportions of components such as fat, bone, cartilage and water, and may be misleading in athletes, children and some ethnic groups.
4. BMI figures may not be directly comparable between the states and territories as source data and methods used for data collection are not uniform. For South Australia, BMI was calculated from the mother's height and weight measured at the first antenatal visit.

2-5 Birth rate

Rationale for reporting

Birth rates are an important component in determining changes in our population, understanding which is necessary for planning and delivering health services.

Measures Reported

1. Births, expressed as number of people born, overall and by Aboriginal status.
2. Crude birth rate, expressed as numbers of births per 1,000 population, by region, state, Aboriginal status and over time.

Source agencies

1. Australian Bureau of Statistics ('ABS')

Data sources and update frequency

1. ABS, *Births, Australia*, cat. no. 3301.0, updated annually

Time period

1. Calendar year

Definitions

1. *Crude birth rate* is the number of births per 1,000 of the estimated population.

Important caveats

1. Birth rates for 2014 use preliminary estimated resident population figures for 30 June 2014 and may be subject to revision.
2. Comparisons over time for Aboriginal births data may be unreliable as a result of birth registration lags and changes in the completeness and coverage of responses by the parent(s) to the Aboriginal and Torres Strait Islander question on the birth registration form.

2-6 Low birthweight

Rationale for reporting

A baby's birthweight is identified by the Australian Institute of Health and Welfare as being a key indicator of infant health and a determinant of a baby's chances of survival and health later in life.

Measures Reported

1. Average weight of babies at birth, expressed in grams birthweight, overall and by Aboriginal status.
2. Extent of low birthweight births, expressed as percentage of all babies born who were of low birthweight, by state, Aboriginal status and over time.
3. Extent of low birthweight births, expressed as percentage of all babies born who were low birthweight, by state, Aboriginal status and over time.

Source agencies

1. Australian Institute of Health and Welfare ('AIHW')

Data sources and update frequency

1. AIHW, *Australia's mothers and babies 2013 – in brief*, Supplementary tables, Perinatal statistics series no. 31, Cat no. PER 72, updated annually

Time period

1. Calendar year

Definitions

1. The term *national average* and similar terms are used to refer to Australia-wide figures and should not be interpreted as being the average of the figures for each individual state and territory.
2. *Birthweight* is the first weight of the baby (stillborn or live born) obtained after birth (usually measured to the nearest 5 grams and obtained within 1 hour of birth).
3. Babies are considered of *low birthweight* if their weight at birth is less than 2,500 grams.

Important caveats

1. Birthweight statistics reported are in respect of live born babies.

2-7 Caesarean births

Rationale for reporting

Data on caesarean deliveries and inequalities in the extent of its practice across the population provides some insight into access to healthcare services and supports planning of future maternity healthcare. However, elective caesarean delivery attracts some controversy: the OECD notes that caesarean delivery results in 'increased maternal mortality, maternal and infant morbidity, and increased complications for subsequent deliveries, as well as increased financial costs' (<https://data.oecd.org/healthcare/caesarean-sections.htm>).

Measures Reported

1. Caesarean birth rate, expressed as percentage of all births which were by caesarean section, by state, Aboriginal status and over time.

Source agencies

1. Australian Institute of Health and Welfare ('AIHW')

Data sources and update frequency

1. AIHW, *Australia's mothers and babies 2013 – in brief*, Supplementary tables, Perinatal statistics series no. 31, Cat no. PER 72, updated annually

Time period

1. Calendar year

Definitions

1. According to AIHW, a *caesarean section* is 'a method of birth in which a surgical incision is made into the mother's womb via the abdomen to directly remove the baby'.
2. The term *national average* and similar terms are used to refer to Australia-wide figures and should not be interpreted as being the average of the figures for each individual state and territory.

Important caveats

1. In cases of multiple births, the presentation of the first-born baby was used for deriving caesarean birth rates.
2. Caesarean birth rates for Australian Capital Territory include non-ACT residents who gave birth in the ACT; the rates for ACT are therefore health service population rates rather than ACT population rates.

2-8 Congenital anomalies

Rationale for reporting

Congenital anomalies may be associated with increased health needs during the life of the child. Data on rates of anomalies and changes over time can assist with healthcare service planning and delivery.

Measures Reported

1. Extent of incidences of congenital anomalies, expressed as number of births notified with anomalies and percentage of all births in which anomalies were notified, over time.

Source agencies

1. Pregnancy Outcome Unit, SA Department of Health ('SA Health POU')

Data sources and update frequency

1. SA Health POU, *Pregnancy outcome in South Australia*, Scheil W, Jolly K, Scott J, Catcheside B, Sage L, Kennare R, updated annually

Time period

1. Calendar year

Important caveats

1. Numbers and rates of congenital anomalies are based on data notified to the South Australian Perinatal Statistics Collection; information on anomalies detected at birth or in the neonatal period (within 28 days of birth) is provided by doctors using a specified form.

2-9 Childhood developmental health checks

Rationale for reporting

Health checks in early childhood can identify health needs and help with monitoring of the effectiveness of childhood health programmes.

Measures Reported

1. Rate of receipt of childhood developmental health checks, expressed as percentage of target population who received a check, by state, Aboriginal status and over time.

Source agencies

1. Productivity Commission, Government of Australia ('PCOM')

Data sources and update frequency

1. PCOM, Volume E: Health, *Report on Government Services*, updated annually

Time period

1. Financial year

Definitions

1. The term *national average* and similar terms are used to refer to Australia-wide figures and should not be interpreted as being the average of the figures for each individual state and territory.
2. The term *Aboriginal and Torres Strait Islander Child Health Check* has been used to encompass also the more recent (since May 2010) *Aboriginal and Torres Strait Islander People's Health Assessment*.

Important caveats

1. Rates are not directly comparable between total population and Aboriginal population. For total population, rates are for receipt of a fourth year developmental *Healthy Kids Check*; for Aboriginal populations, the rates are for receipt of a fourth year developmental *Aboriginal and Torres Strait Islander Child Health Check*.
2. Rates for *Healthy Kids Check* include children who received a *Healthy Kids Check* and did not also receive an *Aboriginal and Torres Strait Islander Child Health Check*.
3. *Healthy Kids Check* rates are based on claims for certain Medicare items for children in the target age range and do not include developmental health check activity conducted outside Medicare such as State and Territory early childhood health assessments in preschools and community health centres. The extent to which this is an issue may vary between jurisdictions and rates are therefore not directly comparable.
4. *Aboriginal and Torres Strait Islander Child Health Check* rates are based on claims for certain Medicare items for children in the target age range and do not include health assessments provided outside Medicare under service models used to increase access for people in remote areas and for Aboriginal and Torres Strait Islander people. The rates are therefore likely to be understated.

2-10 Childhood immunisation coverage

Rationale for reporting

Immunisations provide protection for individuals against various harmful diseases and are also identified by the *Immunise Australia Program* of the Australian Government's Department of Health as reducing rates of disease transmission in the community. Data on differences in rates of immunisation is, therefore, important for understanding and monitoring health needs of individuals and for public health planning.

Measures Reported

1. Childhood immunisation coverage, expressed as percentage of 5-year-olds fully immunised against certain diseases, by state, Aboriginal status and over time.

Source agencies

1. Department of Health, Government of Australia ('DH')

Data sources and update frequency

1. DH, *ACIR - Annual coverage historical data*, updated annually
2. DH, *ACIR - Annual coverage historical data - Aboriginal and Torres Strait Islander children*, updated annually

Time period

1. Calendar year, annualised from quarterly coverage data

Definitions

1. A child is currently regarded as *fully immunised* who has been vaccinated against: hepatitis B, diphtheria, tetanus, pertussis, haemophilus influenzae type b, polio, measles, mumps and rubella, pneumococcal, varicella and meningococcal C.
2. The term *national average* and similar terms are used to refer to Australia-wide figures and should not be interpreted as being the average of the figures for each individual state and territory.

Important caveats

1. The definition of *fully immunised* varies over time to accommodate changes to the National Immunisation Program Schedule. Changes between years may not be completely comparable.
2. Immunisation rates shown are annualised figures for proportions of children fully immunised at five years old, based on quarterly data for cohorts of children aged from 60 months (five years old) to under 63 months (five years and 3 months old).

2-11 Childhood overweight and obesity

Rationale for reporting

According to the source report cited in this section, being overweight or obese increases the risk of developing conditions such as heart disease, stroke and type 2 diabetes. Understanding the extent to which children are overweight or obese and changes in the extent over time can support delivery of health services and planning of future needs.

Measures Reported

1. Size of overweight and obese child population, expressed as percentage of children who are overweight or obese, by state and Aboriginal status.

Source agencies

1. Productivity Commission, Government of Australia ('PCOM')

Data sources and update frequency

1. PCOM, Volume E: Health, *Report on Government Services*, updated annually

Time period

1. Financial year

Definitions

1. Children are defined as persons aged 5–17 years.
2. The term *national average* and similar terms are used to refer to Australia-wide figures and should not be interpreted as being the average of the figures for each individual state and territory.
3. Standardisation allows for valid comparisons between populations with differences in the variables which have been standardised. For instance, age-standardised figures mean that comparisons between states/territories or over time are not affected by differences in age structures in the different jurisdictions. However, standardised figures are not directly comparable with non-standardised figures or with those standardised by a different method.
4. *Body Mass Index* (BMI) is mass (in kilograms) divided by the square of height (in metres). The resulting BMI figure may be categorised as one of: underweight, normal, overweight, obese, severely obese and morbidly obese.

Important caveats

1. Figures from PCOM's *Report on Government Services* for childhood overweight and obesity are based on sample surveys, the Australian Health Survey and the Australian Aboriginal and Torres Strait Islander Health Survey.
2. All sample surveys are subject to sampling and non-sampling error. Sampling error is a measure of the variability that occurs by chance because a sample, rather than the entire population, is surveyed. This can be expressed as a margin of error around the estimate. Non-sampling error may occur in any data collection, whether it is based on a sample or a full count such as a census. Sources of non-sampling error include non-response, errors in reporting by respondents or in recording of answers by interviewers, and occasional errors in coding and processing data.
3. Rates for children being overweight or obese are for children whose BMI (appropriate for age and sex) is likely to be 25 kg/m² or over at age 18 years. BMI was calculated from measured height and weight.
4. Childhood overweight/obesity rates are age standardised by state and territory to the 2001 Australian standard population (selected age ranges from 5–17 years) and should not be compared to non-standardised figures.

5. The rate of overweight/obesity for Aboriginal children in the Northern territory may be affected by the fact that the underlying Australian Health Survey excluded discrete Aboriginal and Torres Strait Islander communities and very remote areas, which comprise around 25 per cent of the estimated resident population of the NT.

Chapter 3 Staying healthy

3-1 Life expectancy

Rationale for reporting

Life expectancy figures provide a useful summary indicator of health and differences between population subgroups, helping to identify differences in healthcare needs. Changes over time both convey a top-level indication of changing population health and help future service delivery planning.

Measures Reported

1. Expected length of life, expressed as average number of years of life, by sex, region, state, Aboriginal status and over time.
2. Expected remaining length of life at ages 65 and 75, expressed as average number of years, by sex, region, state and over time.

Source agencies

1. Australian Bureau of Statistics ('ABS')

Data sources and update frequency

1. ABS, *Deaths, Australia*, cat. no. 3302.0, updated annually
2. ABS, *Life Tables States and Territories and Australia*, cat. no. 3302.0.55.001, updated annually
3. ABS, *Life Tables for Aboriginal and Torres Strait Islander Australians*, cat. no. 3302.0.55.003, update frequency irregular or not known

Time period

1. Calendar year

Important caveats

1. Figures for life expectancy at birth have been calculated using data for the three years ending in the reference year and do not take into account future assumed improvements in mortality.
2. Life expectancies for 2014 use preliminary estimated resident population figures for 30 June 2014 and may be subject to revision.

3-2 Health status

Rationale for reporting

Self-reported health status provides a high-level indicator of the potential level of need for healthcare services.

Measures Reported

1. Extent of self-reported good health, expressed as percentage of adult population, by region and over time.
2. Demographic distribution of self-reported good health, expressed as percentage of adult population, by sex and 10-year age bands.
3. Socio-economic status distribution of self-reported good health, expressed as percentage of adult population by socio-economic status quintiles.
4. Geographic distribution of self-reported good health, expressed as percentage of adult population, by state or territory.
5. Extent of self-reported good health amongst Aboriginal people, expressed as percentage of adult population, by state.

Source agencies

1. South Australian Monitoring and Surveillance System Online, SA Department of Health ('SAMSS')
2. Australian Bureau of Statistics ('ABS')

Data sources and update frequency

1. SAMSS, Health Information Portal database, 'Management Reporting, Reports, General health (Age 18+)', updated annually
2. ABS, *National Health Survey: First Results*, cat. no. 4364.0.55.001, updated every three years
3. ABS, *Australian Aboriginal and Torres Strait Islander health survey: Updated results*, cat. no. 4727.0.55.006, update frequency irregular or not known

Time period

1. Calendar year, derived from monthly snapshot surveys
2. Point in time; survey conducted from July 2014 to June 2015
3. Point in time; survey conducted from April 2012 to February 2013

Definitions

1. *Socio-economic status* summarises a range of information about the economic and social conditions of people and households within an area. The measure used here is the Australian Bureau of Statistics' Socio-economic Index for Areas (SEIFA), Index of Relative Socio-economic Disadvantage (IRSD), under which lower scores indicate relatively greater disadvantage in general.
2. A *quintile* is one of five subsets of a population, providing information about the distribution of observations. Each quintile contains the same number of observations, dividing the population into five equal subsets.
3. Standardisation allows for valid comparisons between populations with differences in the variables which have been standardised. For instance, age-standardised figures mean that comparisons between states/territories or over time are not affected by differences in age structures in the different jurisdictions. However, standardised figures are not directly comparable with non-standardised figures or with those standardised by a different method.
4. The term *national average* and similar terms are used to refer to Australia-wide figures and should not be interpreted as being the average of the figures for each individual state and territory.

Important caveats

1. Data from the South Australian Monitoring and Surveillance System (SAMSS) is based on a sample survey conducted monthly.
2. All sample surveys are subject to sampling and non-sampling error. Sampling error is a measure of the variability that occurs by chance because a sample, rather than the entire population, is surveyed. This can be expressed as a margin of error around the estimate. Non-sampling error may occur in any data collection, whether it is based on a sample or a full count such as a census. Sources of non-sampling error include non-response, errors in reporting by respondents or in recording of answers by interviewers, and occasional errors in coding and processing data.

3-3 Nutrition – Recommended fruit intake

Rationale for reporting

The Australian Dietary Guidelines from the National Health and Medical Research Council advise that a healthy diet includes plenty of fruit, vegetables and legumes. The data reported here provides insight into the extent to which South Australians are eating healthily and any differences between groups of populations, assisting with the planning and delivery of preventative health programmes and of the need for health services.

Measures Reported

1. Extent to which the population eats the recommended amount of fruit, expressed as percentage of adult population, by region and over time.
2. Demographic distribution of extent to which the population eats the recommended amount of fruit, expressed as percentage of adult population, by sex and 10-year age bands.
3. Socio-economic status distribution of extent to which the population eats the recommended amount of fruit, expressed as percentage of adult population by socio-economic status quintiles.
4. Geographic distribution of extent to which the population eats the recommended amount of fruit, expressed as percentage of adult population, by state or territory.
5. Extent to which Aboriginal people eat the recommended amount of fruit, expressed as percentage of adult population, by state.

Source agencies

1. South Australian Monitoring and Surveillance System Online, SA Department of Health ('SAMSS')
2. Australian Bureau of Statistics ('ABS')

Data sources and update frequency

1. SAMSS, Health Information Portal database, 'Management Reporting, Reports, Nutrition-serves of fruit (Age 18+)', updated annually
2. ABS, *National Health Survey: First Results*, cat. no. 4364.0.55.001, updated every three years
3. ABS, *Australian Aboriginal and Torres Strait Islander health survey: Updated results*, cat. no. 4727.0.55.006, update frequency irregular or not known

Time period

1. Calendar year, derived from monthly snapshot surveys
2. Point in time; survey conducted from July 2014 to June 2015
3. Point in time; survey conducted from April 2012 to February 2013

Definitions

1. A *serve of fruit* is approximately 150 grams of fresh fruit or 50 grams of dried fruit.
2. The term *national average* and similar terms are used to refer to Australia-wide figures and should not be interpreted as being the average of the figures for each individual state and territory.
3. *Socio-economic status* summarises a range of information about the economic and social conditions of people and households within an area. The measure used here is the Australian Bureau of Statistics' Socio-economic Index for Areas (SEIFA), Index of Relative Socio-economic Disadvantage (IRSD), under which lower scores indicate relatively greater disadvantage in general.
4. A *quintile* is one of five subsets of a population, providing information about the distribution of observations. Each quintile contains the same number of observations, dividing the population into five equal subsets.

Important caveats

1. Data from the South Australian Monitoring and Surveillance System (SAMSS) is based on a sample survey conducted monthly.
2. All sample surveys are subject to sampling and non-sampling error. Sampling error is a measure of the variability that occurs by chance because a sample, rather than the entire population, is surveyed. This can be expressed as a margin of error around the estimate. Non-sampling error may occur in any data collection, whether it is based on a sample or a full count such as a census. Sources of non-sampling error include non-response, errors in reporting by respondents or in recording of answers by interviewers, and occasional errors in coding and processing data.
3. Figures for South Australian populations eating the recommended amount of fruit may include (in the denominator) those with an 'unknown' response.

3-4 Nutrition – Recommended vegetable intake

Rationale for reporting

The Australian Dietary Guidelines from the National Health and Medical Research Council advise that a healthy diet includes plenty of fruit, vegetables and legumes. The data reported here provides insight into the extent to which South Australians are eating healthily and any differences between groups of populations, assisting with the planning and delivery of preventative health programmes and of the need for health services.

Measures Reported

1. Extent to which the population eats the recommended amount of vegetables, expressed as percentage of adult population, by region and over time.
2. Demographic distribution of extent to which the population eats the recommended amount of vegetables, expressed as percentage of adult population, by sex and 10-year age bands.
3. Socio-economic status distribution of extent to which the population eats the recommended amount of vegetables, expressed as percentage of adult population by socio-economic status quintiles.
4. Geographic distribution of extent to which the population eats the recommended amount of vegetables, expressed as percentage of adult population, by state or territory.
5. Extent to which Aboriginal people eat the recommended amount of vegetables, expressed as percentage of adult population, by state.

Source agencies

1. South Australian Monitoring and Surveillance System Online, SA Department of Health ('SAMSS')
2. Australian Bureau of Statistics ('ABS')

Data sources and update frequency

1. SAMSS, Health Information Portal database, 'Management Reporting, Reports, Nutrition-serves of vegetable (Age 18+)', updated annually
2. ABS, *National Health Survey: First Results*, cat. no. 4364.0.55.001, updated every three years
3. ABS, *Australian Aboriginal and Torres Strait Islander health survey: Updated results*, cat. no. 4727.0.55.006, update frequency irregular or not known

Time period

1. Calendar year, derived from monthly snapshot surveys
2. Point in time; survey conducted from July 2014 to June 2015
3. Point in time; survey conducted from April 2012 to February 2013

Definitions

1. A *serve of vegetables* is approximately half a cup of cooked vegetables or one cup of salad vegetables – equivalent to approximately 75 grams.
2. The term *national average* and similar terms are used to refer to Australia-wide figures and should not be interpreted as being the average of the figures for each individual state and territory.
3. *Socio-economic status* summarises a range of information about the economic and social conditions of people and households within an area. The measure used here is the Australian Bureau of Statistics' Socio-economic Index for Areas (SEIFA), Index of Relative Socio-economic Disadvantage (IRSD), under which lower scores indicate relatively greater disadvantage in general.
4. A *quintile* is one of five subsets of a population, providing information about the distribution of observations. Each quintile contains the same number of observations, dividing the population into five equal subsets.

Important caveats

1. Data from the South Australian Monitoring and Surveillance System (SAMSS) is based on a sample survey conducted monthly.
2. All sample surveys are subject to sampling and non-sampling error. Sampling error is a measure of the variability that occurs by chance because a sample, rather than the entire population, is surveyed. This can be expressed as a margin of error around the estimate. Non-sampling error may occur in any data collection, whether it is based on a sample or a full count such as a census. Sources of non-sampling error include non-response, errors in reporting by respondents or in recording of answers by interviewers, and occasional errors in coding and processing data.
3. Figures for South Australian populations eating the recommended amount of vegetables may include (in the denominator) those with an 'unknown' response.

3-5 Physical activity

Rationale for reporting

Knowledge of physical activity levels can help identify disparities and trends which could affect the ability of the South Australian health system to help the population achieve and maintain healthy body weights.

Measures Reported

1. Extent to which the population undertakes physical activity, expressed as percentage of adult population, by region and over time.
2. Demographic distribution of extent to which the population undertakes sufficient physical activity, expressed as percentage of adult population, by sex and 10-year age bands.
3. Socio-economic status distribution of extent to which the population undertakes sufficient physical activity, expressed as percentage of adult population by socio-economic status quintiles.
4. Geographic distribution of extent to which the population undertakes physical activity, expressed as percentage of adult population, by state or territory.
5. Extent to which Aboriginal people undertake sufficient physical activity, expressed as percentage of adult population, by state.

Source agencies

1. South Australian Monitoring and Surveillance System Online, SA Department of Health ('SAMSS')
2. Australian Bureau of Statistics ('ABS')
3. Population Research and Outcome Studies, University of Adelaide ('PROS')

Data sources and update frequency

1. SAMSS, Health Information Portal database, 'Management Reporting, Reports, Physical activity', updated annually
2. ABS, *Participation in Sport and Physical Recreation, Australia*, cat. no. 4177.0, updated annually
3. PROS, *South Australian Aboriginal health survey*, update frequency irregular or not known

Time period

1. Calendar year, derived from monthly snapshot surveys
2. Financial year, derived from sample surveys conducted throughout the year
3. Point in time; survey conducted during 2012

Definitions

1. *Socio-economic status* summarises a range of information about the economic and social conditions of people and households within an area. The measure used here is the Australian Bureau of Statistics' Socio-economic Index for Areas (SEIFA), Index of Relative Socio-economic Disadvantage (IRSD), under which lower scores indicate relatively greater disadvantage in general.
2. A *quintile* is one of five subsets of a population, providing information about the distribution of observations. Each quintile contains the same number of observations, dividing the population into five equal subsets.

Important caveats

1. Data from the South Australian Monitoring and Surveillance System (SAMSS) is based on a sample survey conducted monthly.
2. All sample surveys are subject to sampling and non-sampling error. Sampling error is a measure of the variability that occurs by chance because a sample, rather than the entire population, is surveyed. This can be expressed as a margin of error around the estimate. Non-sampling error

may occur in any data collection, whether it is based on a sample or a full count such as a census. Sources of non-sampling error include non-response, errors in reporting by respondents or in recording of answers by interviewers, and occasional errors in coding and processing data.

3. Figures from the ABS's *Participation in Sport and Physical Recreation* report are based on a sample survey, the Multipurpose Household Survey (MPHS) conducted by the ABS.
4. Figures by state are for self-reported participation in a sport or physical recreational activity at least once during the 12 months prior to being surveyed. Activities such as gardening, housework, manual labouring and other forms of occupational physical activity were excluded. This definition is substantively different from that used for other figures reported in this section which are for self-reported undertaking of sufficient physical activity.

3-6 Disability

Rationale for reporting

The level of disability in the population can have a direct bearing on the extent and types of healthcare provision needs now and into the future.

Measures Reported

1. Extent of disability in the population, expressed as percentage of population, by state and over time.
2. Extent of population need for assistance due to profound or severe disability, expressed as percentage of population, by region, state and over time.
3. Demographic distribution of extent of population need for assistance due to profound or severe disability, expressed as percentage of population, by sex and 5-year age bands.
4. Extent to which Aboriginal people need assistance due to profound or severe disability, expressed as percentage of population, by state.

Source agencies

1. Australian Bureau of Statistics ('ABS')

Data sources and update frequency

1. ABS, *Disability, Ageing and Carers, Australia: Summary of Findings*, cat. no. 4430.0, update frequency irregular or not known
2. ABS, TableBuilder, *Census of Population and Housing*, updated every five years

Time period

1. Point in time; survey conducted from 5 August 2012 to 2 March 2013
2. Point in time, as at Census night, 9 August 2011

Definitions

1. *Disability* in the ABS's Survey of Disability, Ageing and Carers (SDAC) means a limitation, restriction or impairment, which has lasted, or is likely to last, for at least six months and restricts everyday activities.
2. The term *national average* and similar terms are used to refer to Australia-wide figures and should not be interpreted as being the average of the figures for each individual state and territory.

Important caveats

1. Figures from the ABS's *Disability, Ageing and Carers, Australia* report are based on a sample survey, the Survey of Disability, Ageing and Carers (SDAC) conducted by the ABS.
2. All sample surveys are subject to sampling and non-sampling error. Sampling error is a measure of the variability that occurs by chance because a sample, rather than the entire population, is surveyed. This can be expressed as a margin of error around the estimate. Non-sampling error may occur in any data collection, whether it is based on a sample or a full count such as a census. Sources of non-sampling error include non-response, errors in reporting by respondents or in recording of answers by interviewers, and occasional errors in coding and processing data.
3. The Australian Census of Population and Housing is self-enumerated. This means that householders are required to complete the Census form themselves, rather than having the help of a Census Collector. The Census form may be completed by one household member on behalf of others. Error can be introduced if the respondent does not understand the question, or does not know the correct information about other household members. Self-enumeration carries the risk that wrong answers could be given, either intentionally or unintentionally.

4. Disability rates are based where possible on self-reported survey responses, although in some cases information was provided by another person. The ABS advises that disability is a difficult concept to measure, being dependent on respondent perception, and that some under-reporting may have occurred because of unwillingness to report (e.g., owing to the sensitive nature of a condition) or lack of awareness.
5. Rates shown for *needing assistance due to profound or severe disability* may include (in the denominator) those for whom the response is not stated.

3-7 People living with multiple risk factors

Rationale for reporting

Identified risk factors can have an impact on current and future population health needs. Understanding the extent to which people are living with multiple risk factors can help health service provision and planning.

Measures Reported

1. Size of population living with multiple risk factors, expressed as percentage of adult population, by region and over time.
2. Demographic distribution of population living with multiple risk factors, expressed as percentage of adult population, by sex and 10-year age bands.
3. Socio-economic status distribution of population living with multiple risk factors, expressed as percentage of adult population by socio-economic status quintiles.

Source agencies

1. South Australian Monitoring and Surveillance System Online, SA Department of Health ('SAMSS')

Data sources and update frequency

1. SAMSS, Health Information Portal database, 'Management Reporting, Reports, Number of risk factors (Age 18+)', updated annually

Time period

1. Calendar year, derived from monthly snapshot surveys

Definitions

1. *Socio-economic status* summarises a range of information about the economic and social conditions of people and households within an area. The measure used here is the Australian Bureau of Statistics' Socio-economic Index for Areas (SEIFA), Index of Relative Socio-economic Disadvantage (IRSD), under which lower scores indicate relatively greater disadvantage in general.
2. A *quintile* is one of five subsets of a population, providing information about the distribution of observations. Each quintile contains the same number of observations, dividing the population into five equal subsets.

Important caveats

1. Data from the South Australian Monitoring and Surveillance System (SAMSS) is based on a sample survey conducted monthly.
2. All sample surveys are subject to sampling and non-sampling error. Sampling error is a measure of the variability that occurs by chance because a sample, rather than the entire population, is surveyed. This can be expressed as a margin of error around the estimate. Non-sampling error may occur in any data collection, whether it is based on a sample or a full count such as a census. Sources of non-sampling error include non-response, errors in reporting by respondents or in recording of answers by interviewers, and occasional errors in coding and processing data.

3-8 Alcohol-related risk

Rationale for reporting

The National Health and Medical Research Council has published evidence-based guidelines for reducing the risk of injury on a single occasion of drinking and the risks of alcohol-related harm over a lifetime. Understanding the extent to which South Australians drink within these guidelines is important for understanding necessary health service provision and planning for future provision.

Measures Reported

1. Size of population at risk of alcohol-related injury, expressed as percentage of adult population, by region and over time.
2. Demographic distribution of population at risk of alcohol-related injury, expressed as percentage of adult population, by sex and 10-year age bands.
3. Socio-economic status distribution of population at risk of alcohol-related injury, expressed as percentage of adult population by socio-economic status quintiles.
4. Size of population at lifetime risk of alcohol-related disease or injury, expressed as percentage of adult population, by region and over time.
5. Demographic distribution of population at lifetime risk of alcohol-related disease or injury, expressed as percentage of adult population, by sex and 10-year age bands.
6. Socio-economic status distribution of population at lifetime risk of alcohol-related disease or injury, expressed as percentage of adult population by socio-economic status quintiles.
7. Geographic distribution of population at lifetime risk of alcohol-related disease or injury, expressed as percentage of adult population, by state or territory.
8. Geographic distribution of Aboriginal population at lifetime risk of alcohol-related disease or injury, expressed as percentage of adult population, by state or territory.

Source agencies

1. Drug and Alcohol Services South Australia, SA Health ('DASSA')
2. Australian Bureau of Statistics ('ABS')

Data sources and update frequency

1. Health Omnibus Survey customised extract provided by Drug and Alcohol Services South Australia, SA Health, updated annually
2. ABS, National Health Survey: First Results, cat. no. 4364.0.55.001, updated every three years
3. ABS, Australian Aboriginal and Torres Strait Islander health survey: First results, cat. no. 4727.0.55.001, update frequency irregular or not known

Time period

1. Calendar year, derived from monthly snapshot surveys
2. Point in time; survey conducted from July 2014 to June 2015
3. Point in time; survey conducted from April 2012 to February 2013

Definitions

1. A *standard drink* contains 10 g of alcohol (equivalent to 12.5 mL of pure alcohol).
2. A *single occasion* in respect of drinking means a sequence of drinks taken without the blood alcohol concentration reaching zero in between. This might include a drink at home over dinner, or at a specific event, such as a party, and can include drinking spread across more than one context or venue.
3. *Socio-economic status* summarises a range of information about the economic and social conditions of people and households within an area. The measure used here is the Australian Bureau of Statistics' Socio-economic Index for Areas (SEIFA), Index of Relative Socio-economic

Disadvantage (IRSD), under which lower scores indicate relatively greater disadvantage in general.

4. A *quintile* is one of five subsets of a population, providing information about the distribution of observations. Each quintile contains the same number of observations, dividing the population into five equal subsets.
5. The term *national average* and similar terms are used to refer to Australia-wide figures and should not be interpreted as being the average of the figures for each individual state and territory.

Important caveats

1. Data from the South Australian Health Omnibus Survey (HOS) is based on a sample survey conducted monthly.
2. All sample surveys are subject to sampling and non-sampling error. Sampling error is a measure of the variability that occurs by chance because a sample, rather than the entire population, is surveyed. This can be expressed as a margin of error around the estimate. Non-sampling error may occur in any data collection, whether it is based on a sample or a full count such as a census. Sources of non-sampling error include non-response, errors in reporting by respondents or in recording of answers by interviewers, and occasional errors in coding and processing data.
3. Rates for alcohol-related risk derived from the National Health Survey include (in the denominator) people who did not remember when they last consumed alcohol.
4. Alcohol-related risk in the National Health Survey is assessed using average daily consumption of alcohol for persons aged 15 years and over, derived from the type, brand, number and serving sizes of beverages consumed on the three most recent days of the week prior to interview, in conjunction with the total number of days alcohol was consumed in the week prior to interview.

3-9 Overweight and Obesity

Rationale for reporting

Being overweight or obese increases the risk of developing conditions such as heart disease, stroke and type 2 diabetes. Understanding the extent to which the population are overweight or obese and changes in the extent over time can support delivery of health services and planning of future needs.

Measures Reported

1. Size of overweight and obese population, expressed as percentage of adult population, by region and over time.
2. Demographic distribution of overweight and obese population, expressed as percentage of adult population, by sex and 10-year age bands.
3. Socio-economic status distribution of overweight and obese population, expressed as percentage of adult population by socio-economic status quintiles.
4. Geographic distribution of overweight and obese population, expressed as percentage of adult population, by state or territory.
5. Size of overweight and obese Aboriginal population, expressed as percentage of adult population, by state or territory.

Source agencies

1. South Australian Monitoring and Surveillance System Online, SA Department of Health ('SAMSS')
2. Australian Bureau of Statistics ('ABS')

Data sources and update frequency

1. SAMSS, Health Information Portal database, 'Management Reporting, Reports, Body Mass Index WHO definition (Age 18+)', updated annually
2. ABS, *National Health Survey: First Results*, cat. no. 4364.0.55.001, updated every three years
3. ABS, *Australian Aboriginal and Torres Strait Islander health survey: First results*, cat. no. 4727.0.55.001, update frequency irregular or not known

Time period

1. Calendar year, derived from monthly snapshot surveys
2. Point in time; survey conducted from July 2014 to June 2015
3. Point in time; survey conducted from April 2012 to February 2013

Definitions

1. *Body Mass Index* (BMI) is mass (in kilograms) divided by the square of height (in metres). The resulting BMI figure may be categorised as one of: underweight, normal, overweight, obese, severely obese and morbidly obese.
2. *Overweight* is defined by the World Health Organisation as a BMI in the range of 25 to less than 30 kg/m². *Obesity* is a BMI of 30 kg/m² or higher.
3. *Socio-economic status* summarises a range of information about the economic and social conditions of people and households within an area. The measure used here is the Australian Bureau of Statistics' Socio-economic Index for Areas (SEIFA), Index of Relative Socio-economic Disadvantage (IRSD), under which lower scores indicate relatively greater disadvantage in general.
4. A *quintile* is one of five subsets of a population, providing information about the distribution of observations. Each quintile contains the same number of observations, dividing the population into five equal subsets.
5. Standardisation allows for valid comparisons between populations with differences in the variables which have been standardised. For instance, age-standardised figures mean that comparisons

between states/territories or over time are not affected by differences in age structures in the different jurisdictions. However, standardised figures are not directly comparable with non-standardised figures or with those standardised by a different method.

6. The term *national average* and similar terms are used to refer to Australia-wide figures and should not be interpreted as being the average of the figures for each individual state and territory.

Important caveats

1. Data from the South Australian Monitoring and Surveillance System (SAMSS) is based on a sample survey conducted monthly.
2. All sample surveys are subject to sampling and non-sampling error. Sampling error is a measure of the variability that occurs by chance because a sample, rather than the entire population, is surveyed. This can be expressed as a margin of error around the estimate. Non-sampling error may occur in any data collection, whether it is based on a sample or a full count such as a census. Sources of non-sampling error include non-response, errors in reporting by respondents or in recording of answers by interviewers, and occasional errors in coding and processing data.
3. Overweight/obesity rates by state and territory are age standardised to the 2001 Australian standard population and should not be compared to non-standardised figures.
4. Overweight/obesity rates by state and territory use BMI derived from measured height and weight. In 2014-15, 26.8% of respondents aged 18 years and over did not have their height, weight or both measured. For these respondents, imputation was used to obtain height, weight and BMI scores.
5. Overweight/obesity rates for Aboriginal people based on measured BMI and exclude those for whom height and/or weight were not measured (17.5% of Aboriginal and Torres Strait Islander people aged 15 years and over).

3-10 High blood pressure

Rationale for reporting

High blood pressure is a chronic condition with potentially large impact on the health of the population. Understanding the extent to which the population is living with the condition is important for being able to plan and deliver health services.

Measures Reported

1. Extent of living with high blood pressure, expressed as percentage of adult population, by region and over time.
2. Demographic distribution of extent of living with high blood pressure, expressed as percentage of adult population, by sex and 10-year age bands.
3. Socio-economic status distribution of extent of living with high blood pressure, expressed as percentage of adult population by socio-economic status quintiles.
4. Geographic distribution of extent of living with high blood pressure, expressed as percentage of adult population, by state or territory.
5. Extent of living with high blood pressure in the Aboriginal population, expressed as percentage of adult population, by state or territory.

Source agencies

1. South Australian Monitoring and Surveillance System Online, SA Department of Health ('SAMSS')
2. Australian Bureau of Statistics ('ABS')
3. Population Research and Outcome Studies, University of Adelaide ('PROS')

Data sources and update frequency

1. SAMSS, Health Information Portal database, 'Management Reporting, Reports, Blood pressure prevalence (Age 18+)', updated annually
2. ABS, *National Health Survey: First Results*, cat. no. 4364.0.55.001, updated every three years
3. PROS, *South Australian Aboriginal health survey*, update frequency irregular or not known

Time period

1. Calendar year, derived from monthly snapshot surveys
2. Point in time; survey conducted from July 2014 to June 2015
3. Point in time; survey conducted during 2012

Definitions

1. *Socio-economic status* summarises a range of information about the economic and social conditions of people and households within an area. The measure used here is the Australian Bureau of Statistics' Socio-economic Index for Areas (SEIFA), Index of Relative Socio-economic Disadvantage (IRSD), under which lower scores indicate relatively greater disadvantage in general.
2. A *quintile* is one of five subsets of a population, providing information about the distribution of observations. Each quintile contains the same number of observations, dividing the population into five equal subsets.

Important caveats

1. Data from the South Australian Monitoring and Surveillance System (SAMSS) is based on a sample survey conducted monthly.
2. All sample surveys are subject to sampling and non-sampling error. Sampling error is a measure of the variability that occurs by chance because a sample, rather than the entire population, is surveyed. This can be expressed as a margin of error around the estimate. Non-sampling error

may occur in any data collection, whether it is based on a sample or a full count such as a census. Sources of non-sampling error include non-response, errors in reporting by respondents or in recording of answers by interviewers, and occasional errors in coding and processing data.

3. Reported rates from the South Australian Monitoring and Surveillance System Online are people aged 16 or over who self-reported that they had current doctor-diagnosed high blood pressure and/or were on medication for high blood pressure.
4. Rates from the Australian Health Survey are for people aged 18 and over whose measured blood pressure was 140/90 mmHg or higher.
5. In 2014-15, 24.3% of respondents to the Australian Health Survey aged 18 years and over did not have their blood pressure measured. For these respondents, imputation was used to obtain blood pressure. From their investigations, the ABS has nevertheless found the data to be of suitable quality and comparable to 2011-12 and earlier years. Further information is available in the explanatory notes published by ABS alongside the source data.
6. Rates from the South Australian Aboriginal Health Survey are for people aged 15 or over who self-reported that they had current doctor diagnosed high blood pressure and/or were on medication for high blood pressure.

3-11 High cholesterol

Rationale for reporting

High cholesterol is a chronic condition with potentially large impact on the health of the population. Understanding the extent to which the population is living with the condition is important for being able to plan and deliver health services.

Measures Reported

1. Extent of living with high cholesterol, expressed as percentage of adult population, by region and over time.
2. Demographic distribution of extent of living with high cholesterol, expressed as percentage of adult population, by sex and 10-year age bands.
3. Socio-economic status distribution of extent of living with high cholesterol, expressed as percentage of adult population by socio-economic status quintiles.
4. Geographic distribution of extent of living with high cholesterol, expressed as percentage of adult population, by state or territory.

Source agencies

1. South Australian Monitoring and Surveillance System Online, SA Department of Health ('SAMSS')
2. Australian Bureau of Statistics ('ABS')

Data sources and update frequency

1. SAMSS, Health Information Portal database, 'Management Reporting, Reports, Cholesterol prevalence (Age 18+)', updated annually
2. ABS, *National Health Survey: First Results*, cat. no. 4364.0.55.001, updated every three years

Time period

1. Calendar year, derived from monthly snapshot surveys
2. Point in time; survey conducted from July 2014 to June 2015

Definitions

1. *Socio-economic status* summarises a range of information about the economic and social conditions of people and households within an area. The measure used here is the Australian Bureau of Statistics' Socio-economic Index for Areas (SEIFA), Index of Relative Socio-economic Disadvantage (IRSD), under which lower scores indicate relatively greater disadvantage in general.
2. A *quintile* is one of five subsets of a population, providing information about the distribution of observations. Each quintile contains the same number of observations, dividing the population into five equal subsets.

Important caveats

1. Data from the South Australian Monitoring and Surveillance System (SAMSS) is based on a sample survey conducted monthly.
2. All sample surveys are subject to sampling and non-sampling error. Sampling error is a measure of the variability that occurs by chance because a sample, rather than the entire population, is surveyed. This can be expressed as a margin of error around the estimate. Non-sampling error may occur in any data collection, whether it is based on a sample or a full count such as a census. Sources of non-sampling error include non-response, errors in reporting by respondents or in recording of answers by interviewers, and occasional errors in coding and processing data.

3-12 Smoking prevalence

Rationale for reporting

Data on population smoking rates, and differences between different subgroups of the population can changes over time, provide monitoring information on the need for and effectiveness of public health programmes and can help with health service delivery planning.

Measures Reported

1. Size of the smoking population, expressed as percentage of adult population, by region and over time.
2. Demographic distribution of the smoking population, expressed as percentage of adult population, by sex and 10-year age bands.
3. Socio-economic status distribution of the smoking population, expressed as percentage of adult population by socio-economic status quintiles.
4. Geographic distribution of the smoking population, expressed as percentage of adult population, by state or territory.
5. Size of the Aboriginal smoking population, expressed as percentage of adult population, by state or territory.

Source agencies

1. Drug and Alcohol Services South Australia, SA Health ('DASSA')
2. Australian Bureau of Statistics ('ABS')

Data sources and update frequency

1. Health Omnibus Survey customised extract provided by Drug and Alcohol Services South Australia, SA Health, updated annually
2. ABS, *National Health Survey: First Results*, cat. no. 4364.0.55.001, updated every three years
3. ABS, *Australian Aboriginal and Torres Strait Islander health survey: Updated results*, cat. no. 4727.0.55.006, update frequency irregular or not known

Time period

1. Calendar year, derived from monthly snapshot surveys
2. Point in time; survey conducted from July 2014 to June 2015
3. Point in time; survey conducted from April 2012 to February 2013

Definitions

1. *Socio-economic status* summarises a range of information about the economic and social conditions of people and households within an area. The measure used here is the Australian Bureau of Statistics' Socio-economic Index for Areas (SEIFA), Index of Relative Socio-economic Disadvantage (IRSD), under which lower scores indicate relatively greater disadvantage in general.
2. A *quintile* is one of five subsets of a population, providing information about the distribution of observations. Each quintile contains the same number of observations, dividing the population into five equal subsets.
3. Standardisation allows for valid comparisons between populations with differences in the variables which have been standardised. For instance, age-standardised figures mean that comparisons between states/territories or over time are not affected by differences in age structures in the different jurisdictions. However, standardised figures are not directly comparable with non-standardised figures or with those standardised by a different method.
4. The term *national average* and similar terms are used to refer to Australia-wide figures and should not be interpreted as being the average of the figures for each individual state and territory.

Important caveats

1. Data from the South Australian Health Omnibus Survey (HOS) is based on a sample survey conducted monthly.
2. All sample surveys are subject to sampling and non-sampling error. Sampling error is a measure of the variability that occurs by chance because a sample, rather than the entire population, is surveyed. This can be expressed as a margin of error around the estimate. Non-sampling error may occur in any data collection, whether it is based on a sample or a full count such as a census. Sources of non-sampling error include non-response, errors in reporting by respondents or in recording of answers by interviewers, and occasional errors in coding and processing data.
3. Smoking rates by state and territory are age standardised to the 2001 Australian standard population and should not be compared to non-standardised figures.

3-13 Psychological distress

Rationale for reporting

The extent to which the population is living with conditions of psychological distress, such as anxiety or depression, is an important indicator of social and emotional wellbeing.

Measures Reported

1. Extent of living with psychological distress, expressed as percentage of adult population, by region and over time.
2. Demographic distribution of the extent of living with psychological distress, expressed as percentage of adult population, by sex and 10-year age bands.
3. Socio-economic status distribution of extent of living with psychological distress, expressed as percentage of adult population by socio-economic status quintiles.
4. Geographic distribution of extent of living with psychological distress, expressed as percentage of adult population, by state or territory.
5. Extent to which Aboriginal people are living with psychological distress, expressed as percentage of adult population, by state.

Source agencies

1. South Australian Monitoring and Surveillance System Online, SA Department of Health ('SAMSS')
2. Australian Bureau of Statistics ('ABS')

Data sources and update frequency

1. SAMSS, Health Information Portal database, 'Management Reporting, Reports, Psychological Distress K10 (Age 18+)', updated annually
2. ABS, *National Health Survey: First Results*, cat. no. 4364.0.55.001, updated every three years
3. ABS, *Australian Aboriginal and Torres Strait Islander health survey: First results*, cat. no. 4727.0.55.001, update frequency irregular or not known

Time period

1. Calendar year, derived from monthly snapshot surveys
2. Point in time; survey conducted from July 2014 to June 2015
3. Point in time; survey conducted from April 2012 to February 2013

Definitions

1. A person is considered to be living with or affected by *psychological distress* when assessed as having a negative emotional state (such as for anxiety or depression).
2. *Socio-economic status* summarises a range of information about the economic and social conditions of people and households within an area. The measure used here is the Australian Bureau of Statistics' Socio-economic Index for Areas (SEIFA), Index of Relative Socio-economic Disadvantage (IRSD), under which lower scores indicate relatively greater disadvantage in general.
3. A *quintile* is one of five subsets of a population, providing information about the distribution of observations. Each quintile contains the same number of observations, dividing the population into five equal subsets.
4. Standardisation allows for valid comparisons between populations with differences in the variables which have been standardised. For instance, age-standardised figures mean that comparisons between states/territories or over time are not affected by differences in age structures in the different jurisdictions. However, standardised figures are not directly comparable with non-standardised figures or with those standardised by a different method.

5. The term *national average* and similar terms are used to refer to Australia-wide figures and should not be interpreted as being the average of the figures for each individual state and territory.

Important caveats

1. Data from the South Australian Monitoring and Surveillance System (SAMSS) is based on a sample survey conducted monthly.
2. All sample surveys are subject to sampling and non-sampling error. Sampling error is a measure of the variability that occurs by chance because a sample, rather than the entire population, is surveyed. This can be expressed as a margin of error around the estimate. Non-sampling error may occur in any data collection, whether it is based on a sample or a full count such as a census. Sources of non-sampling error include non-response, errors in reporting by respondents or in recording of answers by interviewers, and occasional errors in coding and processing data.
3. Levels of psychological distress are based on scores from the Kessler Psychological Distress Questionnaire. The 10-item Questionnaire (K10) is used for data from the South Australian Monitoring and Surveillance System Online and from the Australian Health Survey; the 5-item Questionnaire (K5) is used for data from the Australian Aboriginal and Torres Strait Islander Health Survey.
4. Rates for psychological distress by state are age standardised to the 2001 Australian standard population and should not be compared to non-standardised figures.

3-14 Cancer

Rationale for reporting

Data on cancer affliction and trends over time provide insight that can help monitor and support planning for the burden on the health service.

Measures Reported

1. Size of the cancer-affected population, expressed as percentage of adult population, by region and over time.
2. Demographic distribution of the cancer-affected population, expressed as percentage of adult population, by sex and age bands.
3. Socio-economic status distribution of the cancer-affected population, expressed as percentage of adult population by socio-economic status quintiles.

Source agencies

1. South Australian Monitoring and Surveillance System Online, SA Department of Health ('SAMSS')

Data sources and update frequency

1. SAMSS, Health Information Portal database, 'Management Reporting, Reports, Cancer disease prevalence (Age 18+)', updated annually

Time period

1. Calendar year, derived from monthly snapshot surveys

Definitions

1. *Socio-economic status* summarises a range of information about the economic and social conditions of people and households within an area. The measure used here is the Australian Bureau of Statistics' Socio-economic Index for Areas (SEIFA), Index of Relative Socio-economic Disadvantage (IRSD), under which lower scores indicate relatively greater disadvantage in general.
2. A *quintile* is one of five subsets of a population, providing information about the distribution of observations. Each quintile contains the same number of observations, dividing the population into five equal subsets.

Important caveats

1. Data from the South Australian Monitoring and Surveillance System (SAMSS) is based on a sample survey conducted monthly.
2. All sample surveys are subject to sampling and non-sampling error. Sampling error is a measure of the variability that occurs by chance because a sample, rather than the entire population, is surveyed. This can be expressed as a margin of error around the estimate. Non-sampling error may occur in any data collection, whether it is based on a sample or a full count such as a census. Sources of non-sampling error include non-response, errors in reporting by respondents or in recording of answers by interviewers, and occasional errors in coding and processing data.

3-15 Illicit drug use

Rationale for reporting

According to the Australian Institute of Health and Welfare, illicit drug use is a major risk factor for ill health and death. Understanding the extent to which drugs are being used for non-medical purposes can help to provide insight into healthcare burdens and equity in provision of necessary healthcare services and public health campaigns.

Measures Reported

1. Extent of illicit drug usage, expressed as percentage of population, overall and by sex, state, Aboriginal status and over time.
2. Popularity of illicit drugs, expressed as percentage of all illicit drug usage.

Source agencies

1. Australian Institute of Health and Welfare ('AIHW')

Data sources and update frequency

1. AIHW, *National Drug Strategy Household Survey detailed report*, Drug statistics series no. 28, Cat. no. PHE 183, updated every three years

Time period

1. Point in time; survey conducted from July to December 2013

Definitions

1. *Illicit drugs* means illegal drugs, drugs and volatile substances used illicitly, and pharmaceuticals used for non-medical purposes.
2. The term *national average* and similar terms are used to refer to Australia-wide figures and should not be interpreted as being the average of the figures for each individual state and territory.

Important caveats

1. All sample surveys are subject to sampling and non-sampling error. Sampling error is a measure of the variability that occurs by chance because a sample, rather than the entire population, is surveyed. This can be expressed as a margin of error around the estimate. Non-sampling error may occur in any data collection, whether it is based on a sample or a full count such as a census. Sources of non-sampling error include non-response, errors in reporting by respondents or in recording of answers by interviewers, and occasional errors in coding and processing data.

Chapter 4 Chronic conditions

4-1 Living with multiple chronic and long-term health conditions

Rationale for reporting

Understanding the extent to which the population is living with long-term or chronic conditions provides an insight into both the immediate and long-run burden on the health system and can help identify any inequalities between population subgroups.

Measures Reported

1. Size of population living with multiple chronic conditions, expressed as percentage of adult population, by region and over time.
2. Demographic distribution of the population living with multiple chronic conditions, expressed as percentage of adult population, by sex and 10-year age bands.
3. Socio-economic status distribution of the population living with multiple chronic conditions, expressed as percentage of adult population by socio-economic status quintiles.
4. Geographic distribution of the population living with multiple long-term health conditions, expressed as percentage of population, by state or territory.
5. Size of Aboriginal population living with multiple long-term health conditions, expressed as percentage of population, by state or territory.

Source agencies

1. South Australian Monitoring and Surveillance System Online, SA Department of Health ('SAMSS')
2. Australian Bureau of Statistics ('ABS')

Data sources and update frequency

1. SAMSS, Health Information Portal database, 'Management Reporting, Reports, Number chronic conditions (inc. mental health) (Age 18+)', updated annually
2. ABS, *National Health Survey: First Results*, cat. no. 4364.0.55.001, updated every three years
3. ABS, *Australian Aboriginal and Torres Strait Islander health survey: First results*, cat. no. 4727.0.55.001, update frequency irregular or not known

Time period

1. Calendar year, derived from monthly snapshot surveys
2. Point in time; survey conducted from July 2014 to June 2015
3. Point in time; survey conducted from April 2012 to February 2013

Definitions

1. *Socio-economic status* summarises a range of information about the economic and social conditions of people and households within an area. The measure used here is the Australian Bureau of Statistics' Socio-economic Index for Areas (SEIFA), Index of Relative Socio-economic Disadvantage (IRSD), under which lower scores indicate relatively greater disadvantage in general.
2. A *quintile* is one of five subsets of a population, providing information about the distribution of observations. Each quintile contains the same number of observations, dividing the population into five equal subsets.
3. Standardisation allows for valid comparisons between populations with differences in the variables which have been standardised. For instance, age-standardised figures mean that comparisons between states/territories or over time are not affected by differences in age structures in the different jurisdictions. However, standardised figures are not directly comparable with non-standardised figures or with those standardised by a different method.

4. A *chronic health condition* is any of: diabetes, asthma, cardiovascular disease, arthritis, osteoporosis or a mental health condition.
5. A *long-term health condition* is any medical condition (illness, injury or disability) which has lasted at least six months, or which the survey respondent expects to last for six months or more.

Important caveats

1. Data from the South Australian Monitoring and Surveillance System (SAMSS) is based on a sample survey conducted monthly.
2. All sample surveys are subject to sampling and non-sampling error. Sampling error is a measure of the variability that occurs by chance because a sample, rather than the entire population, is surveyed. This can be expressed as a margin of error around the estimate. Non-sampling error may occur in any data collection, whether it is based on a sample or a full count such as a census. Sources of non-sampling error include non-response, errors in reporting by respondents or in recording of answers by interviewers, and occasional errors in coding and processing data.
3. Proportions by state for living with multiple long-term health conditions are age standardised to the 2001 Australian standard population and should not be compared to non-standardised figures.

4-2 Arthritis prevalence

Rationale for reporting

Arthritis is a commonly occurring condition that can substantially affect people's quality of life. Understanding the extent of arthritis and differences in its prevalence across population subgroups provides insight into healthcare service needs and delivery planning.

Measures Reported

1. Size of population living with arthritis, expressed as percentage of adult population, by region and over time.
2. Demographic distribution of the population living with arthritis, expressed as percentage of adult population, by sex and 10-year age bands.
3. Socio-economic status distribution of the population living with arthritis, expressed as percentage of adult population by socio-economic status quintiles.
4. Geographic distribution of the population living with arthritis, expressed as percentage of population, by state or territory.
5. Size of the Aboriginal population living with arthritis, expressed as percentage of population, by state or territory.

Source agencies

1. South Australian Monitoring and Surveillance System Online, SA Department of Health ('SAMSS')
2. Australian Bureau of Statistics ('ABS')

Data sources and update frequency

1. SAMSS, Health Information Portal database, 'Management Reporting, Reports, Arthritis prevalence (Age 18+)', updated annually
2. ABS, *National Health Survey: First Results*, cat. no. 4364.0.55.001, updated every three years
3. ABS, *Australian Aboriginal and Torres Strait Islander health survey: First results*, cat. no. 4727.0.55.001, update frequency irregular or not known

Time period

1. Calendar year, derived from monthly snapshot surveys
2. Point in time; survey conducted from July 2014 to June 2015
3. Point in time; survey conducted from April 2012 to February 2013

Definitions

1. *Socio-economic status* summarises a range of information about the economic and social conditions of people and households within an area. The measure used here is the Australian Bureau of Statistics' Socio-economic Index for Areas (SEIFA), Index of Relative Socio-economic Disadvantage (IRSD), under which lower scores indicate relatively greater disadvantage in general.
2. A *quintile* is one of five subsets of a population, providing information about the distribution of observations. Each quintile contains the same number of observations, dividing the population into five equal subsets.
3. Standardisation allows for valid comparisons between populations with differences in the variables which have been standardised. For instance, age-standardised figures mean that comparisons between states/territories or over time are not affected by differences in age structures in the different jurisdictions. However, standardised figures are not directly comparable with non-standardised figures or with those standardised by a different method.
4. The term *national average* and similar terms are used to refer to Australia-wide figures and should not be interpreted as being the average of the figures for each individual state and territory.

Important caveats

1. Data from the South Australian Monitoring and Surveillance System (SAMSS) is based on a sample survey conducted monthly.
2. All sample surveys are subject to sampling and non-sampling error. Sampling error is a measure of the variability that occurs by chance because a sample, rather than the entire population, is surveyed. This can be expressed as a margin of error around the estimate. Non-sampling error may occur in any data collection, whether it is based on a sample or a full count such as a census. Sources of non-sampling error include non-response, errors in reporting by respondents or in recording of answers by interviewers, and occasional errors in coding and processing data.
3. Proportions by state for arthritis prevalence are age standardised to the 2001 Australian standard population and should not be compared to non-standardised figures.

4-3 Mental health conditions

Rationale for reporting

Mental health conditions are among the most important chronic conditions that can affect the health of the population. Data reported can help to identify healthcare service needs and inequalities in specialist health service provision and planning needs.

Measures Reported

1. Size of population living with mental health conditions, expressed as percentage of adult population, by region and over time.
2. Demographic distribution of the population living with mental health conditions, expressed as percentage of adult population, by sex and 10-year age bands.
3. Socio-economic status distribution of the population living with mental health conditions, expressed as percentage of adult population by socio-economic status quintiles.
4. Geographic distribution of the population living with mental or behavioural problems, expressed as percentage of population, by state or territory.
5. Size of the Aboriginal population living with mental health problems, expressed as percentage of population, by region.

Source agencies

1. South Australian Monitoring and Surveillance System Online, SA Department of Health ('SAMSS')
2. Australian Bureau of Statistics ('ABS')
3. Population Research and Outcome Studies, University of Adelaide ('PROS')

Data sources and update frequency

1. SAMSS, Health Information Portal database, 'Management Reporting, Reports, Mental Health-Doctor diagnosed (Age 18+)', updated annually
2. ABS, *National Health Survey: First Results*, cat. no. 4364.0.55.001, updated every three years
3. PROS, *South Australian Aboriginal health survey*, update frequency irregular or not known

Time period

1. Calendar year, derived from monthly snapshot surveys
2. Point in time; survey conducted from July 2014 to June 2015
3. Point in time; survey conducted during 2012

Definitions

1. *Socio-economic status* summarises a range of information about the economic and social conditions of people and households within an area. The measure used here is the Australian Bureau of Statistics' Socio-economic Index for Areas (SEIFA), Index of Relative Socio-economic Disadvantage (IRSD), under which lower scores indicate relatively greater disadvantage in general.
2. A *quintile* is one of five subsets of a population, providing information about the distribution of observations. Each quintile contains the same number of observations, dividing the population into five equal subsets.
3. Standardisation allows for valid comparisons between populations with differences in the variables which have been standardised. For instance, age-standardised figures mean that comparisons between states/territories or over time are not affected by differences in age structures in the different jurisdictions. However, standardised figures are not directly comparable with non-standardised figures or with those standardised by a different method.

Important caveats

1. Data from the South Australian Monitoring and Surveillance System (SAMSS) is based on a sample survey conducted monthly.
2. All sample surveys are subject to sampling and non-sampling error. Sampling error is a measure of the variability that occurs by chance because a sample, rather than the entire population, is surveyed. This can be expressed as a margin of error around the estimate. Non-sampling error may occur in any data collection, whether it is based on a sample or a full count such as a census. Sources of non-sampling error include non-response, errors in reporting by respondents or in recording of answers by interviewers, and occasional errors in coding and processing data.
3. Proportions by state for doctor-diagnosed mental and behavioural problems are age standardised to the 2001 Australian standard population and should not be compared to non-standardised figures.
4. Reported rates from the National Health Survey for long-term mental and behavioural problems are not comparable with rates reported from the previous survey (for 2011-12) or earlier owing to a change in collection methodology.

4-4 Asthma prevalence

Rationale for reporting

Asthma is a commonly occurring condition that can substantially affect people's quality of life. Understanding the extent of asthma and differences in its prevalence across population subgroups provides insight into healthcare service needs and delivery planning.

Measures Reported

1. Size of population living with asthma, expressed as percentage of adult population, by region and over time.
2. Demographic distribution of the population living with asthma, expressed as percentage of adult population, by sex and 10-year age bands.
3. Socio-economic status distribution of the population living with asthma, expressed as percentage of adult population by socio-economic status quintiles.
4. Geographic distribution of the population living with asthma, expressed as percentage of population, by state or territory.
5. Size of the Aboriginal population living with asthma, expressed as percentage of population, by state or territory.

Source agencies

1. South Australian Monitoring and Surveillance System Online, SA Department of Health ('SAMSS')
2. Australian Bureau of Statistics ('ABS')

Data sources and update frequency

1. SAMSS, Health Information Portal database, 'Management Reporting, Reports, Asthma prevalence (Age 18+)', updated annually
2. ABS, *National Health Survey: First Results*, cat. no. 4364.0.55.001, updated every three years
3. ABS, *Australian Aboriginal and Torres Strait Islander health survey: First results*, cat. no. 4727.0.55.001, update frequency irregular or not known

Time period

1. Calendar year, derived from monthly snapshot surveys
2. Point in time; survey conducted from July 2014 to June 2015
3. Point in time; survey conducted from April 2012 to February 2013

Definitions

1. *Socio-economic status* summarises a range of information about the economic and social conditions of people and households within an area. The measure used here is the Australian Bureau of Statistics' Socio-economic Index for Areas (SEIFA), Index of Relative Socio-economic Disadvantage (IRSD), under which lower scores indicate relatively greater disadvantage in general.
2. A *quintile* is one of five subsets of a population, providing information about the distribution of observations. Each quintile contains the same number of observations, dividing the population into five equal subsets.
3. Standardisation allows for valid comparisons between populations with differences in the variables which have been standardised. For instance, age-standardised figures mean that comparisons between states/territories or over time are not affected by differences in age structures in the different jurisdictions. However, standardised figures are not directly comparable with non-standardised figures or with those standardised by a different method.
4. The term *national average* and similar terms are used to refer to Australia-wide figures and should not be interpreted as being the average of the figures for each individual state and territory.

Important caveats

1. Data from the South Australian Monitoring and Surveillance System (SAMSS) is based on a sample survey conducted monthly.
2. All sample surveys are subject to sampling and non-sampling error. Sampling error is a measure of the variability that occurs by chance because a sample, rather than the entire population, is surveyed. This can be expressed as a margin of error around the estimate. Non-sampling error may occur in any data collection, whether it is based on a sample or a full count such as a census. Sources of non-sampling error include non-response, errors in reporting by respondents or in recording of answers by interviewers, and occasional errors in coding and processing data.
3. Proportions by state for asthma prevalence are age standardised to the 2001 Australian standard population and should not be compared to non-standardised figures.

4-5 Diabetes prevalence

Rationale for reporting

Diabetes is a commonly occurring condition that can substantially affect people's quality of life and is associated with other health conditions. Understanding the extent of diabetes and differences in its prevalence across population subgroups provides insight into healthcare service needs and delivery planning.

Measures Reported

1. Size of population living with diabetes, expressed as percentage of adult population, by region and over time.
2. Demographic distribution of the population living with diabetes, expressed as percentage of adult population, by sex and 10-year age bands.
3. Socio-economic status distribution of the population living with diabetes, expressed as percentage of adult population by socio-economic status quintiles.
4. Geographic distribution of the population diagnosed with diabetes, expressed as percentage of population, by state or territory.
5. Size of the Aboriginal population living with diabetes, expressed as percentage of population, by state or territory.

Source agencies

1. South Australian Monitoring and Surveillance System Online, SA Department of Health ('SAMSS')
2. Australian Bureau of Statistics ('ABS')

Data sources and update frequency

1. SAMSS, Health Information Portal database, 'Management Reporting, Reports, Diabetes prevalence (Age 18+)', updated annually
2. ABS, *National Health Survey: First Results*, cat. no. 4364.0.55.001, updated every three years
3. ABS, *Australian Aboriginal and Torres Strait Islander health survey: Updated results*, cat. no. 4727.0.55.006, update frequency irregular or not known

Time period

1. Calendar year, derived from monthly snapshot surveys
2. Point in time; survey conducted from July 2014 to June 2015
3. Point in time; survey conducted from April 2012 to February 2013

Definitions

1. *Socio-economic status* summarises a range of information about the economic and social conditions of people and households within an area. The measure used here is the Australian Bureau of Statistics' Socio-economic Index for Areas (SEIFA), Index of Relative Socio-economic Disadvantage (IRSD), under which lower scores indicate relatively greater disadvantage in general.
2. A *quintile* is one of five subsets of a population, providing information about the distribution of observations. Each quintile contains the same number of observations, dividing the population into five equal subsets.
3. Standardisation allows for valid comparisons between populations with differences in the variables which have been standardised. For instance, age-standardised figures mean that comparisons between states/territories or over time are not affected by differences in age structures in the different jurisdictions. However, standardised figures are not directly comparable with non-standardised figures or with those standardised by a different method.

Important caveats

1. Data from the South Australian Monitoring and Surveillance System (SAMSS) is based on a sample survey conducted monthly.
2. All sample surveys are subject to sampling and non-sampling error. Sampling error is a measure of the variability that occurs by chance because a sample, rather than the entire population, is surveyed. This can be expressed as a margin of error around the estimate. Non-sampling error may occur in any data collection, whether it is based on a sample or a full count such as a census. Sources of non-sampling error include non-response, errors in reporting by respondents or in recording of answers by interviewers, and occasional errors in coding and processing data.
3. Proportions by state for diabetes prevalence are age standardised to the 2001 Australian standard population and should not be compared to non-standardised figures.
4. Reported rates from the National Health Survey for diabetes prevalence include people who reported they had diabetes but that it was not current at the time of interview. This is different from the definition used for previous releases of the survey data and so these rates are not comparable with rates published in previous editions of *State of Our Health*.

4-6 Cardiovascular disease prevalence

Rationale for reporting

Being a common condition that can have substantial healthcare needs, understanding the extent to which cardiovascular disease affects the population is important for monitoring and understanding healthcare service provisions and likely future needs.

Measures Reported

1. Size of population living with cardiovascular disease, expressed as percentage of adult population, by region and over time.
2. Demographic distribution of the population living with cardiovascular disease, expressed as percentage of adult population, by sex and 10-year age bands.
3. Socio-economic status distribution of the population living with cardiovascular disease, expressed as percentage of adult population by socio-economic status quintiles.
4. Geographic distribution of the population diagnosed with cardiovascular disease, expressed as percentage of population, by state or territory.
5. Size of the Aboriginal population living with cardiovascular disease, expressed as percentage of population, by state or territory.

Source agencies

1. South Australian Monitoring and Surveillance System Online, SA Department of Health ('SAMSS')
2. Australian Bureau of Statistics ('ABS')

Data sources and update frequency

1. SAMSS, Health Information Portal database, 'Management Reporting, Reports, Diabetes prevalence (Age 18+)', updated annually
2. ABS, *National Health Survey: First Results*, cat. no. 4364.0.55.001, updated every three years
3. ABS, *Australian Aboriginal and Torres Strait Islander health survey: Updated results*, cat. no. 4727.0.55.006, update frequency irregular or not known

Time period

1. Calendar year, derived from monthly snapshot surveys
2. Point in time; survey conducted from July 2014 to June 2015
3. Point in time; survey conducted from April 2012 to February 2013

Definitions

1. *Socio-economic status* summarises a range of information about the economic and social conditions of people and households within an area. The measure used here is the Australian Bureau of Statistics' Socio-economic Index for Areas (SEIFA), Index of Relative Socio-economic Disadvantage (IRSD), under which lower scores indicate relatively greater disadvantage in general.
2. A *quintile* is one of five subsets of a population, providing information about the distribution of observations. Each quintile contains the same number of observations, dividing the population into five equal subsets.
3. Standardisation allows for valid comparisons between populations with differences in the variables which have been standardised. For instance, age-standardised figures mean that comparisons between states/territories or over time are not affected by differences in age structures in the different jurisdictions. However, standardised figures are not directly comparable with non-standardised figures or with those standardised by a different method.
4. The term *national average* and similar terms are used to refer to Australia-wide figures and should not be interpreted as being the average of the figures for each individual state and territory.

Important caveats

1. Data from the South Australian Monitoring and Surveillance System (SAMSS) is based on a sample survey conducted monthly.
2. All sample surveys are subject to sampling and non-sampling error. Sampling error is a measure of the variability that occurs by chance because a sample, rather than the entire population, is surveyed. This can be expressed as a margin of error around the estimate. Non-sampling error may occur in any data collection, whether it is based on a sample or a full count such as a census. Sources of non-sampling error include non-response, errors in reporting by respondents or in recording of answers by interviewers, and occasional errors in coding and processing data.
3. Proportions by state for cardiovascular disease prevalence are age standardised to the 2001 Australian standard population and should not be compared to non-standardised figures.
4. Reported rates from the National Health Survey for cardiovascular disease prevalence cover the noted circulatory conditions that are current and long-term (lasted or expected to last six months or more) as well as, in a change from previous such surveys, people who reported having ischaemic heart diseases and cerebrovascular diseases that were not current and long-term at the time of interview. Because of the definitional change, rates should not be compared with those previously derived from the 2011-12 and earlier editions of the source publication.

4-7 Osteoporosis prevalence

Rationale for reporting

Data on the prevalence of osteoporosis provides insight into population systemic health needs and inequalities in service provision requirements.

Measures Reported

1. Size of population living with osteoporosis, expressed as percentage of adult population, by region and over time.
2. Demographic distribution of the population living with osteoporosis, expressed as percentage of adult population, by sex and 10-year age bands.
3. Socio-economic status distribution of the population living with osteoporosis, expressed as percentage of adult population by socio-economic status quintiles.
4. Geographic distribution of the population living with osteoporosis, expressed as percentage of population, by state or territory.
5. Size of the Aboriginal population living with osteoporosis, expressed as percentage of population, by state or territory.

Source agencies

1. South Australian Monitoring and Surveillance System Online, SA Department of Health ('SAMSS')
2. Australian Bureau of Statistics ('ABS')

Data sources and update frequency

1. SAMSS, Health Information Portal database, 'Management Reporting, Reports, Osteoporosis prevalence (Age 18+)', updated annually
2. ABS, *National Health Survey: First Results*, cat. no. 4364.0.55.001, updated every three years
3. ABS, *Australian Aboriginal and Torres Strait Islander health survey: First results*, cat. no. 4727.0.55.001, update frequency irregular or not known

Time period

1. Calendar year, derived from monthly snapshot surveys
2. Point in time; survey conducted from July 2014 to June 2015
3. Point in time; survey conducted from April 2012 to February 2013

Definitions

1. *Socio-economic status* summarises a range of information about the economic and social conditions of people and households within an area. The measure used here is the Australian Bureau of Statistics' Socio-economic Index for Areas (SEIFA), Index of Relative Socio-economic Disadvantage (IRSD), under which lower scores indicate relatively greater disadvantage in general.
2. A *quintile* is one of five subsets of a population, providing information about the distribution of observations. Each quintile contains the same number of observations, dividing the population into five equal subsets.
3. Standardisation allows for valid comparisons between populations with differences in the variables which have been standardised. For instance, age-standardised figures mean that comparisons between states/territories or over time are not affected by differences in age structures in the different jurisdictions. However, standardised figures are not directly comparable with non-standardised figures or with those standardised by a different method.
4. For statistics calculated from population samples, the *standard error* is a commonly used statistical measure of the sampling error, i.e., the random variation in point estimates that inherently arise from their being calculated from samples rather than from the whole population.

5. *Relative standard error* (RSE) is the *standard error* expressed as a fraction – typically a percentage – of the reported statistic (which is the point estimate of the true population value). Larger RSEs broadly indicate larger uncertainty in point estimates.
6. The term *national average* and similar terms are used to refer to Australia-wide figures and should not be interpreted as being the average of the figures for each individual state and territory.

Important caveats

1. Data from the South Australian Monitoring and Surveillance System (SAMSS) is based on a sample survey conducted monthly.
2. All sample surveys are subject to sampling and non-sampling error. Sampling error is a measure of the variability that occurs by chance because a sample, rather than the entire population, is surveyed. This can be expressed as a margin of error around the estimate. Non-sampling error may occur in any data collection, whether it is based on a sample or a full count such as a census. Sources of non-sampling error include non-response, errors in reporting by respondents or in recording of answers by interviewers, and occasional errors in coding and processing data.
3. Proportions by state for osteoporosis prevalence are age standardised to the 2001 Australian standard population and should not be compared to non-standardised figures.
4. Proportions by state for osteoporosis prevalence in the Aboriginal populations are subject to substantial uncertainty arising from sampling error which may affect the validity of comparisons between the states/territories.

4-8 Chronic bronchitis or emphysema prevalence

Rationale for reporting

Bronchitis and emphysema are common long-term conditions that can substantially affect people's quality of life and may indicate ancillary healthcare needs. Understanding the prevalence of these conditions and differences across population subgroups provides insight into healthcare service needs and delivery planning.

Measures Reported

1. Size of population living with chronic bronchitis or emphysema, expressed as percentage of population by state or territory.

Source agencies

1. Australian Bureau of Statistics ('ABS')

Data sources and update frequency

1. ABS, *National Health Survey: First Results*, cat. no. 4364.0.55.001, updated every three years

Time period

1. Point in time; survey conducted from July 2014 to June 2015

Definitions

1. Standardisation allows for valid comparisons between populations with differences in the variables which have been standardised. For instance, age-standardised figures mean that comparisons between states/territories or over time are not affected by differences in age structures in the different jurisdictions. However, standardised figures are not directly comparable with non-standardised figures or with those standardised by a different method.

Important caveats

1. All sample surveys are subject to sampling and non-sampling error. Sampling error is a measure of the variability that occurs by chance because a sample, rather than the entire population, is surveyed. This can be expressed as a margin of error around the estimate. Non-sampling error may occur in any data collection, whether it is based on a sample or a full count such as a census. Sources of non-sampling error include non-response, errors in reporting by respondents or in recording of answers by interviewers, and occasional errors in coding and processing data.
2. Proportions by state are age standardised to the 2001 Australian standard population and should not be compared to non-standardised figures.

4-9 Back pain prevalence

Rationale for reporting

Back pain and related conditions are common long-term health issues that can substantially affect people's quality of life and may indicate ancillary healthcare needs. Understanding the prevalence of these conditions and differences across population subgroups provides insight into healthcare service needs and delivery planning.

Measures Reported

1. Size of population living with back pain or certain related conditions, expressed as percentage of population by state or territory.

Source agencies

1. Australian Bureau of Statistics ('ABS')

Data sources and update frequency

1. ABS, *National Health Survey: First Results*, cat. no. 4364.0.55.001, updated every three years

Time period

1. Point in time; survey conducted from July 2014 to June 2015

Definitions

1. Standardisation allows for valid comparisons between populations with differences in the variables which have been standardised. For instance, age-standardised figures mean that comparisons between states/territories or over time are not affected by differences in age structures in the different jurisdictions. However, standardised figures are not directly comparable with non-standardised figures or with those standardised by a different method.

Important caveats

1. All sample surveys are subject to sampling and non-sampling error. Sampling error is a measure of the variability that occurs by chance because a sample, rather than the entire population, is surveyed. This can be expressed as a margin of error around the estimate. Non-sampling error may occur in any data collection, whether it is based on a sample or a full count such as a census. Sources of non-sampling error include non-response, errors in reporting by respondents or in recording of answers by interviewers, and occasional errors in coding and processing data.
2. Proportions by state are age standardised to the 2001 Australian standard population and should not be compared to non-standardised figures.
3. Proportions by state for back pain are not comparable to previous years owing to changes in the definition in the underlying data; rates cited in previous editions of *State of Our Health* may also have been incorrect as the ABS has advised that they identified an issue during processing of the latest data which may have resulted in undercounts in 2011-12 data.

Chapter 5 End of life

5-1 Death rate

Rationale for reporting

Death rates are an important component in determining changes in our population, understanding which is necessary for planning and delivering health services.

Measures Reported

1. Deaths, expressed as number of people who died.
2. Death rate, expressed as number of deaths per 1,000 population, by region, state, Aboriginal status and over time.

Source agencies

1. Australian Bureau of Statistics ('ABS')
2. Productivity Commission, Government of Australia ('PCOM')

Data sources and update frequency

1. ABS, *Deaths, Australia*, cat. no. 3302.0, updated annually
2. PCOM, Volume E: Health, *Report on Government Services*, updated annually

Time period

1. Calendar year
2. Five-year period

Definitions

1. Standardisation allows for valid comparisons between populations with differences in the variables which have been standardised. For instance, age-standardised figures mean that comparisons between states/territories or over time are not affected by differences in age structures in the different jurisdictions. However, standardised figures are not directly comparable with non-standardised figures or with those standardised by a different method.

Important caveats

1. In section 5-1-1, death rates for 2014 use preliminary estimated resident population figures for 30 June 2014 and may be subject to revision.
2. Death rates are age standardised and are expressed as deaths per 1,000 standard population. Figures in section 5-1-1 are average standardised death rates calculated using data for the three years ending in the reference year. Figures in section 5-1-2 are for a five-year period owing to the volatility of the small numbers involved.
3. Death rates for Aboriginal people are likely to be underestimates owing to inaccuracies in the identification of people as being Aboriginal; rates exclude deaths where Indigenous status is recorded as 'not stated'.

5-2 Median age at death

Rationale for reporting

Monitoring differences in age at death between population subgroups can expose inequalities in health service provision and need; changes over time in age at death reveal long-term health performance trends and assist in identifying future service needs.

Measures Reported

1. Average age of the population at death, expressed as median years of age, by region, state, sex, and over time.

Source agencies

1. Australian Bureau of Statistics ('ABS')

Data sources and update frequency

1. ABS, *Deaths, Australia*, cat. no. 3302.0, updated annually

Time period

1. Calendar year

Definitions

1. The *median* is a commonly used measure of central tendency, like the average. The median, or 50th percentile, is the exact midpoint of a distribution, the number at which half the observations are smaller and the other half are larger. The median is less susceptible than the average to the influence of particularly large or small observations (outliers) in the dataset.

5-3 Perinatal deaths

Rationale for reporting

The rate of perinatal deaths can expose information affecting the need for and provision of maternal and early childhood health, including any inequalities between population subgroups.

Measures Reported

1. Perinatal deaths, expressed as number of perinatal deaths per 1,000 of all births, by state, Aboriginal status, and over time.

Source agencies

1. Australian Bureau of Statistics ('ABS')

Data sources and update frequency

1. ABS, *Causes of death, Australia*, cat. no. 3303.0, updated annually

Time period

1. Calendar year
2. Five-year period

Definitions

1. The term *national average* and similar terms are used to refer to Australia-wide figures and should not be interpreted as being the average of the figures for each individual state and territory.

Important caveats

1. Perinatal death rates covering the most recent two years are based on preliminary and revised data and may be subject to further revision.
2. Aboriginal perinatal death rates are likely to be underestimates owing to inaccuracies in the identification of people as being Aboriginal; rates exclude deaths where Indigenous status is recorded as 'not stated'.

5-4 Infant mortality

Rationale for reporting

Information on infant deaths can expose information affecting the need for and provision of early childhood health, including any inequalities between population subgroups.

Measures Reported

1. Deaths of people under one year of age, expressed as numbers of deaths per 1,000 live births, by state, Aboriginal status and over time.

Source agencies

1. Australian Bureau of Statistics ('ABS')

Data sources and update frequency

1. ABS, *Deaths, Australia*, cat. no. 3302.0, updated annually

Time period

1. Calendar year
2. Three-year period

Definitions

1. The term *national average* and similar terms are used to refer to Australia-wide figures and should not be interpreted as being the average of the figures for each individual state and territory.

Important caveats

1. In section 5-4-1, mortality rates for 2014 have been calculated using preliminary estimated resident population figures for 30 June 2014 and may be subject to revision.
2. Mortality rates for Aboriginal people are likely to be underestimates owing to inaccuracies in the identification of people as being Aboriginal and because of lags in registrations of deaths; rates exclude deaths where Indigenous status is recorded as 'not stated'. As a result, changes between years may also not be completely comparable. Volatility over time in infant mortality rates is partially due to the relatively small number of infant deaths registered.
3. Mortality rates for Aboriginal people are averaged over a three year period owing to the small numbers involved.

5-5 Leading causes of death by age group in South Australia

Rationale for reporting

Knowing the most common causes of death provides valuable insight into end-of-life care needs and healthcare service requirements in later life.

Measures Reported

1. Deaths, expressed as deaths per 100,000 population, by cause of death and sex.
2. Deaths of people under one year of age, expressed as deaths per 1,000 live births, by cause of death and sex.
3. Deaths of people aged one year or over, expressed as deaths per 100,000 population, by cause of death, sex and 10-year age bands.

Source agencies

1. Australian Bureau of Statistics ('ABS')

Data sources and update frequency

1. ABS, *Causes of Death, Australia*, cat. no. 3303.0, updated annually

Time period

1. Calendar year

Definitions

1. The *ICD-10* is the 10th revision of the International Classification of Diseases, a global standard endorsed by the World Health Organisation for the structured classification of diseases and other health problems.

Important caveats

1. Death rates are shown for causes of death which are among the ten causes of death (by two-character ICD-10 code) with the largest number of deaths in Australia.
2. The number of deaths attributed to intentional self-harm for 2014 is expected to increase as data is revised.

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