# 8 Healthy lives

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| Strategic areas for action |
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| Governance and leadership and culture |  | Early child development |  | Education and training |  | Healthy lives |  | Economic participation |  | Home environment |  | Safe and supportive communities |
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| 8.1 Access to primary health care8.2 Potentially preventable hospitalisations8.3 Potentially avoidable deaths8.4 Tobacco consumption and harm | 8.5 Obesity and nutrition8.6 Oral health8.7 Mental health8.8 Suicide and self-harm |
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Health outcomes directly affect the quality of people’s lives, including their ability to socialise with family and friends, to participate in the community and to work and earn an income. Physical health outcomes are related to a number of factors, including a healthy living environment, access to and use of health services, and lifestyle choices. Health risk behaviours, such as smoking and poor diet, are strongly associated with many aspects of socioeconomic disadvantage. Mental health issues are related to a complex range of medical issues, historical factors, the stressors associated with entrenched disadvantage and drug and substance misuse.

In May 2014, the Australian Government announced that an implementation plan for the *National Aboriginal and Torres Strait Islander Health Plan* will be developed by the end of 2014, which will outline the Commonwealth’s blueprint for coordinated effort to improve health outcomes (Nash 2014).

The following indicators are included in the ‘Healthy lives’ strategic area:

* access to primary health care (section 8.1) — the first point of contact with the health system enables prevention, early intervention, case management and ongoing care. It can also help address health risk behaviours
* potentially preventable hospitalisations (section 8.2) — many hospital admissions could be prevented if more effective non-hospital care were available, either at an earlier stage in disease progression or as an alternative to hospital care. Hospitalisations for injury and poisoning may also be preventable, although not necessarily through better primary health care
* potentially avoidable deaths (section 8.3) — some deaths could be prevented if effective public health, medical and other interventions were available
* tobacco consumption and harm(section 8.4) — tobacco consumption is a significant contributor to premature death and ill health. In addition tobacco consumption can divert scarce family resources
* obesity and nutrition (section 8.5) — obesity and poor nutrition are significant contributors to poor health outcomes
* oral health (section 8.5) — healthy teeth are important for overall health. Historically, Aboriginal and Torres Strait Islander Australians had less tooth decay, due to a traditional diet. Current levels of oral health reflect changed diet, dental hygiene and access to dental services
* mental health (section 8.7) — mental health plays an important role in social and emotional wellbeing. Mental health is considered to include not only mental illness but the overall mental wellbeing of an individual, with the latter influenced by a range of factors including domestic violence, substance misuse, imprisonment and family breakdown
* suicide and self-harm (section 8.8) — suicide and self-harm cause great grief. Studies suggest that Aboriginal and Torres Strait Islander suicide is influenced by a complex set of factors relating to history of dispossession, removal from family, discrimination, resilience, social capital and socio-economic status.

Several COAG targets and headline indicators reflect the importance of healthy lives:

* life expectancy (section 4.1)
* young child mortality (section 4.2)
* disability and chronic disease (section 4.8).

Other headline indicators can be directly influenced by health outcomes:

* employment (section 4.6)
* household and individual income (section 4.9).

Outcomes in the healthy lives area can be affected by outcomes in all other strategic areas, and can influence outcomes in other areas.

#### Attachment tables

Attachment tables for this chapter are identified in references throughout this chapter by an ‘A’ suffix (for example, table 8A.1.1). These tables can be found on the Review web page (www.pc.gov.au/gsp), or users can contact the Secretariat directly.

### References

Nash, F.A.M. for H. 2014, *National Indigenous Health Plan to Focus on Outcomes*, Australian Government Department of Health, http://www.health.gov.au/internet/ministers/publishing.nsf/ Content/health-mediarel-yr2014-nash023.htm (accessed 10 June 2014).

## 8.1 Access to primary health care[[1]](#footnote-1)

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| Box 8.1.1 Key messages |
| * In 2012-13, 39.3 per cent of Aboriginal and Torres Strait Islander Australians aged 15 years and over reported their health status as excellent or very good. This was a decrease from 43.7 per cent in 2008 (table 8A.1.1).
* In 2012-13, a smaller proportion of Aboriginal and Torres Strait Islander adults reported not seeing a GP/specialist in the previous 12 months (13.6 per cent) compared with 2001 (19.4 per cent). The decrease was largest in remote areas (from 30.2 per cent to 15.6 per cent) (tables 8A.1.15-16). For those that did not consult a GP/specialist when they had a health-related problem, around half (49.6 per cent) cited ‘personal reasons’ (table 8A.1.17).
* In 2012-13, almost 2 in 5 Aboriginal and Torres Strait Islander Australians aged 2 years and over either had not consulted in a dentist in the previous two years (26.6 per cent) or had never consulted a dentist (13.9 per cent). In remote areas, 21.0 per cent reported never having consulted a dentist (table 8A.1.18). For those that did not consult a dentist when they had an oral health-related problem, the most commonly reported reason nationally was ‘cost’ (45.6 per cent). In remote areas, the most common reason was ‘logistical’ (55.5 per cent) (table 8A.1.20).
* While Aboriginal and Torres Strait Islander Australians make up around 3 per cent of the Australian population, they make up only 1.3 per cent of the health workforce (table 8A.1.45).
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| Box 8.1.2 Measures of access to primary health care |
| Access to healthcare is a complex concept, involving sufficient supply of services, and the ability to utilise available services (which may be influenced by affordability, physical accessibility and acceptability of the services). There is no single measure of access that encompasses all these aspects. Five proxy measures are reported.* *Self-assessed health status* is defined as the proportion of the population aged 15 years and over reporting their health status as very good or excellent (all jurisdictions; age; sex; remoteness; selected characteristics).
* *Aboriginal and Torres Strait Islander Australians use of primary health care services* is defined as the proportion of the population aged 18 years and over (for GP/specialist) and 2 years and over (dentist) not visiting a GP/specialist/dentist when they had a health problem (national; remoteness).
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| Box 8.1.2 (continued) |
| The most recent data for self-assessed health status and use of primary health care services are sourced from the ABS Australian Aboriginal and Torres Strait Islander Health Survey (AATSIHS)/National Aboriginal and Torres Strait Islander Social Survey (NATSISS), with the most recent data available for 2012-13. Data for the non‑Indigenous population are sourced from the ABS Australian Health Survey (AHS)/National Health Survey (NHS), with data for 2011-12. AATSIHS and AHS data are presented together as covering the overall time period 2011–13. * *Immunisation* rates is defined as vaccination coverage rates for selected diseases for children (reported at 1, 2 and 5 years of age) and adult immunisation rates for those aged 50 years and over. Data for children are derived from the Australian Childhood Immunisation Register (ACIR), with the most recent data for 2013 (all jurisdictions; age).

Data for Aboriginal and Torres Strait Islander adults are available from the 2012-13 AATSIHS (national; age). Data are not available for non-Indigenous adults.* *Expenditure on health care services* is defined as total recurrent health expenditure and per person expenditure on primary and secondary/tertiary health care. Expenditure refers to funding from multiple government and non-government sources, including private health insurance. Data are sourced from the AIHW Expenditure on Health for Aboriginal and Torres Strait Islander peoples 2010-11 publication (national).
* *Aboriginal and Torres Strait Islander health workforce* is defined as the proportion of Aboriginal and Torres Strait Islander people aged 15 years and over employed in a health related occupation. Data for this report are sourced from the ABS Census of Population and Housing (the Census), with the most recent data for 2011 (national).
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Access to primary health care services influences health status by detecting and treating illness, managing chronic conditions and providing prevention programs. Primary health care can affect outcomes in a range of headline indicators and strategic areas for action, including life expectancy (section 4.1), child mortality (section 4.2) and disability and chronic disease (section 4.8). Poor health can also affect people’s educational attainment (section 4.5) and ability to work (section 4.6). Section 5.3 (engagement with services) examines Aboriginal and Torres Strait Islander Australian’s access to a range of services and some of the access barriers they may face.

Health services can be divided into primary services (which include public and community health services, Aboriginal and Torres Strait Islander Community Controlled Primary Health Care Services, general practitioner consultations, hospital emergency attendances, general practitioner ordered investigations and prescriptions, and over the counter medicines) and secondary/tertiary services (which involve a referral within the health system or a hospital admission). Primary health care services can reduce the need for secondary/tertiary services (section 8.2 reports on hospitalisations that may be potentially preventable with appropriate primary care.)

Due to their poorer health, Aboriginal and Torres Strait Islander Australians could be expected to utilise health services at a much higher rate than non-Indigenous Australians, but available data suggest that Aboriginal and Torres Strait Islander utilisation is only marginally higher (AHMAC 2012; Deeble 2009). Lack of services, lack of affordability and lack of social/cultural acceptability of services are all potential barriers to Aboriginal and Torres Strait Islander Australians accessing primary health care (Ware 2013). Institutional and cultural barriers may also lead to adverse health outcomes (Paradies, Harris and Anderson 2008). Section 5.1 includes data on Aboriginal and Torres Strait Islander perceptions of discrimination based on their Indigenous status.

### Self-assessed health status

In 2012-13, 39.3 per cent of Aboriginal and Torres Strait Islander Australians aged 15 years and over reported their health status as excellent or very good, a decrease from 43.7 per cent in 2008 and 43 per cent in 2004-05 (table 8A.1.1). The decrease was similar for males and females (table 8A.1.3) and for people in remote and non‑remote areas
(table 8A.1.9).

In 2011–13, after adjusting for differences in population age structures, a lower proportion of Aboriginal and Torres Strait Islander Australians reported their health as excellent or very good, compared with non-Indigenous Australians — a gap of around 22 percentage points (similar to the gap in 2008 and 2004-05). The proportion of people reporting their health status as excellent or very good decreased with age for both Aboriginal and Torres Strait Islander Australians and non-Indigenous Australians (table 8A.1.1).

In 2011–13, age-adjusted reported health status for both Aboriginal and Torres Strait Islander Australians and non‑Indigenous Australians varied according to a range of socioeconomic characteristics. The proportion of people aged 15 years and over rating their health status as excellent or very good was higher for those:

* with a highest year of schooling of year 12, compared with year 9 (16.1 percentage points higher for Aboriginal and Torres Strait Islander Australians and 24.9 percentage points higher for non-Indigenous Australians)
* in the highest income quintile compared with the lowest income quintile (14.0 percentage points higher for Aboriginal and Torres Strait Islander Australians and 22.8 percentage points higher for non-Indigenous Australians) (table 8A.1.10).

Data on health status of Aboriginal and Torres Strait Islander Australians aged 15 years and over are also reported by State and Territory (tables 8A.1.5 and 8A.1.11) and by selected population characteristics (table 8A.1.10).

Data on health status of Aboriginal and Torres Strait Islander children aged
0–14 years as reported by the survey respondent are available for 2008 (tables 8A.1.2 and 8A.1.8). No new data were available for this report.

### Aboriginal and Torres Strait Islander Australian’s use of primary health care services

The following section compares the use of different primary health care services by Aboriginal and Torres Strait Islander Australians in non-remote and remote areas. Data are not available for non-Indigenous Australians for the current period.

Survey data reported below asked people how long it had been since they had last consulted a GP/specialist or dentist, regardless of whether they had a health-related problem. Reasons for not consulting were only asked of people who identified that they had a health problem but had not consulted a GP/specialist or dentist in the previous 12 months.

#### GP/specialist

In 2012-13, around one in seven (13.6 per cent) of Aboriginal and Torres Strait Islander Australians aged 18 years and over had not consulted a GP/specialist in the previous 12 months — a decrease from 20.6 per cent in 2004-05 and 19.4 per cent in 2001 (table 8A.1.15). The decrease was greatest in remote areas, with the proportion almost halving from 30.2 per cent in 2001 to 15.6 per cent in 2012-13 (table 8A.1.15).

Aboriginal and Torres Strait Islander Australians reported a variety of reasons for not visiting a GP when they had a health problem. In 2012-13, ‘personal reasons’[[2]](#footnote-2) were most commonly reported (49.6 per cent), followed by ‘logistical reasons’ (33.9 per cent) and ‘decided not to seek care’ (33.7 per cent) (table 8A.1.17). ‘Personal reasons’ were also the most commonly reported reason in 2004-05 (39.5 per cent) but the proportion was significantly higher in 2012-13 (table 8A.1.17).

AIHW research indicates that Aboriginal and Torres Strait Islander Australians’ access to GPs relative to need decreases with remoteness, as a result of both decreased physical access to GPs and increased predicted need for primary health care. The decrease in access relative to need by remoteness was less pronounced for non-Indigenous Australians (AIHW 2014a).

#### Dentist

In 2012-13, just over a quarter (26.6 per cent) of Aboriginal and Torres Strait Islander Australians aged 2 years and over reported not having visited a dentist in the previous two years, and a further 13.9 per cent reported never having visited a dentist. The proportion who had never visited a dentist was higher for those in remote areas
(21.0 per cent) than for those in non‑remote areas (11.9 per cent) (tables 8A.1.18‑19).

In 2012-13, the most commonly reported reason for not going to a dentist in the previous 12 months when they had an oral health-related problem was ‘cost’ (45.6 per cent), followed by ‘personal reasons’ (43.3 per cent) and ‘logistical reasons’ (32.9 per cent). In remote areas, ‘logistical reasons’ (55.5 per cent) were most commonly reported, while ‘cost’ (49.2 per cent) was the most commonly reported reason in non-remote areas (table 8A.1.20). Nationally, the proportion of people reporting ‘cost’ as a reason increased from 30.0 per cent in 2004-05 to 45.6 per cent in 2012-13 (table 8A.1.20).

Data on reasons for not going to ‘other health professionals’ by remoteness are available in table 8A.1.20 (for 2004-05 and 2012-13). Data on health services usually used by Aboriginal and Torres Strait Islander children aged 0–14 years are available in tables 8A.1.22–24 (for 2008 only — no new data available).

### Immunisation rates

Immunisation is effective in preventing sickness and death from vaccine preventable diseases. The Australian Childhood Immunisation Register (ACIR) assesses children for immunisation coverage at 12–15 months, 24–27 months and 60–63 months, by Indigenous status, for all jurisdictions. Nationally in 2013, the overall vaccination coverage rate for one year old Aboriginal and Torres Strait Islander children (86.1 per cent) was slightly lower than for other children of the same age (90.3 per cent). For children aged two years and five years, overall vaccination coverage rates were within one percentage point for Aboriginal and Torres Strait Islander children and other children (table 8A.1.25).

Time series data for childhood immunisation rates are available for NSW, Victoria, WA, SA and the NT. (Data from the ACT, Queensland and Tasmania were not available prior to 2008 due to data quality issues with reporting of Indigenous identification.) For available jurisdictions, the largest increase in vaccination coverage rates occurred for 5 year olds, with the proportion increasing for Aboriginal and Torres Strait Islander children from 75.9 per cent in 2008 to 92.3 per cent in 2013, and for other children from 78.8 per cent in 2008 to 91.7 per cent in 2013 (table 8A.1.25). Childhood immunisation data reported by State and Territory are available in tables 8A.1.30–41.

Vaccination against influenza and pneumonia is recommended for Aboriginal and Torres Strait Islander Australians aged 50 years and over and non-Indigenous Australians aged 65 years and over. No new data are available on vaccination rates for non-Indigenous adults, but in 2012-13, for Aboriginal and Torres Strait Islander Australians aged 50 years and over:

* 56.8 per cent reported being vaccinated against influenza in the previous 12 months
* 28.5 per cent reported being vaccinated against pneumococcus in the last five years (a decrease from 34 per cent in 2004-05) (tables 8A.1.42; AIHW 2013a).

Data on immunisation rates for Aboriginal and Torres Strait Islander Australians aged 50 years and over are also available by age in table 8A.1.42.

### Expenditure on health care services

Expenditure per person on health services provides an indication of the relative use of health care services by Aboriginal and Torres Strait Islander Australians and non‑Indigenous Australians. Comparisons of expenditure require consideration of relative need. For example, chronic diseases are expensive to treat, and Aboriginal and Torres Strait Islander Australians have higher rates of chronic disease than non-Indigenous Australians (AIHW 2014b). Section 4.8 includes information on rates of chronic disease.

The Australian Government (44.8 per cent) and the State and Territory governments (46.6 per cent) combined funded 91.4 per cent of the total health expenditure for Aboriginal and Torres Strait Islander Australians in 2010-11. For non-Indigenous Australians, the Australian Government (44.5 per cent) and the State and Territory governments (23.7 per cent) funded 68.1 per cent of the total health expenditure (AIHW 2013b).

Per person expenditure on Aboriginal and Torres Strait Islander Australians is significantly higher in remote areas than in non‑remote areas, while per person expenditure for non‑Indigenous Australians in remote areas is only slightly higher than expenditure in non‑remote areas. This suggests that patient-level factors are a major determinant of health expenditure in remote areas (rather than the cost of delivering services) (AIHW 2013b).

AIHW *Expenditures on Health for Aboriginal and Torres Strait Islander Peoples 2010‑11* disaggregates expenditure by primary and secondary/tertiary[[3]](#footnote-3) health expenditure (AIHW 2013b).[[4]](#footnote-4) Caution should be used in interpreting these estimates, due to issues around incomplete recording of Indigenous status and limitations of financial recording systems (AIHW 2013b).

For 2010-11, total expenditure on health care from government and non-government sources (including insurance) for Aboriginal and Torres Strait Islander Australians:

* was $7995 per person, compared with $5437 per non‑Indigenous Australian (table 8A.1.43). This expenditure was highest on hospitals for both Aboriginal and Torres Strait Islander Australians ($3826 per person) and non-Indigenous Australians ($2169 per person), followed by community health services for Aboriginal and Torres Strait Islander Australians ($1967 per person) and medical services for non‑Indigenous Australians ($1011 per person) (table 8A.1.43).
* for primary health services was $3602 per person, compared with $2447 per non‑Indigenous Australian (table 8A.1.44). Across primary health services, expenditure per person was highest on community health services ($1967) for Aboriginal and Torres Strait Islander Australians, followed by medical services ($406). For non‑Indigenous Australians, primary health expenditure per person was highest for medications ($751) followed by medical services ($626) (table 8A.1.44). Comparative information on secondary/tertiary health services is in table 8A.1.44.

### The Aboriginal and Torres Strait Islander health workforce

Due to cultural differences, language barriers and racism experienced when accessing some mainstream health services, some Aboriginal and Torres Strait Islander Australians feel more comfortable seeing Aboriginal and Torres Strait Islander health professionals and accessing Aboriginal Community Controlled Health services. However, although Aboriginal and Torres Strait Islander Australians make up around 3 per cent of the Australian population (ABS 2013), Census data show that Aboriginal and Torres Strait Islander Australians represent only 1.3 per cent of people working in health-related occupations. For some occupations this proportion is even lower (for example, registered nurses — 0.8 per cent, general medical practitioners — 0.3 per cent, and dental practitioners — 0.2 per cent) (table 8A.1.45). As many Aboriginal and Torres Strait Islander Australians needing health care will be treated by non‑Indigenous health professionals, it is important that non‑Indigenous health professionals treating Aboriginal and Torres Strait Islander Australians are trained to be culturally competent.

Increasing the number of Aboriginal and Torres Strait Islander health workers, requires similar improvements in educational outcomes to those needed for improvement in Aboriginal and Torres Strait Islander employment more generally. Sections 4.5, 4.6, 4.7, chapter 7 and section 9.1 provide more information on education and employment outcomes and case studies of successful programs.

### Future directions in data

Research has been undertaken to develop a geospatial index on access to GP services relative to need. The index incorporates information on GP service locations (as a measure of primary care service availability), spatial accessibility (defined as time to drive to a GP service), and differential health needs for primary care services. The index was first published in July 2014, and may be further refined as more data become available. The ABS 2016 Census may introduce long-term health conditions as a new topic, which could improve the ability to assess differential health needs (AIHW 2014a). The ABS has advised that a final decision on topics for the 2016 Census is expected in the first half of 2015.

### References

ABS (Australian Bureau of Statistics) 2013, *Estimates of Aboriginal and Torres Strait Islander Australians, June 2011*, 30 August, Cat. no. 3238.0.55.001, Canberra, http://www.abs.gov.au/ausstats/abs@.nsf/mf/3238.0.55.001 (accessed 29 November 2013).

AHMAC (Australian Health Ministers’ Advisory Council) 2012, *Aboriginal and Torres Strait Islander Health Performance Framework 2012 Report*, Canberra.

AIHW (Australian Institute of Health and Welfare) 2013a, *Aboriginal and Torres Strait Islander Health Performance Framework 2012: detailed analyses*, Canberra.

——2013b, *Expenditure on health for Aboriginal and Torres Strait Islander people 2010-11*, Cat. no. HWE 57, Health and welfare expenditure series no. 48, Canberra.

——2014a, *Access to primary health care relative to need for Indigenous Australians*, Cat. no. IHW 128, Canberra.

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Paradies, Y. 2007, *Social Determinants of Indigenous Health*, Allen and Unwin, Sydney.

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SCRGSP (Steering Committtee for the Review of Government Service Provision) 2012, *2012 Indigenous Expenditure Report*, Productivity Commission, Canberra.

Ware, V.A. 2013, *Improving the accessibilty of health services in urban and regional settings for Indigenous people*, Resource sheet no. 27, Closing the Gap Clearinghouse.

## 8.2 Potentially preventable hospitalisations[[5]](#footnote-5)

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| Box 8.2.1 Key messages |
| * For Aboriginal and Torres Strait Islander Australians, hospitalisation rates for potentially preventable *chronic* conditions are more than twice the rate for potential preventable *acute* conditions, while for non-Indigenous Australians the hospitalisation rates for these two types are similar (tables 8A.2.1 and 8A.2.6).
* In 2012-13, hospitalisations for chronic conditions made up 6.7 per cent of all hospitalisations for Aboriginal and Torres Strait Islander Australians (1.6 times the equivalent proportion for non‑Indigenous Australians) (table 8A.2.1).
* Coding changes mean time series are not available for acute and chronic conditions. In 2012-13, after adjusting for differences in population age structures:
* the hospitalisation rate for chronic conditions for Aboriginal and Torres Strait Islander Australians was more than four times the rate for non-Indigenous Australians. For both Aboriginal and Torres Strait Islander and non-Indigenous Australians, the largest proportion of these hospitalisations were for diabetes complications, followed by chronic obstructive pulmonary diseases (table 8A.2.1)
* the hospitalisation rate for potentially preventable acute conditions for Aboriginal and Torres Strait Islander Australians was more than twice the rate for non‑Indigenous Australians. For Aboriginal and Torres Strait Islander Australians, the majority of these hospitalisations were due to kidney failure from bacterial infection (pyelonephritis), followed by convulsions and epilepsy (table 8A.2.6)
* the hospitalisation rate for Aboriginal and Torres Strait Islander Australians for influenza and pneumonia was 3.4 times the rate for non‑Indigenous Australians, and the hospitalisation rate for other vaccine preventable conditions was 5.7 times the rate for non-Indigenous Australians (table 8A.2.9)
* hospitalisation rates for all categories of potentially preventable conditions increased as remoteness increased for both Aboriginal and Torres Strait Islander Australians and non‑Indigenous Australians (tables 8A.2.3, 8A.2.8 and 8A.2.11).
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| Box 8.2.2 Measures of potentially preventable hospitalisations |
| Potentially preventable hospitalisations are those admissions that may have been prevented through appropriate preventive health interventions and early disease management, usually delivered in primary care and community-based care settings. (continued next page) |
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| Box 8.2.2 (continued) |
| There are three main measures for this indicator, relating to the rate of hospitalisation per 100 000 population for:* potentially preventable chronic conditions — diseases that typically persist for at least six months (including complications of diabetes)
* potentially preventable acute conditions — diseases that cause serious short term illness that could possibly be prevented, or their severity minimised
* vaccine preventable conditions — including influenza and pneumonia.

Data for all measures are sourced from the AIHW National Hospital Morbidity Database, with the most recent data available for 2012-13 (national by remoteness). Data for potentially preventable chronic conditions and potentially preventable acute conditions are not directly comparable over time due to changes in coding for related conditions.Additional data are reported on the rate of hospitalisation for injury, poisoning and other external causes, and sexually transmitted conditions, that could potentially have been prevented (national by remoteness; sex). |
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The extent of potentially preventable hospitalisations is an indirect measure of whether people are receiving adequate primary health care. In many cases, hospital admissions can be prevented if more effective non-hospital care is available, either at an earlier stage in disease progression or as an alternative to hospital care (AHMAC 2011; Katterl et al. 2012; Russell 2013). Communication and collaboration between patients and healthcare providers make it easier for people to understand and use information and services to take care of their health (AHMAC 2012). However, higher rates of potentially preventable hospitalisations may also be due to higher prevalence of the underlying diseases, particularly chronic diseases (AHMAC 2012; AIHW 2014).

Consistent research shows that Aboriginal and Torres Strait Islander Australians have a higher rate of potentially preventable hospitalisations than non-Indigenous Australians (Katterl et al. 2012). Even after controlling for age, sex and remoteness, the rate of potentially preventable hospitalisation for Aboriginal and Torres Strait Islander Australians is 1.5 times as high as the rate for non‑Indigenous Australians. Indigenous status appears to have a larger affect than remoteness on whether a hospitalisation was for a potentially preventable disease (AIHW 2014).

From 2010-11, Indigenous status in hospital separations data is considered of sufficient quality for reporting in all jurisdictions. Prior to 2010‑11, six jurisdictions (NSW, Victoria, Queensland, WA, SA and the NT) were considered to have acceptable quality of Aboriginal and Torres Strait Islander identification in hospitalisation data. The attachment tables for this report include data for all jurisdictions for 2010-11 to 2012-13, as well as data for the six jurisdictions for 2004-05 to 2012-13.

Data for potentially preventable hospitalisations for chronic and acute conditions are not comparable over time, due to changes in changes in coding for related conditions. Analysis in text is restricted to the current year only for these conditions. Historic data for 2004-05 to 2012-13 are available in the tables 8A.2.2 and 8A.2.7

### Potentially preventable chronic conditions

In 2012-13, hospitalisations for potentially preventable chronic[[6]](#footnote-6) conditions comprised 6.7 per cent of all hospitalisations for Aboriginal and Torres Strait Islander Australians, 1.6 times the rate for non-Indigenous Australians (4.3 per cent) (8A.2.1).

After adjusting for differences in population age structures, the hospitalisation rate for chronic conditions for Aboriginal and Torres Strait Islander Australians was more than four times the rate for non-Indigenous Australians (6712.6 per 100 000 population and 1549.3 per 100 000 population respectively) (table 8A.2.1). For both Aboriginal and Torres Strait Islander and non-Indigenous Australians, the hospitalisation rate for potentially preventable chronic conditions increased as remoteness increased (table 8A.2.3).

For both Aboriginal and Torres Strait Islander and non-Indigenous Australians, diabetes complications accounted for the largest proportion of hospitalisations for preventable chronic conditions (4476.2 per 100 000 population and 730.8 per 100 000 population respectively), followed by chronic obstructive pulmonary diseases (1119.3 per 100 000 population and 252.3 per 100 000 population respectively) (table 8A.2.1).

Data on Type 2 diabetes as a principal diagnosis are also available in tables 8A.2.4– 5.

### Potentially preventable acute conditions

In 2012-13, after adjusting for differences in population age structures, the hospitalisation rate for potentially preventable acute conditions[[7]](#footnote-7) for Aboriginal and Torres Strait Islander Australians was more than twice the rate for non-Indigenous Australians (2930.5 per 100 000 population and 1349.1 per 100 000 population respectively) (table 8A.2.6). For both Aboriginal and Torres Strait Islander and non-Indigenous Australians, the hospitalisation rate for potentially preventable acute conditions increased as remoteness increased (table 8A.2.8).

For Aboriginal and Torres Strait Islander Australians, kidney failure from bacterial infection (pyelonephritis) accounted for the largest rate of hospitalisations for preventable acute conditions, followed by convulsions and epilepsy (table 8A.2.6).

### Vaccine preventable conditions

In 2012-13, after adjusting for differences in population age structures, the hospitalisation rate for Aboriginal and Torres Strait Islander Australians for influenza and pneumonia was 3.4 times the rate for non-Indigenous Australians (258.8 per 100 000 population and 76.1 per 100 000 population respectively), and for other vaccine preventable conditions was 5.7 times the rate for non-Indigenous Australians (93.5 per 100 000 population and 16.3 per 100 000 population respectively) (table 8A.2.9).

Hospitalisations for influenza and pneumonia increased as remoteness increased for both Aboriginal and Torres Strait Islander and non-Indigenous Australians. Hospitalisations for other vaccine preventable conditions increased as remoteness increased for Aboriginal and Torres Strait Islander Australian, but the rate was lowest in remote and very remote areas for non-Indigenous Australians (table 8A.2.11).

Over the period 2004-05 to 2012-13, for NSW, Victoria, Queensland, WA, SA and the NT combined, hospitalisation rates for Aboriginal and Torres Strait Islander Australians increased for influenza and pneumonia and other vaccine preventable conditions. The rate increased for other Australians for influenza and pneumonia but remained relatively stable for other vaccine preventable conditions, with the gap widening for both (table 8A.2.10).

### Other hospitalisations

Available data for hospitalisations for infections with a predominantly sexual mode of transmission show that, in 2012-13, hospitalisation rates for Aboriginal and Torres Strait Islander Australians for these infections (21.0–60.4 per 100 000 population) were considerably higher than the rate for non-Indigenous Australians (up to 14.2 per 100 000 population) (table 8A.2.13).

Data are also available for hospitalisations for infections with a predominantly sexual mode of transmission by remoteness in table 8A.2.13.

Hospitalisations where the principal diagnosis was injury and poisoning and other consequences of external causes, may be prevented by both appropriate primary health care and educational awareness programs. In 2012-13, hospitalisation rates for Aboriginal and Torres Strait Islander Australians for these causes was 1.8 times the rate for other Australians (tables 8A.2.16).

Data are also available for hospitalisations where the principal diagnosis was injury and poisoning and other external causes, by sex and remoteness in tables 8A.2.14–15.

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## 8.3 Potentially avoidable deaths[[8]](#footnote-8)

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| Box 8.3.1 Key messages |
| * For people aged under 75 years:
* between 1998 and 2012, after adjusting for differences in population age structures, mortality rates from avoidable causes for Aboriginal and Torres Strait Islander Australians declined at a greater rate than for non‑Indigenous Australians. The gap has narrowed from 368.2 deaths to 297.9 deaths per 100 000 population. However, in 2012, the avoidable death rate for Aboriginal and Torres Strait Islander Australians remained over 3 times the rate for non‑Indigenous Australians (table 8A.3.9).
* for the period 2008–2012, three quarters of Aboriginal and Torres Strait Islander deaths were potentially avoidable (7079 out of 9438 deaths), compared to two-thirds of non‑Indigenous deaths (112 076 out of 169 111 deaths) (tables 8A.3.1 and 8A.3.10).
* for the period 2008–2012, after adjusting for differences in population age structures, the most common causes of avoidable mortality for Aboriginal and Torres Strait Islander Australians were ischaemic heart disease (heart attacks) (18.5 per cent), cancer (18.0 per cent) (particularly lung cancer (6.5 per cent)), diabetes (10.4 per cent) and suicide (8.9 per cent) (table 8A.3.7).
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| Box 8.3.2 Measures of potentially avoidable deaths |
| There is one main measure for this indicator.* *Potentially avoidable deaths* is defined as the number and rate of deaths from potentially preventable and treatable conditions[[9]](#footnote-9) for people aged less than 75 years (NSW, Queensland, WA, SA and the NT; age and sex).

Data for this measure are sourced from the ABS Causes of Death collection, with the most recent available data for 2012. People aged 75 years and over are excluded due to difficultly in assigning a cause of death that can be clearly defined as avoidable or unavoidable (Page et al. 2006). |
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Reducing potentially avoidable deaths is a key contributor to improving life expectancy (section 4.1). Potentially avoidable deaths can be reduced through lifestyle improvements (such as reduced alcohol (section 11.1), drug (section 11.2) and tobacco consumption (section 8.4)), high quality, effective and accessible primary prevention, early intervention and medical treatment, and is closely related to measures of access to primary health care (section 8.1) and potentially preventable hospitalisations (section 8.2).

Research into mortality trends over the last three decades in Australia shows that health care has made a significant contribution to the reduction in mortality, but that those with a higher socioeconomic status have obtained a greater benefit (Korda et al. 2007). This may be because factors outside the health system also contribute to potentially avoidable deaths, including socioeconomic factors (lower level of education, employment and income — see chapters 7, and 9); lifestyle factors (illicit substance use, obesity and lack of nutrition — see sections 8.4, 8.8, 11.1 and 11.2); environmental factors (lack of clean water and sanitation — see section 10.3) and exposure to abuse, neglect and violence (sections 4.10, 4.11 and 11.3).

For Aboriginal and Torres Strait Islander Australians, chronic diseases and injury account for the greatest proportions of avoidable deaths, but are amenable to prevention as well as treatment. A 2009 study in the NT found the observed decline in avoidable deaths in the NT had been greatest for conditions amenable to medical treatment and care, including neonatal and paediatric care, antibiotics, immunisation, drug therapies, improved intensive care and surgical procedures. (Li et. al 2009 cited in AHMAC 2012).

### Potentially avoidable deaths

Mortality rates for potentially avoidable causes are defined as the number of deaths per 100 000 population. The following caveats apply:

* five year aggregate data are used for current period analysis due to the volatility of the small number of deaths. Single year data are presented for time series analysis only.
* data disaggregated by Indigenous status are available for NSW, Queensland, WA, SA and the NT, as these jurisdictions have sufficient levels of Aboriginal and Torres Strait Islander identification and numbers of deaths to support analysis.

#### Current period

For the period 2008–2012, after adjusting for differences in population age structures, the potentially avoidable mortality rate for Aboriginal and Torres Strait Islander Australians aged 0–74 years was three times the rate for non-Indigenous Australians. For both Aboriginal and Torres Strait Islander Australians and non-Indigenous Australians, the majority of potentially avoidable deaths were attributable to potentially *preventable* conditions (63.2 and 61.3 per cent of avoidable deaths, respectively) with the remainder potentially *treatable* conditions (36.8 and 38.7 per cent of avoidable deaths, respectively) (table 8A.3.3).

From 15 years of age, potential avoidable mortality increased with age for both Aboriginal and Torres Strait Islander Australians and non-Indigenous Australians (for those aged
15–24 years, 84.5 and 28.9 deaths per 100 000 population respectively, whilst for those aged 65–74 years, 2103.2 and 837.3 deaths per 100 000 population respectively). Aboriginal and Torres Strait Islander males had higher rates of avoidable mortality than females across all age categories (except for the 1–4 year age group), with the rates for males aged 15–24 and 25–34 years more than twice the rates for females of the same ages (table 8A.3.5).

Potentially avoidable mortality data reported by selected states and territories are available in tables 8A.3.1 and 8A.3.3.

#### Over time

Potentially avoidable death rates for Aboriginal and Torres Strait Islander Australians are declining. From 1998 to 2012, after adjusting for differences in population age structures, Aboriginal and Torres Strait Islander mortality rates from avoidable causes for people aged 0–74 years declined by 27.4 per cent, with a larger decline for males (29.4 per cent) than for females (24.5 per cent) (table 8A.3.9).

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| Figure 8.3.1 Avoidable mortality rates, people aged 0–74 years, NSW, Queensland, WA, SA and the NT, 1998 to 2012**a,b** |
| Figure 8.3.1 Avoidable mortality rates, people aged 0-74 years, NSW, Queensland, WA, SA and the NT, 1998 to 2012  More details can be found within the text surrounding this image. |
| a Mortality data disaggregated by Indigenous status are available for NSW, Queensland, WA, SA and the NT, as these jurisdictions have sufficient levels of Aboriginal and Torres Strait Islander identification and number of deaths to support analysis. They do not represent an Australian total. b Data are age standardised. |
| *Sources*: ABS (unpublished) Causes of Death, Australia, Cat. no. 3303.0; ABS (unpublished) Estimates and Projections, Aboriginal and Torres Strait Islander Australians, 2001 to 2026 ,Cat. no. 3238.0; table 8A.3.9. |
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From 1998 to 2012, after adjusting for differences in population age structures, the gap in potentially avoidable mortality rates between Aboriginal and Torres Strait Islander Australians and non-Indigenous Australians narrowed from 368.2 to 297.9 deaths per 100 000 population (figure 8.3.1).

The percentage decrease in non-Indigenous avoidable mortality rates (37.6 per cent) was larger than the percentage decrease in Aboriginal and Torres Strait Islander rates (27.4 per cent). However, as the avoidable mortality rates for non-Indigenous Australians are lower, the gap in the rates narrowed (table 8A.3.9).

For 2008–2012, after adjusting for differences in population age structures, the most common causes of avoidable mortality for Aboriginal and Torres Strait Islander Australians aged 0–74 years were ischaemic heart disease (heart attacks) (18.5 per cent), cancer (18.0 per cent) (particularly lung cancer (6.5 per cent)), diabetes (10.4 per cent) and suicide (8.9 per cent) (table 8A.3.7).

The greatest opportunities to further reduce avoidable mortality rates for Aboriginal and Torres Strait Islander Australians appear to be in relation to deaths avoidable through risk factor reduction and general health promotion (52.7 per cent of avoidable deaths for the period 2008–2012), followed by early detection and treatment (24.2 per cent) and once the disease is fully established therapy and rehabilitation (23.1 per cent)[[10]](#footnote-10) (table 8A.3.10).

### References

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## 8.4 Tobacco consumption and harm[[11]](#footnote-11)

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| Box 8.4.1 Key messages |
| * Between 2001 and 2012-13, the crude daily smoking rate for Aboriginal and Torres Strait Islander adults declined from 50.7 to 44.4 per cent (table 8A.4.1).
* A similar decline in non-Indigenous smoking rates meant that the gap in (age adjusted) daily smoking rates remained relatively constant at around 26 percentage points between 2001 and 2011–13 (table 8A.4.6).
* In 2012‑13, the age adjusted rate of hospitalisations related to tobacco use for Aboriginal and Torres Strait Islander Australians was 3.8 times the rate for non‑Indigenous Australians (table 8A.4.11).
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| Box 8.4.2 Measures of tobacco consumption and harm |
| There is one main measure for this indicator (aligned with the associated NIRA indicator), rates of current daily smokers, measured by the proportion of people aged 18 years and over who are current daily smokers (all jurisdictions; remoteness; age; sex).Smoking rate data are available from the ABS Australian Aboriginal and Torres Strait Islander Health Survey (AATSIHS)/National Aboriginal and Torres Strait Islander Social Survey (NATSISS), with the most recent data available for 2012‑13 (core component). Data for the non‑Indigenous population are sourced from the ABS Australian Health Survey (AHS)/National Health Survey (NHS), with data for 2011-12 (core component). Indicators using both AATSIHS (2012-13) and AHS (2011-12) are referenced as 2011-13.Data are also provided for the supplementary measure, tobacco related hospitalisations (all jurisdictions; remoteness; sex). |
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Tobacco consumption is a subsidiary performance measure for COAG’s target of ‘closing the life expectancy gap (between Indigenous and non-Indigenous Australians) within a generation’ (COAG 2012).

Among Aboriginal and Torres Strait Islander Australians, tobacco use is the leading risk factor contributing to disease and death (Vos et al. 2007). Studies have found that smoking tobacco increases the risk of numerous cancers, heart and vascular diseases, and depression (AHMAC 2012; Cunningham et al. 2008; Pasco et al. 2008).

Compared to non-Indigenous people, Aboriginal and Torres Strait Islander Australians who smoke generally commence at an earlier age, smoke for longer, and make fewer quitting attempts than non‑Indigenous Australians (CEITC 2010, 2014).

Tobacco use is often associated with other lifestyle related health risk factors, such as excessive alcohol consumption and poor diet. Long term risky/high risk drinkers (both males and females) were more likely to be current smokers than those who drank at a low risk level (ABS 2006). Section 11.1 examines alcohol consumption and harm. According to the World Health Organization, tobacco and poverty are inextricably linked worldwide (WHO 2004). Non‑smokers tend to have higher incomes and less disadvantage in a range of other areas (Thomas et al. 2008).

In addition to long term health risks, low income groups (such as some Aboriginal and Torres Strait Islander families and communities) are affected by the financial strain associated with tobacco use. Expenditure on tobacco can divert scarce family resources away from meeting other needs, such as housing, nutrition and health care (Briggs, Lindorff and Ivers 2003).

### Tobacco consumption

Current daily smokers are people who smoked one or more cigarettes (or pipes or cigars) per day at the time of survey interview.

The COAG performance measure and the data presented in this section focus on the proportion of people aged 18 years and over who are current daily smokers. However, as noted, Aboriginal and Torres Strait Islander Australians tend to start smoking at an earlier age than non‑Indigenous people — for 2011–13, around one in six (15.7 per cent in 2012‑13) of Aboriginal and Torres Strait Islander 15 to 17 year olds were current daily smokers, compared with around one in twenty five (3.9 per cent in 2011-12) of non‑Indigenous 15 to 17 year olds (table 8A.4.10).

Nationally in 2012-13, the crude daily smoking rate among Aboriginal and Torres Strait Islander adults was 44.4 per cent, a decline from 50.7 per cent in 2001 (table 8A.4.1).

In 2012-13, the crude daily smoking rate for Aboriginal and Torres Strait Islander Australians varied across states and territories, from 29.7 per cent in the ACT to
53.3 per cent in the NT (table 8A.4.1). Smoking rates were higher in very remote areas (54.6 per cent) and remote areas (48.9 per cent) than in major cities (40.2 per cent) (table 8A.4.2). In non-remote areas in 2012-13, smoking was most prevalent among those aged 25–54 years (between 45.5 and 49.0 per cent), with smoking rates much lower for older people (27.7 per cent for those aged 55 years and over). A similar pattern was observed for non-Indigenous Australians, although the daily smoking rates were consistently lower across all age groups (table 8A.4.10).

After adjusting for different population age structures, the current daily smoking rate for Aboriginal and Torres Strait Islander Australians in 2012-13 was 2.6 times the rate for non-Indigenous Australians in 2011-12 (table 8A.4.6). The gap in smoking rates was widest in major cities (table 8A.4.7).

Short-term trend data for age adjusted smoking rates are presented in figure 8.4.1.

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| Figure 8.4.1 Current daily smokers aged 18 years and over, 2001 to 2011–13**a,b,c** |
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| Figure 8.4.1 Current daily smokers aged 18 years and over, 2001 to 2011-13   More details can be found within the text surrounding this image. |

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| a Error bars represent 95 per cent confidence intervals around each estimate. b Rates are age standardised. c Current period data for Aboriginal and Torres Strait Islander Australians are from the 2012-13 AATSIHS. Data for non‑Indigenous Australians are from the 2011–13 AHS (for the period (2011-12). |
| *Sources*: ABS (unpublished) National Health Survey 2001; ABS (unpublished) National Health Survey and National Aboriginal Torres Strait Islander Health Survey 2004-05; ABS (unpublished) National Aboriginal Torres Strait Islander Social Survey 2008; ABS (unpublished) National Health Survey 2007-08; ABS (unpublished) AATSIHS 2012-13 (core component); ABS (unpublished) AHS 2011–13 (2011-12 core component); table 8A.4.6. |
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Between 2001 and 2011–13, after adjusting for differences in population age structures, the daily smoking rate declined for both Aboriginal and Torres Strait Islander adults and non‑Indigenous adults, leaving the gap relatively unchanged around 26 percentage points (table 8A.4.6).

Data for smoking rates reported by State and Territory are available in tables 8A.4.6−8, and for remoteness by sex in table 8A.4.9.

### Tobacco related hospitalisations and deaths

Tobacco smoking is the single largest cause of preventable death and disease in Australia (AIHW 2011). There is a strong causal relationship between tobacco consumption and multiple chronic diseases, including coronary heart disease, stroke, chronic respiratory tract diseases and cancer. Smoking in pregnancy can lead to miscarriage, stillbirth or premature birth (Graham et al. 2007). Smoking prevalence among pregnant Aboriginal and Torres Strait Islander women is high relative to the Australian population (Gilligan et al. 2009). Section 6.2 includes information on women reporting smoking during pregnancy.

There are no comparable data on smoking related deaths for Aboriginal and Torres Strait Islander Australians and non-Indigenous Australians for inclusion in this report. Data on hospitalisations related to tobacco use are sourced from the AIHW National Hospital Morbidity Database. These data only cover tobacco related illnesses resulting in admission to a hospital, and only relate to conditions directly attributable to tobacco — they do not include most conditions where tobacco may be a contributing factor but the link is not direct and immediate (AIHW 2010).

From 2010-11, Indigenous status in hospital separations data is considered of sufficient quality for reporting in all jurisdictions. Prior to 2010-11, six jurisdictions (NSW, Victoria, Queensland, WA, SA and the NT) were considered to have acceptable quality of Aboriginal and Torres Strait Islander identification in hospitalisation data. The attachment tables for this report include data for all jurisdictions for 2010-11 to 2012-13, as well as data for the six jurisdictions for 2004-05 to 2012-13.

In 2012-13, the age adjusted rate of hospitalisation related to tobacco use for Aboriginal and Torres Strait Islander Australians was 3.8 times the rate for non‑Indigenous Australians (table 8A.4.11). The gap between Aboriginal and Torres Strait Islander Australians and other Australians increased slightlyfrom 2004-05 to 2012-13 (table 8A.4.12).

In 2012-13, the age adjusted hospitalisation rate for tobacco use was 1.3 times higher for Aboriginal and Torres Strait Islander males than females (table 8A.4.11). The age adjusted rate of hospitalisations for tobacco use for both Aboriginal and Torres Strait Islander Australians and non-Indigenous Australians increased as remoteness decreased (table 8A.4.13).

Data for hospitalisation rates by State and Territory by sex are available in table 8A.4.12.

### References

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\_book/en/ (accessed 26 June 2014).

## 8.5 Obesity and nutrition[[12]](#footnote-12)

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| Box 8.5.1 Key messages |
| * In 2012-13, 78.4 per cent of Aboriginal and Torres Strait Islander children aged 2–14 years were meeting the guidelines for adequate daily fruit intake, similar to the rate for non-Indigenous children (80.0 per cent). The proportions meeting the guidelines for adequate daily vegetable intake were much lower — 15.7 per cent for Aboriginal and Torres Strait Islander children and 13.3 per cent for non‑Indigenous children (table 8A.5.13).
* In 2012-13, 69.2 per cent of Aboriginal and Torres Strait Islander adults were categorised as clinically obese (39.8 per cent) or overweight (29.4 per cent). Only 27.7 per cent were considered to be of normal weight (table 8A.5.8). After adjusting for different population age structures, the proportion of Aboriginal and Torres Strait Islander adults categorised as overweight or obese was 1.2 times the proportion for non-Indigenous adults (table 8A.5.2).
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| Box 8.5.2 Measures of obesity and nutrition |
| There is one main measure for this indicator (aligned with the associated NIRA indicator). *Overweight and obese* is defined as the number of people aged 18 years and over with a BMI in the range 25.0–29.9 (overweight) or 30 or higher (obese) as a proportion of the total population. Additional data are also reported for people with a BMI of 18.5–24.9 (normal weight) and with a BMI of less than 18.5 (underweight) (all jurisdictions; remoteness; sex; age).Data are also provided for a supplementary measure defined as the proportion of children meeting the recommended average daily fruit and vegetable consumption guidelines (national; remoteness; age).Data for both measures are sourced from the ABS Australian Aboriginal and Torres Strait Islander Health Survey (AATSIHS)/National Aboriginal and Torres Strait Islander Social Survey (NATSISS), with the most recent data available for 2012-13. Data for the non-Indigenous population are sourced from the ABS Australian Health Survey (AHS)/National Health Survey (NHS), with data for 2011-12. AATSIHS and AHS data are presented together as covering the overall time period of 2011–13. BMI data for 2012-13 are not directly comparable with earlier data for 2004-05. |
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The prevalence of overweight and obesity is a subsidiary performance measure for COAG’s target of ‘closing the life expectancy gap (between Indigenous and non‑Indigenous Australians) within a generation’ (COAG 2012).

For Aboriginal and Torres Strait Islander Australians, high body mass and physical inactivity are two significant risk factors for poor health outcomes (Thorpe and Browne 2009).

Excess weight increases the risk of an individual developing, among other things, cardiovascular disease, Type 2 diabetes, some musculoskeletal conditions and some cancers. The risk of developing these conditions increases with this level of excess weight (AIHW 2013). Research suggests that the excess burden of overweight and obesity for Aboriginal and Torres Strait Islander Australians reduces the average life expectancy by between one and three years, accounting for 9 to 17 per cent of the total gap in life expectancy between Aboriginal and Torres Strait Islander Australians and non‑Indigenous Australians (Zhao et al. 2013).

Lifestyle factors resulting in overconsumption of energy in the diet and a decrease in physical activity are major contributors to obesity (NHMRC 2013).

Good nutrition contributes to quality of life and helps to maintain a healthy body weight, protect against infections, and reduce the risk of chronic disease and premature deaths. Studies have found that people on low incomes tend to purchase foods that provide the most calories for the least cost, such as soft drinks (Brimblecombe and O’Dea 2009; Brownell and Frieden 2009; Harrison et al. 2007; WHO 2008). Low income, in combination with the high cost of fresh food, contributes to obesity, poor nutrition and the displacement of healthy food choices in remote Aboriginal communities. (Section 4.9 provides more information on incomes.)

Regular physical activity and intake of a nutritious diet commensurate with energy requirements can have a protective effect against obesity related diseases (Australian Medical Association and AMA 2005; NHMRC 2013). Section 5.7 provides more information on participation in organised sport, arts or community group activities. Good nutrition is important during pregnancy (see section 6.1, Antenatal care) because pathways to chronic diseases can begin in utero (O’Dea 2008; WHO 2005). Low birthweight (see section 6.4) is associated with a higher risk of central obesity, type 2 diabetes, kidney failure, high blood pressure, and heart disease in later life. Good nutrition is also important for infant and childhood growth and development and for establishing healthy habits for life (ARACY 2008; Eades et al. 2010; Tomkins 2001; WHO 2008).

Inadequate housing in remote areas compounds the issue of providing a well‑balanced daily diet (House of Representatives 2009; Lee et al. 2009). In one community, less than six per cent of houses had essential kitchen hardware for the storage and preparation of food (Lee et al. 2009). Section 10.3 provides more information on housing infrastructure.

Research shows that it becomes more difficult to get on track towards a healthy weight as age increases, emphasising the importance of early prevention, to avoid the development of overweight and obesity (FaHCSIA 2013). Education has an important role in establishing health behaviours and the readiness of individuals to effect behavioural change (NHMRC 2013).

### Obesity

Obesity is most commonly measured using the body mass index (BMI). BMI is calculated as weight (kg) divided by the square of height (m). BMI values are grouped according to World Health Organization and National Health and Medical Research Council guidelines. Adults with a BMI of 25 to less than 30 are categorised as overweight and those with a BMI of 30 or higher are categorised as obese (NHMRC 2013; WHO 2000).

Nationally in 2012‑13, 69.2 per cent of Aboriginal and Torres Strait Islander adults were considered to be obese (39.8 per cent) or overweight (29.4 per cent). Only 27.7 per cent were considered to be of normal weight. Rates of overweight were higher for males
(32.3 per cent) than females (26.6 per cent) but rates of obesity were higher for females (43.3 per cent) than for males (36.2 per cent). Whilst rates of overweight remained relatively stable as age increased, rates of obesity increased with age (from 28.4 per cent for those aged 18–24 years to 48.8 per cent of those aged 55 years and over). The trend was similar for males and females (table 8A.5.8).

After adjusting for differences in population age structures, the proportion of Aboriginal and Torres Strait Islander adults who were overweight or obese in 2012-13 was 1.2 times the proportion for non-Indigenous adults in 2011-12 (table 8A.5.2).

Data for rates of overweight and obesity by State and Territory and by remoteness area are available in tables 8A.5.2, 8A.5.4 and 8A.5.6. Data for all BMI categories by State and Territory are available in table 8A.5.6.

Children have lower rates of overweight and obesity than adults. In 2012-13, 30.4 per cent of Aboriginal and Torres Strait Islander children aged 2–14 years were categorised as overweight (19.9 per cent) and obese (10.5 per cent) (ABS 2014)

The BMI data for Aboriginal and Torres Strait Islander Australians collected in 2012-13 were calculated from *measured* height and weight, while data collected in 2004-05 were calculated from *reported* height and weight, which means that the two sets of data are not directly comparable.

### Child nutrition

The NHMRC Australian dietary guidelines recommend eating a wide variety of nutritious food (vegetables, legumes, fruits, cereals, lean meat, fish, poultry, milks, yoghurts and cheeses (reduced fat varieties where possible)) and drinking plenty of water. The guidelines recommend limiting consumption of saturated fat, salt, alcohol and sugars.

Data reported for 2011–13 are based on the 2013 NHMRC daily food consumption guidelines (NHMRC 2013). For children and adolescents, the guidelines depend on age and sex, varying from 3.5 to 5.5 serves of vegetables and legumes/beans, and
1 to 2 serves of fruit.

In 2011–13, 78.4 per cent of Aboriginal and Torres Strait Islander children aged
2–14 years across all areas (remote and non-remote) met the guidelines for adequate daily fruit consumption, similar to the rate for non-Indigenous children (80.0 per cent). The proportions meeting the guidelines for adequate daily vegetable intake were much lower — 15.7 per cent for Aboriginal and Torres Strait Islander children and 13.3 per cent for non‑Indigenous children (table 8A.5.13).

Time series comparisons are difficult— the guidelines for adequate fruit and vegetable consumption changed between 2008 and 2011–13, and the 2008 survey did not collect information on non-Indigenous children in remote areas. Comparisons over time are limited to the number of serves of fruit and vegetables for children in non-remote areas, for which there were no significant changes between 2008 and 2011–13 for Aboriginal and Torres Strait Islander children and non‑Indigenous children (except for a decrease in the proportion of Aboriginal and Torres Strait Islander children ‘who do not usually eat fruit’) (tables 8A.5.14 and 8A.5.15).

### Future directions in data

There are few comparable time series data from which to draw conclusions about the prevalence and burden of obesity among Aboriginal and Torres Strait Islander children, and only limited data are available on their dietary behaviours.

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## 8.6 Oral health[[13]](#footnote-13)

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| Box 8.6.1 Key measures |
| * In 2012-13, younger Aboriginal and Torres Strait Islander children aged 0–4 years and 5–9 years had higher rates of hospitalisation for dental health conditions than non‑Indigenous children in the same age groups (8.4 and 4.9 per 1000 population and 12.2 and 9.8 per 1000 population, respectively), but older Aboriginal and Torres Strait Islander children aged 10–14 years had lower rates (3.0 and 5.9 per 1000 population respectively) (8A.6.12).
* In 2008, 31.6 per cent of Aboriginal and Torres Strait Islander children aged0–14 years were reported as having teeth or gum problems and 34.8 per cent of all Aboriginal and Torres Strait Islander children had not visited a dentist in the previous 12 months. ‘Waiting time’ (32.0 per cent) and ‘cost’ (20.7 per cent) were the most common reasons for not visiting a dentist (tables 8A.6.4−6).
* In NSW (2007) and SA, Tasmania and the NT (2008), 29 to 43 per cent of Aboriginal and Torres Strait Islander children aged 5–10 years had no decayed, missing or filled deciduous (baby) teeth compared with 48 to 60 per cent of non-Indigenous children (table 8A.6.1).
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| Box 8.6.2 Measures of oral health |
| There are two main measures for this indicator:* *Child dental health* is defined as the proportion of children with no decayed, missing or filled teeth (dmft/DMFT) for children aged 5–10 years (infant teeth) and 6–15 years (permanent teeth)[[14]](#footnote-14). Data are sourced from the AIHW Child Dental Health Survey, with the most recent data for Aboriginal and Torres Strait Islander children for 2007 for NSW and 2008 for SA, Tasmania and the NT (age; remoteness).
* *Adult dental health* is defined as the number of decayed, missing and filled teeth (DMFT) for people aged 15 years and over. Data are sourced from the National Survey of Adult Oral Health, 2004–2006 (national).

Supplementary data for the main measures are reported from the ABS Australian Aboriginal and Torres Strait Islander Health Survey (AATSIHS)/National Aboriginal and Torres Strait Islander Social Survey (NATSISS), with the most recent data for 2012-13 for people aged 15 years and over and for 2008 for children aged 0–14 years. Non-Indigenous comparator data are not available as these data were not collected in the Australian Health Survey (AHS).A supplementary measure is reported on the hospitalisation rate for dental health conditions per 1000 population (national: remoteness; age).  |
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Oral health is an important part of overall health and wellbeing (AHMAC 2012; Williams et al. 2011). Two of the most frequently occurring oral diseases are tooth decay (also known as dental decay or dental caries) and periodontal disease (Jamieson, Sayers and Roberts-Thomas 2010). Both are preventable and, with early treatment, curable (Williams et al. 2011).

* Tooth decay unless treated early, may result in pain, infection and destruction of soft tissue in the mouth. This may contribute to the development or exacerbation of other diseases. In addition, eating difficulty or pain may lead to modification of eating habits and subsequent nutritional problems. Dental health may affect speech and language development, and exacerbate other chronic diseases (Jamieson, Sayers and Roberts-Thomas 2010; NACOH 2004; Zander et al. 2013).
* Periodontal diseases of the tissues surrounding teeth are associated with bacterial infection of the periodontal tissues, and are specifically attributed to poor oral hygiene as opposed to diet. Periodontal diseases range in severity from gingivitis (a mild reversible form) to periodontitis (a severe destruction of the tissues) (Williams et al. 2011).

Older Aboriginal and Torres Strait Islander children generally have more dental decay than non-Indigenous children, and the decay is less likely to have been treated. Untreated tooth decay is also significantly more prevalent among Aboriginal and Torres Strait Islander adults than among non‑Indigenous adults (AHMAC 2012). Historically, the traditional diets of Aboriginal and Torres Strait Islander Australians were associated with low levels of tooth decay. A marked rise in the consumption of food and drinks containing high levels of sugar and other refined carbohydrates over recent decades — particularly in remote communities and among children — has occurred at the same time as an increase in levels of tooth decay among Aboriginal and Torres Strait Islander Australians (Jamieson, Armfield and Robert-Thomson 2007; NACOH 2004).

Factors in oral health include diet, dental hygiene and environmental factors, such as water fluoride levels. Access to dental services is also a factor in prevention, as well as treatment (AHMAC 2009).

Preventative oral health behaviours such as tooth brushing and flossing are developed mainly through education and modelling by adults in the home environment and/or education outside the home (Jamieson, Armfield and Robert-Thomson 2007). Among Aboriginal and Torres Strait Islander children, levels of preventative oral health behaviours are relatively low. A survey of children in remote Indigenous communities between 2000 and 2003 found that under 20 per cent of Aboriginal and Torres Strait Islander children brushed their teeth at home or school (Jamieson, Armfield and Robert-Thomson 2007).

Regular dental check-ups are important in the prevention and early treatment of dental decay. In 2012-13, 13.9 per cent of Aboriginal and Torres Strait Islander peopled aged 2 years and over reported never having visited a dentist (table 8A.1.37-38), with cost the most commonly reported reason for not visiting a dentist in the last 12 months, followed by logistical reasons in remote areas and personal reasons in non-remote areas (table 8A.1.39).

Additional data on dental consultations and oral health actions from the 2012-13 Aboriginal and Torres Strait Islander Health Survey are reported in section 8.1 (Access to primary health care).

### Child dental health

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| Figure 8.6.1 Proportion of children aged 6–15 years with no decayed missing or filled permanent teeth, by age, NSW (2007), SA, Tasmania and the NT, 2008 |
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| Figure 8.6.1 Proportion of children aged 6-15 years with no decayed missing or filled permanent teeth, by age, NSW (2007), SA, Tasmania and the NT, 2008  More details can be found within the text surrounding this image. |

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| *Source*: AIHW (2013) *Aboriginal and Torres Strait Islander Health Performance Framework 2012: Detailed analysis*; table 8A.6.2. |
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The most recent available data are relatively old. In NSW (2007), SA, Tasmania and the NT (2008):

* the proportions of Aboriginal and Torres Strait Islander children aged 5–10 years with no decayed, missing or filled deciduous (baby) teeth (dmft) ranged from 28.7 to 42.5 per cent, lower than the proportions for non-Indigenous children, which ranged from 47.8 to 59.6 per cent (table 8A.6.1).
* the proportions of children aged 6–15 years with no decayed, missing or filled permanent (adult) teeth (DMFT) decreased as age increased, with a larger decrease for Aboriginal and Torres Strait Islander children:
* for children aged 6 years, over 90 per cent of Aboriginal and Torres Strait Islander children (93.9 per cent) and non-Indigenous children (95.0 per cent) had no DMFT
* for children aged 15 years, 11.2 per cent of Aboriginal and Torres Strait Islander children and 38.4 per cent of non-Indigenous children had no DMFT (figure 8.6.1).
* for children aged 6–15 years, Aboriginal and Torres Strait Islander children across all age groups and remoteness areas generally had higher rates of DMFT than
non-Indigenous children (table 8A.6.3).

Supplementary data from the 2008 NATSISS found that almost one third of Aboriginal and Torres Strait Islander children aged 0–14 years (31.6 per cent) were reported to have teeth or gum problems, with 34.8 per cent of those with reported problems not visiting a dentist within the previous 12 months (tables 8A.6.4 and 8A.6.5). The most common reasons reported for not visiting a dentist were ‘waiting time’ (32.0 per cent) and ‘cost’ (20.7 per cent) (table 8A.6.6).

### Adult dental health

In 2004–2006, Aboriginal and Torres Strait Islander Australians aged 15 years and over had an average of 14.8 decayed, missing or filled teeth (mean DMFT), compared with 12.8 teeth for non-Indigenous Australians. The mean number of decayed and missing teeth was higher for Aboriginal and Torres Strait Islander Australians across all age groups from 15 to 74 years, while the mean number of filled teeth was higher for non-Indigenous Australians in the age groups from 35 to 74 years (table 8A.6.7).

In 2012-13, 4.7 per cent of Aboriginal and Torres Strait Islander Australians aged 15 years and over reported complete natural tooth loss. The rate for complete tooth loss was highest for those aged over 55 years (23.6 per cent) and higher in non‑remote areas (5.1 per cent) than in remote areas (3.3 per cent) (tables 8A.6.8 and 8A.6.9).

Data on complete natural tooth loss for Aboriginal and Torres Strait Islander Australians aged 15 years and over are available by State and Territory and by sex in table 8A.6.9.

### Potentially preventable hospitalisation for dental conditions

From 2010-11, Indigenous status in hospital separations data is considered of sufficient quality for reporting in all jurisdictions. Prior to 2010‑11, six jurisdictions (NSW, Victoria, Queensland, WA, SA and the NT) were considered to have acceptable quality of Aboriginal and Torres Strait Islander identification in hospitalisation data. The attachment tables for this report include data for all jurisdictions for 2010‑11 to 2012‑13, as well as data for the six jurisdictions for 2004‑05 to 2012‑13.

In 2012-13, after adjusting for differences in population age structures, Aboriginal and Torres Strait Islander Australians were hospitalised for dental conditions at 1.3 times the rate for non-Indigenous Australians (table 8A.6.10). The age adjusted hospitalisation rate for Aboriginal and Torres Strait Islander Australians in remote areas was over twice the rate for those in non-remote areas (table 8A.6.11).

From 2004-05 to 2012-13, for NSW, Victoria, Queensland, WA, SA and the NT combined, the age adjusted hospitalisation rate for dental health conditions for Aboriginal and Torres Strait Islander Australians increased by 56.5 per cent, while rates for other Australians remained relatively stable (table 8A.6.10).

In 2012-13, younger Aboriginal and Torres Strait Islander children aged 0–4 years and
5–9 years had higher rates of hospitalisation for dental health conditions than non‑Indigenous children in the same age groups (8.4 and 4.9 per 1000 population and 12.2 and 9.8 per 1000 population respectively), but older Aboriginal and Torres Strait Islander children aged 10–14 years had lower rates than non‑Indigenous children (3.0 and 5.9 per 1000 population respectively) (table 8A.6.12).

Data by type of hospital dental procedure for children aged 0–14 years are available in table 8A.6.14 and for dental hospitalisation rates by remoteness by age in table 8A.6.15.

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## 8.7 Mental health[[15]](#footnote-15)

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| Box 8.7.1 Key messages |
| * In 2012-13, almost one-third of Aboriginal and Torres Strait Islander adults (30.1 per cent) reported experiencing high/very high levels of psychological distress, an increase from 27.2 per cent in 2004-05 (table 8A.7.2).
* After adjusting for differences in population age structures, the proportion of Aboriginal and Torres Strait Islander adults experiencing high/very high psychological distress in 2012-13 was 2.7 times the proportion for non‑Indigenous Australians in 2011-12 (table 8A.7.1).
* In 2012-13, the age-adjusted rate of hospitalisation for mental and behavioural disorders for Aboriginal and Torres Strait Islander Australians was twice the rate for non‑Indigenous Australians (table 8A.7.28).
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| Box 8.7.2 Measures of mental health |
| There is one main measure for this indicator:* *Psychological distress*[[16]](#footnote-16)is defined as the proportion of people aged 18 years and over experiencing high/very high levels of psychological distress. Data are available from the ABS Australian Aboriginal and Torres Strait Islander Health Survey (AATSIHS)/National Aboriginal and Torres Strait Islander Social Survey (NATSISS), with the most recent available data for 2012-13 (all jurisdictions; national data by remoteness, age and stressors). Data for the non-Indigenous population are sourced from the ABS Australian Health Survey (AHS)/National Health Survey (NHS), with data for 2011-12. AATSIHS and AHS data are presented together as covering the overall time period 2011–13.

There are three supplementary measures for this indicator:* *Treatment rates* is defined as the rate of patients treated for mental health by emergency departments (national), community and residential mental health care (all jurisdictions), and general practitioners (national).
* *Hospitalisation rates* is defined as the rate of hospital separations for mental and behavioural disorders per 100 000 population (all jurisdictions: sex, remoteness).
* *Deaths from potentially avoidable mental and behavioural disorders* is defined as the rate of deaths from mental and behavioural disorders per 100 000 population (NSW, Queensland, WA, SA and the NT: age, sex).
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Mental health is essential to the overall health and wellbeing of individuals, and is closely related to the COAG targets for improved health outcomes. Mental health can also affect outcomes in other areas, such as economic participation (chapter 9), and safe and supportive communities (chapter 11).

Mental health relates to the ability to negotiate the daily challenges and social interactions of life, without experiencing undue emotional or behavioural incapacity (DoHA 2010). Mental health includes both mental illness and overall mental wellbeing. Although mental wellbeing problems are distinct from mental illness, the two interact and influence each other.

* Mental *illness* describes a range of behavioural and psychological conditions that can affect an individual’s mental health functioning and quality of life. The most common mental illnesses are anxiety, affective (mood), and substance use disorders. Mental illness also includes low prevalence conditions such as schizophrenia, bipolar disorder and other psychoses, and severe personality disorder (DoHA 2010). While of lower prevalence, these conditions can severely affect people’s ability to function in their daily lives (Morgan et al. 2011).
* Mental *wellbeing* can be affected by a broad range of factors, including domestic violence (see section 4.11), substance misuse (see section 11.2), physical health problems, incarceration (see section 4.12), family breakdown and social disadvantage (AHMAC 2004; Dudgeon, Milroy and Walker 2014).

Many of the unique risk factors faced by Aboriginal and Torres Strait Islander Australians have persisted across generations, most particularly the ongoing effects of colonisation (Dudgeon, Milroy and Walker 2014). Socio-historical-political factors influence the mental health of Aboriginal and Torres Strait Islander people, through the impact of family separation, the taking away of land, social inequity, racism, and the loss of culture and identity (Vicary and Westerman 2004). (See the historical narrative on Australia’s first peoples in chapter 1.)

Racism can be a key source of stress and socioeconomic disadvantage faced by Aboriginal people and families, with negative effects on social and emotional wellbeing (Dudgeon, Milroy and Walker 2014). Research in the NT found a significant association between interpersonal racism and depression among Aboriginal and Torres Strait Islander Australians (AHMAC 2012). (See section 5.1 on valuing Indigenous Australians and their cultures.)

On the positive side, a WA study showed that higher socioeconomic status was associated with a reduced risk of mental health problems in Aboriginal children (Dudgeon, Milroy and Walker 2014).

### Psychological distress

In 2012-13, almost one third of Aboriginal and Torres Strait Islander Australians aged
18 years and over (30.1 per cent) reported experiencing high/very high levels of psychological distress — an increase from 27.2 per cent in 2004-05 (table 8A.7.2). In 2012-13 this rate was significantly lower for those aged 55 years and over (24.5 per cent) than for those aged 18–24 years (30.2 per cent) and 45–54 years (30.5 per cent) (table  8A.7.3).

After adjusting for differences in population age structures, the proportion of Aboriginal and Torres Strait Islander adults experiencing high/very high levels of psychological distress in 2012-13 was around 2.7 times the rate for non‑Indigenous adults in 2011-12. For Aboriginal and Torres Strait Islander adults, the proportion decreased as remoteness increased. There was no significant difference by remoteness for non-Indigenous adults (table 8A.7.1).

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| Figure 8.7.1 Proportion of people aged 18 years and over with high/very high levels of psychological distress, 2004-05, 2008 and 2011–13**a,b,c** |
| Figure 8.7.1 Proportion of people aged 18 years and over with high/very high levels of psychological distress, 2004-05, 2008 and 2011-13  More details can be found within the text surrounding this image. |
| a Error bars represent 95 per cent confidence intervals around each estimate. b Data are age standardised. c Data for Aboriginal and Torres Strait Islander Australians are from the 2012-13 AATSIHS. Data for non-Indigenous Australians are from the 2011–13 AHS (for the period 2011-12). |
| *Sources*: ABS (unpublished) National Aboriginal and Torres Strait Islander Health Survey (NATSIHS) 2004-05; ABS (unpublished) National Health Survey (NHS) 2004-05; ABS (unpublished) National Aboriginal and Torres Strait Islander Social Survey (NATSISS) 2008; ABS (unpublished) National Health Survey (NHS) 2007-08; ABS (unpublished) Australian Aboriginal and Torres Strait Islander Health Survey (AATSIHS) 2012-13 National Aboriginal and Torres Strait Islander Health Survey (NATSIHS component); ABS (unpublished) Australian Health Survey (AHS); 2011–13 (NHS 2011-12 component); table 8A.7.1. |
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Between 2004-05 and 2011–13, after adjusting for differences in population age structures, the gap between the proportion of Aboriginal and Torres Strait Islander adults and non‑Indigenous adults experiencing high/very high psychological distress widened (from 13.6 percentage points to 18.6 percentage points) (figure 8.7.1).

In 2012-13, the most commonly reported stressors for Aboriginal and Torres Strait Islander adults experiencing high/very high levels of psychological distress were ‘feeling unsafe’ (62.4 per cent), ‘getting back together with spouse’ (50.4 per cent), ‘abuse or violent crime’ (48.7 per cent) and ‘pressure to fulfil cultural responsibilities’ (48.0 per cent) (table 8A.7.5). Data on the level of psychological distress reported by State and Territory are available in table 8A.7.2.

The attachment tables include supplementary data about selected attributes of positive wellbeing (calm and peaceful, happy, full of life, lots of energy) by State and Territory, sex and remoteness (tables 8A.7.8–13) and selected attributes of psychological distress (nervous, without hope, restless or jumpy, that everything was an effort and sadness) by sex, age and remoteness (tables 8A.7.14–22).

Prisoners exhibit higher rates of emotional and mental wellbeing problems than the general population. Available data suggest that, in 2012, non‑Indigenous prison entrants had higher rates of high/very high levels of psychological distress (38 per cent) than Aboriginal and Torres Strait Islander prison entrants (20 per cent) (AIHW 2013). This may reflect the relative ‘normalisation’ of imprisonment in some Indigenous communities (see section 4.12 on Imprisonment and juvenile detention.)

### Treatment rates

Treatment rate data are reported for a selection of mental health services by ‘occasions of service’. A patient may be counted more than once if they received multiple occasions of service.

* *General practitioner encounters* — 16.7 out of every 100 GP encounters were mental health related for Aboriginal and Torres Strait Islander Australians in 2011-12, compared with 12.2 per 100 GP encounters for non‑Indigenous Australians (table 8A.7.23)
* *Community based mental health service contacts*:[[17]](#footnote-17) — there were 871 service contacts per 1000 Aboriginal and Torres Strait Islander Australians in 2010-11, compared with 277 service contacts per 1000 non‑Indigenous Australians (table 8A.7.25)
* *Residential mental health care —* there were2.6 episodes of community-based residential care per 10 000 Aboriginal and Torres Strait Islander Australians in
2010-11, compared with 1.8 per 10 000 non-Indigenous Australians (table 8A.7.25).

Data on community based and residential mental health service contacts by State and Territory are available in table 8A.7.25.

### Hospitalisation rates

From 2010-11, Indigenous status in hospital separations data is considered of sufficient quality for reporting in all jurisdictions. Prior to 2010-11, six jurisdictions (NSW, Victoria, Queensland, WA, SA and the NT) were considered to have acceptable quality of Aboriginal and Torres Strait Islander identification in hospitalisation data. The attachment tables for this report include data for all jurisdictions for 2010-11 to 2012-13, as well as data for the six jurisdictions for 2004-05 to 2012-13.

Nationally in 2012-13, the rate of hospital separations for mental and behavioural disorders for Aboriginal and Torres Strait Islander Australians was 2371.3 per 100 000 population. The most common principal diagnoses were substance use disorders (862.7 per 100 000 population) and mood and neurotic disorders (720.2 per 100 000 population). For NSW, Victoria, Queensland, WA, SA and the NT combined, the hospitalisation rate increased from 1941.5 per 100 000 population in 2004-05 to 2660.0 per 100 000 population in
2012-13 (table 8A.7.27).

In 2012-13, after adjusting for differences in population age structures, the rate of hospitalisation for mental and behavioural disorders for Aboriginal and Torres Strait Islander Australians was twice the rate for non-Indigenous Australians (table 8A.7.28). For both Aboriginal and Torres Strait Islander Australians and non‑Indigenous Australians, the hospitalisation rate was higher for major cities compared to other remoteness areas (table 8A.7.30).

For NSW, Victoria, Queensland, WA, SA and the NT combined, between 2004-05 and 2012-13, after adjusting for differences in population age structures, the gap in the rate of hospitalisations for mental and behavioural disorders for Aboriginal and Torres Strait Islander Australians widened from 1.5 to 1.9 times the rate for other Australians (tables 8A.7.29 and 38).

Data on hospitalisations for mental and behavioural disorders are available by State and Territory in tables 8A.7.29 and 8A.7.31–38.

### Mental and behavioural disorders as cause of death

Mortality data disaggregated by Indigenous status are available for NSW, Queensland, WA, SA and the NT, as these jurisdictions have sufficient levels of Indigenous identification and numbers of deaths to support analysis.

Over the period 2008–2012, there were 10.5 deaths per 100 000 population for Aboriginal and Torres Strait Islander Australians and 32.0 deaths per 100 000 population for
non-Indigenous Australians due to mental and behavioural disorders. The majority of deaths for both Aboriginal and Torres Strait Islander and non‑Indigenous Australians were for people aged 45 years and over (table 8A.7.40).

Over the period 2008–2012, after adjusting for differences in population age structures, the rate of deaths for Aboriginal and Torres Strait Islander Australians due to mental and behavioural disorders was 41.9 deaths per 100 000 population, compared with 29.0 deaths per 100 000 population for non-Indigenous Australians (table 8A.7.39).

Data on death rates due to mental and behavioural disorders are available by State and Territory by sex in tables 8A.7.39 and 8A.7.41.

### Things that work

Increasingly, research findings suggest that early intervention can prevent the worsening of mental health problems. Early intervention is most appropriate for helping young people, as adolescence is the peak age of onset for a first episode of mental illness (Chalmers et al. 2014).

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## 8.8 Suicide and self-harm[[18]](#footnote-18)

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| Box 8.8.1 Key messages |
| * Suicide and self-harm cause great grief in both Aboriginal and Torres Strait Islander communities and non-Indigenous communities.
* For the period 2008–2012, after adjusting for differences in population age structures, the rate of deaths from suicide for Aboriginal and Torres Strait Islander Australians was almost twice the rate for non‑Indigenous Australians (table 8A.8.1).
* The rate of deaths from suicide was higher for males than for females for both Aboriginal and Torres Strait Islander Australians (2.9 times higher) and non‑Indigenous Australians (3.4 times higher) (table 8A.8.1).
* Age-specific rates of deaths from suicide were highest for Aboriginal and Torres Strait Islander people aged 25–34 years (39.9 deaths per 100 000 population), around three times the rate for non-Indigenous Australians of the same age. There was no difference in rates between Aboriginal and Torres Strait Islander and non‑Indigenous people aged 45 years and over (figure 8.8.1).
* From 2004-05 to 2012-13, after adjusting for differences in population age structures, the hospitalisation rate for intentional self-harm increased for Aboriginal and Torres Strait Islander Australians by 48.1 per cent, while the rate for other Australians remained relatively stable, resulting in the rate for Aboriginal and Torres Strait Islander Australians increasing from 1.7 to 2.7 times the rate for other Australians (figure 8.8.2).
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| Box 8.8.2 Measures of suicide and self-harm |
| There is one main measure for this indicator. *Suicide deaths* is defined as the number of deaths from intentional self-harm per 100 000 population (NSW, Queensland, WA, SA and NT; age; sex). Data for this measure are sourced from the ABS Causes of Death collection, with the most recent available data for 2012. Due to small numbers, the rate is calculated by averaging the number of deaths over a five year period.Data are also provided for one supplementary measure, the number of non-fatal hospitalisations from intentional self-harm per 100 000 population (all jurisdictions; sex; remoteness). |
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Suicide and self-harm cause great grief in both Aboriginal and Torres Strait Islander and non-Indigenous communities (Senate Community Affairs References Committee 2010). However, Aboriginal and Torres Strait Islander Australians experience disproportionately high rates of suicide, and it has become increasingly prevalent over recent decades, accelerating after the 1980s (DOHA 2013). Suicide is most prevalent among young Aboriginal and Torres Strait Islander males, while suicide attempts seem to be more prevalent for Aboriginal and Torres Strait Islander females (AHA 2014; Clifford, Doran and Tsey 2013; Elliott-Farrelly 2004).

Mental illness is the largest risk factor for suicide, with psychological distress often being the final factor leading to spontaneous acts of suicide and self-harm (Australian Government 2013). Section 8.7 reports on mental health in more detail.

Environmental risk factors that contribute to high levels of suicide in Aboriginal and Torres Strait Islander Australians include: lower levels of education, employment, service access, health and income; and increased levels of remoteness, domestic violence or abuse, alcohol and other drug abuse (DOHA 2008). Trauma and grief as a result of past dislocation and mistreatment, and a loss of cultural identity, and lack of access to culturally appropriate services can also contribute to higher levels of suicide (DOHA 2008).

Studies have found that suicides among Aboriginal and Torres Strait Islander Australians appear to occur in clusters, and that victims may share common age groups, genders and methods (Elliott-Farrelly 2004). Aboriginal and Torres Strait Islander Australians have been more exposed to suicide than most non-Indigenous Australians, which can lead to situations of ‘bereavement overload’ and may contribute to suicidal behaviours (AHA 2014).

The continued exposure of Aboriginal and Torres Strait Islander Australians to multiple risk factors has led to calls for increased suicide prevention interventions (Clifford, Doran and Tsey 2013). Broadly protective factors against suicide include connectedness with family, friends, culture, school and communities; having someone who cares about you and having someone you care about; having positive attitudes and ways to tackle problems; financial stability, good health and access to mental health support when required (NMHC 2012).

### Suicide deaths

Mortality data disaggregated by Indigenous status are available for NSW, Queensland, WA, SA and the NT, as these jurisdictions have sufficient levels of Aboriginal and Torres Strait Islander identification and numbers of deaths to support analysis.

For the period 2008–2012, after adjusting for differences in population age structures, the rate of deaths for Aboriginal and Torres Strait Islander Australians due to suicide was almost twice the rate for non-Indigenous Australians (table 8A.8.1).

The rate of deaths from suicide was higher for males than for females for both Aboriginal and Torres Strait Islander Australians (2.9 times higher) and non-Indigenous Australians (3.4 times higher) (table 8A.8.1).

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| Figure 8.8.1 Rates of deaths from intentional self-harm (suicide) by age, NSW, Queensland, WA, SA and the NT, 2008–2012**a** |
| Figure 8.8.1 Rates of death from intentional self-harm (suicide) by age, NSW, Queensland, WA, SA and the NT, 2008-2012  More details can be found within the text surrounding this image. |
| a Deaths from intentional self-harm are defined as causes of death with ICD-10 codes X60‑X84, Y87.0. |
| *Source*: ABS (unpublished) Causes of Death, Australia collection; table 8A.8.2. |
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For the period 2008–2012, suicide death rates varied by age group, with the highest rate for Aboriginal and Torres Strait Islander Australians aged 25–34 years (39.9 per 100 000 population), around three times the rate for non-Indigenous Australians of the same age. For those aged 45 years and over, there was no difference in rates between Aboriginal and Torres Strait Islander and non‑Indigenous Australians (figure 8.8.1). Data on suicide death rates by State and Territory by sex are available in table 8A.8.1 and by State and Territory by age in table 8A.8.2.

### Hospitalisations for self-harm

From 2010-11, Indigenous status in hospital separations data is considered of sufficient quality for reporting in all jurisdictions. Prior to 2010-11, six jurisdictions (NSW, Victoria, Queensland, WA, SA and the NT) were considered to have acceptable quality of Aboriginal and Torres Strait Islander identification in hospitalisation data. The attachment tables for this report include data for all jurisdictions for 2010-11 to 2012-13 as well as data for the six jurisdictions for 2004-05 to 2012-13.

Nationally in 2012-13, after adjusting for differences in population age structures, the rate of hospitalisation for intentional self-harm for Aboriginal and Torres Strait Islander Australians was around two and a half times the rate for non‑Indigenous Australians (table 8A.8.3).

In 2012-13, for Aboriginal and Torres Strait Islander Australians, the rate was:

* higher for females than males. There was a similar trend for non-Indigenous Australians (table 8A.8.3)
* higher in remote areas than other areas. Rates for non-Indigenous Australians were highest in regional areas, followed by remote areas and major cities (table 8A.8.5).

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| Figure 8.8.2 Rates of hospitalisation for intentional self-harm, NSW, Victoria, Queensland, WA, SA and public hospitals in the NT, 2004-05 to 2012-13**a, b** |
| Figure 8.8.2 Rates of hospitalisation for intentional self-harm, NSW, Victoria, Queensland, WA, SA and public hospitals in the NT, 2004-05 to 2012-13  More details can be found within the text surrounding this image. |
| a Other includes hospitalisations where Indigenous status was recorded as non-Indigenous or not stated. b Rates are age standardised. |
| *Source*: AIHW (unpublished) National Hospital Morbidity Database; table 8A.8.4 |
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Comparable time series data from 2004-05 to 2012-13 are available for NSW, Victoria, Queensland, WA, SA and the NT. After adjusting for differences in population age structures, the hospitalisation rate for intentional self‑harm increased for Aboriginal and Torres Strait Islander Australians by 48.1 per cent, while the rate for other Australians remained relatively stable, resulting in the rate for Aboriginal and Torres Strait Islander Australians increasing from 1.7 to 2.7 times the rate for non-Indigenous Australians (figure 8.8.2).

### Things that work

One initiative that may have contributed to a reduction in suicide and self-harm is described in box 8.8.3.

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| Box 8.8.3 Things that work |
| The **Yiriman Project** (WA), auspiced by the Kimberly Aboriginal Law and Culture Centre, commenced in 2000. The Project takes young people, accompanied by elders, on trips back to country, to immerse them in the stories, song and knowledge that are their cultural heritage. This builds young people’s confidence and improves their self-worth, and is considered to have helped curb suicide, self-harm and substance abuse in the participating communities (RA 2013).The Yiriman project was the winner of Reconciliation Australia’s 2012 Indigenous Governance Awards in Category B: non-incorporated projects and initiatives. Project outcomes were summarised in Taylor’s (2010) qualitative study:* the healing of young people as they walk on country and look after it
* the opportunity to develop and assert culture, language and bush skills
* meaningful employment that values and maintains culture.

Further information about this program, focusing on the program’s successful governance arrangements, is in section 5.4. |
| *Source*: Reconciliation Australia (2013) *Sharing Success: Stories from the 2012 Indigenous Governance Awards*, Reconciliation Australia, Canberra; Taylor (2010), *Partnerships in the Youth Sector - Building Stories in Our Young People: The Yiriman Project*, The Foundation for Young Australians, Melbourne. |
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Australian Government 2013, *Australian Government's Response to the House of Representatives Standing Committee on Health and Ageing’s Report on the Inquiry into early intervention programs aimed at reducing youth suicide*.

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DOHA (Department of Health and Ageing) 2008, *Promoting Good Practice in Suicide Prevention - Activities Targeting Men*, Canberra.

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NMHC (National Mental Health Commission) 2012, *A contributing life: the 2012 National Report Card on Mental Health and Suicide Prevention*, NHMC, Sydney.

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1. The Steering Committee notes its appreciation to the National Health Leadership Forum, which reviewed a draft of this section of the report. [↑](#footnote-ref-1)
2. Personal reasons include: too busy (work, personal or family responsibilities), discrimination, service not culturally appropriate, language problems, dislikes service or health professional, afraid, embarrassed, or felt service would be inadequate. [↑](#footnote-ref-2)
3. Primary health service include public and community health services and those flowing from a patient-initiated contact (general practitioner consultations, hospital emergency attendances, general practitioner ordered investigations and prescriptions, over the counter medicines). Secondary/tertiary services involved a referral within the health system or a hospital admission. [↑](#footnote-ref-3)
4. Data are also available on healthcare expenditure in the Indigenous Expenditure Report (SCRGSP 2012) and care should be taken when comparing estimates from this report due to different definitions and methodology, source of expenditure data and time period. [↑](#footnote-ref-4)
5. The Steering Committee notes its appreciation to the National Health Leadership Forum, which reviewed a draft of this section of the report. [↑](#footnote-ref-5)
6. Diseases that would typically persist for at least six months. [↑](#footnote-ref-6)
7. Relate to serious short-term illness and could possibly be prevented or severely minimised, through access to effective primary health care services. [↑](#footnote-ref-7)
8. The Steering Committee notes its appreciation to the National Health Leadership Forum, which reviewed a draft of this section of the report. [↑](#footnote-ref-8)
9. A list of causes for potentially avoidable deaths is available in table 8A.3.11. [↑](#footnote-ref-9)
10. These categories are based on work published by the National Health Performance Committee (NHPC 2003). [↑](#footnote-ref-10)
11. The Steering Committee notes its appreciation to the National Health Leadership Forum, which reviewed a draft of this section of the report. [↑](#footnote-ref-11)
12. The Steering Committee notes its appreciation to the National Health Leadership Forum, which reviewed a draft of this section of the report. [↑](#footnote-ref-12)
13. The Steering Committee notes its appreciation to the National Health Leadership Forum, which reviewed a draft of this section of the report. [↑](#footnote-ref-13)
14. DMFT/dmft: uppercase letters denote permanent (adult) teeth and lowercase letters denote deciduous (infant) teeth. DMFT/dmft experience is quantified as the sum of decayed, missing and filled teeth. The index is cumulative: once a tooth has decay, it is permanently recorded as such, and therefore changes in risk factors or active disease levels do not change this for the individual. [↑](#footnote-ref-14)
15. The Steering Committee notes its appreciation to the National Health Leadership Forum, which reviewed a draft of this section of the report. [↑](#footnote-ref-15)
16. Based on Kessler Psychological Distress Scale‑10 (K10) modified to five questions (K5) which measure an individual’s level of psychological distress in the past four weeks. [↑](#footnote-ref-16)
17. Community based mental health service contacts refers to specialised public mental health services dedicated to the assessment, treatment, rehabilitation and care of non-admitted clients. [↑](#footnote-ref-17)
18. The Steering Committee notes its appreciation to the National Health Leadership Forum, which reviewed a draft of this section of the report. [↑](#footnote-ref-18)