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for better health and wellbeing*

Substance use among Aboriginal and Torres Strait Islander people

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Canberra

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Australian Institute of Health and Welfare

Board Chair

Hon. Peter Collins, AM, QC

Director

David Kalisch

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

Dr Fadwa Al-Yaman

Australian Institute of Health and Welfare

GPO Box 570

Canberra ACT 2601

Phone: (02) 6244 1146

Email: fadwa.al-yaman@aihw.gov.au

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Abbreviations

ABS	Australian Bureau of Statistics
AIDS	acquired immune deficiency syndrome
AIHW	Australian Institute of Health and Welfare
AODTS-NMDS	Alcohol and Other Drug Treatment Services National Minimum Data Set
APY	Anangu Pitjantjatjara ankuntyjatjara (Lands of South Australia)
BEACH	Bettering the Evaluation and Care of Health
CAI	computer-assisted interview
COAG	Council of Australian Governments
DALY	disability adjusted life year
DASR	Drug and Alcohol Service Report
DoHA	Department of Health and Ageing
GP	general practitioner
HIV	human immunodeficiency virus
ICD-10-AM	International Statistical Classification of Diseases and Related Health Problems, Tenth Revision, Australian Modification
ICPC	International Classification of Primary Care
LSD	lysergic acid diethylamide
ml	millilitre
NATSIHS	National Aboriginal and Torres Strait Islander Health Survey
NATSISS	National Aboriginal and Torres Strait Islander Social Survey
NDSHS	National Drug Strategy Household Survey
NHS	National Health Survey
NIDAC	National Indigenous Drug and Alcohol Committee
NMDS	National Minimum Data Set
NPDC	National Perinatal Data Collection
NPSU	National Perinatal Statistics Unit
OATSIH	Office for Aboriginal and Torres Strait Islander Health
OSR	OATSIH Services Reporting
PSPP	Petrol Sniffing Prevention Program

Symbols

..	not applicable (that category/ data item does not apply)
*	represents statistically significant differences in the Indigenous/ non-Indigenous comparisons
—	rounded to zero (for example, in a table showing whole numbers, the statistic is less than 0.5)
-	negative or minus values
<	less than

Summary

The purpose of this report is to assist the work of the National Indigenous Drug and Alcohol Committee (NIDAC), the leading voice in Indigenous alcohol and other drug policy. NIDAC's aim is to reduce alcohol and other drug problems and associated harms in Indigenous communities nationally. Funding support for the report was received from the Office for Aboriginal and Torres Strait Islander Health.

This report brings together national data on substance use among Aboriginal and Torres Strait Islander people to provide a comprehensive picture of smoking, alcohol and illicit substance consumption patterns and how these have changed over time. The report also includes data on the links between substance use and health, and the use of alcohol and other drug treatment services by Indigenous Australians.

Smoking

Smoking rates among Aboriginal and Torres Strait Islander Australians remain high, but recent data show that there has been some decline.

- In 2008, approximately half the Indigenous adults (49.9%) were current smokers – more than double the rate of non-Indigenous people who smoked.
- Indigenous people in remote areas smoked at higher rates (51%) than those in non-remote areas (46%) in 2008.
- The first statistically significant decline in smoking rates for Indigenous Australians was seen between 2002 and 2008, from 53% to about 50% respectively.
- More than half of Indigenous mothers (51%) smoked during pregnancy in 2008, and this rate remained relatively stable over the period between 2001 and 2008.

Alcohol consumption

Compared with non-Indigenous Australians, a higher proportion of Indigenous Australians abstain from both alcohol use and binge drinking. The data show that:

- In 2008, nearly three in ten (29%) Indigenous Australians did not drink in the last 12 months – almost double the rate of non-Indigenous Australians (15%)
- Indigenous Australians were twice as likely as non-Indigenous Australians to binge drink (17% and 8% respectively) in 2004-05.
- the proportion of Indigenous (15%) and non-Indigenous people (14%) who drank at long-term (chronic), risky or high-risk levels was similar in 2008.
- alcohol consumption patterns for Indigenous Australians varied by sex In 2008, with a higher proportion of men than women drinking alcohol, and consuming it at risky levels
- there was a decline in the proportion of Indigenous people who abstained from alcohol between 2002 (31%) and 2008 (27%).

Illicit substance use

About a quarter (23%) of Indigenous Australians had recently used an illicit substance while just over four in ten (43%) reported that they had used at least one illicit substance in their lifetime.

- Indigenous males are more likely than Indigenous females to have used an illicit substance in the last 12 months (28% compared with 17%).
- Marijuana was the most common substance used, followed by amphetamines or speed.
- More than half (51%) of Indigenous males reported that they had ever used illicit substances compared with 36% of Indigenous females.
- The proportion of Indigenous Australians reporting that they had used illicit substances remained the same between 2002 and 2008.

1 Introduction

Alcohol, tobacco and illicit substances are widely used by both Indigenous and non-Indigenous Australians. Substance use can cause serious harm to individuals, families, communities and the economy. In 2004–05, the cost associated with drug use related harm in Australia was estimated at \$56.1 billion: 56% of this was due to tobacco, 27% to alcohol and 15% to illicit drugs (Collins & Lapsley 2008).

The use of alcohol, tobacco and illicit substances is both the cause and effect of much suffering among Aboriginal and Torres Strait Islander people. It causes serious harm to the physical health of Indigenous people, but also to the social health of individuals and communities (MCDS 2006).

Smoking is the major cause of chronic disease among Aboriginal and Torres Strait Islander people (Vos et al. 2007). About half of Indigenous Australians smoke regularly, twice the rate of non-Indigenous Australians. Alcohol use is a major contributor to the higher rates of injury, violence and involvement in the criminal justice system found among Indigenous Australians (MCDS 2006).

Substance use plays a significant role in the gap between Indigenous and non-Indigenous Australians in life expectancy and health (Catto & Thomson 2008). Under the Council of Australian Governments' (COAG) Closing the Gap National Health Partnership, Australian governments are making significant investments in programs to address chronic disease, including programs to tackle the high rates of smoking among Indigenous people.

Australia's *National Drug Strategy 2004–09* provides the overarching framework for an integrated and coordinated approach across all levels of government to reduce the prevalence and harm caused by drug use (MCDS 2004). The *Drug Strategy Aboriginal and Torres Strait Islander Peoples Complementary Action Plan 2003–2009* provides the framework for reducing harms caused by alcohol, tobacco and illicit substance use among Aboriginal and Torres Strait Islander people. These strategies are currently being updated (MCDS 2006).

This report brings together the national data on substance use among Aboriginal and Torres Strait Islander people. It includes Australian Bureau of Statistics (ABS) self-reported survey data, Australian Institute of Health and Welfare (AIHW) survey data, and data from a number of different administrative sources. The report includes a separate chapter with data on the tobacco, alcohol and illicit substances, focusing on consumption patterns and trends. The chapter on the health impacts of substance use includes data on the links between substance use and various health measures, such as self-assessed health, hospitalisations and mortality. The final chapter provides data on the national drug and alcohol treatment services that Aboriginal and Torres Strait Islander people use.

The report was prepared with funding from the Office for Aboriginal and Torres Strait Islander Health (OATSIH), to assist the work of the National Indigenous Drug and Alcohol Committee (NIDAC), the leading voice in Indigenous alcohol and other drug policy. NIDAC's aim is to reduce alcohol and other drug problems and associated harms in Indigenous communities nationally. The report was intended to be used as the basis for discussion at the NIDAC conference held in Adelaide in June 2010 where key findings from the report were presented.

2 Tobacco use

Tobacco is one of the most widely used legal drugs in Australia. Tobacco smoking is a major risk factor for the development of heart and circulatory system diseases including coronary heart disease, stroke and peripheral vascular diseases, numerous cancers, respiratory diseases and a variety of other conditions (AIHW 2008a).

Smoking is related to socioeconomic status, with persons of lower socioeconomic status more likely to smoke than persons of higher socioeconomic status (AIHW 2002a). Tobacco smoking is also found to be associated with other health risk factors, such as poor diet and long-term/high-risk drinking (ABS 2006a).

As well as the adverse effects that tobacco use causes to smokers, tobacco smoke can also have serious health implications for those who spend time in close proximity to a smoker. This includes causing asthma in vulnerable children, lower respiratory tract infections, lung cancer and coronary heart disease (AIHW 2002b).

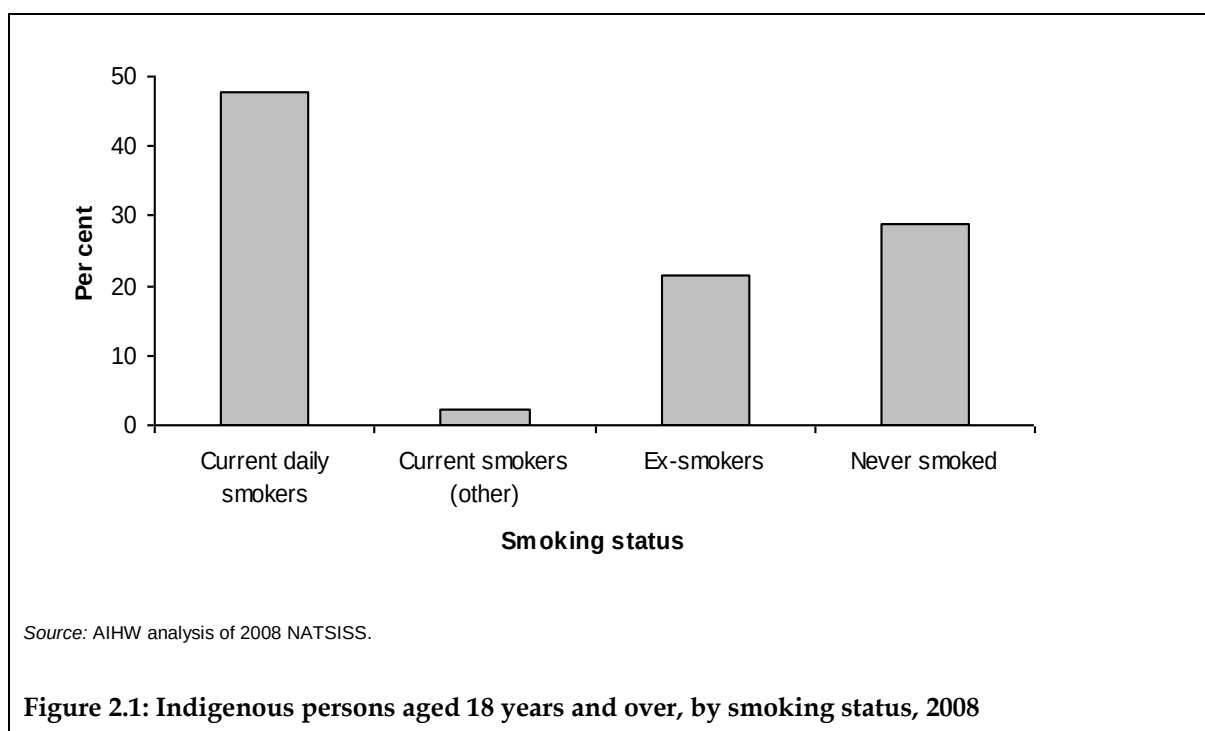
This chapter provides data on self-reported tobacco usage for both Indigenous and non-Indigenous Australians. Data on trends in tobacco usage are also provided. The national data on smoking during pregnancy are also included, as this increases the risks of complications during pregnancy and adverse perinatal outcomes.

2.1 Self-reported smoking rates

The main data sources for self-reported tobacco smoking used in this report were the ABS National Aboriginal and Torres Strait Islander Social Survey (NATSISS) and the ABS National Aboriginal and Torres Strait Islander Health Survey (NATSIHS). (See Appendix 1 for more information about data sources and data quality issues.)

The most recent data available come from the 2008 NATSISS, which collected information on the prevalence of smoking among the Aboriginal and Torres Strait Islander population. Among Indigenous persons aged 18 years and over, the survey estimated that:

- 47.7% were current daily smokers
- 2.2% were current smokers who smoked less often than daily
- just over one-fifth (21.4%) were ex-smokers
- 28.8% had never smoked (Figure 2.1).



The 2008 NATSISS found that smoking rates varied by location and age:

- In relation to state, the proportion of Indigenous persons aged 18 years and over who were current daily smokers ranged from 36% in the Australian Capital Territory to 51% in the Northern Territory (Table 2.1).

Table 2.1: Smoking status, by state/territory, Indigenous persons aged 18 years and over, 2008 (per cent)

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Australia
Current smoker									
Daily	49.8	48.3	45.6	44.1	48.9	47.2	36.4	50.9	47.7
Other	*1.7	*1.5	*1.8	2.8	*2.2	*1.8	**1.4	3.7	2.2
Ex-smoker	23.9	24.1	22.0	20.4	19.5	24.4	28.7	13.6	21.4
Never smoked	24.5	26.1	30.6	32.7	29.4	26.6	33.5	31.8	28.8
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Total number	85,257	19,312	80,218	38,925	16,111	10,777	2,564	37,774	290,937

* Estimate has a relative standard error of between 25% and 50% and should be used with caution.

** Estimate has a relative standard error greater than 50% and is considered too unreliable for general use.

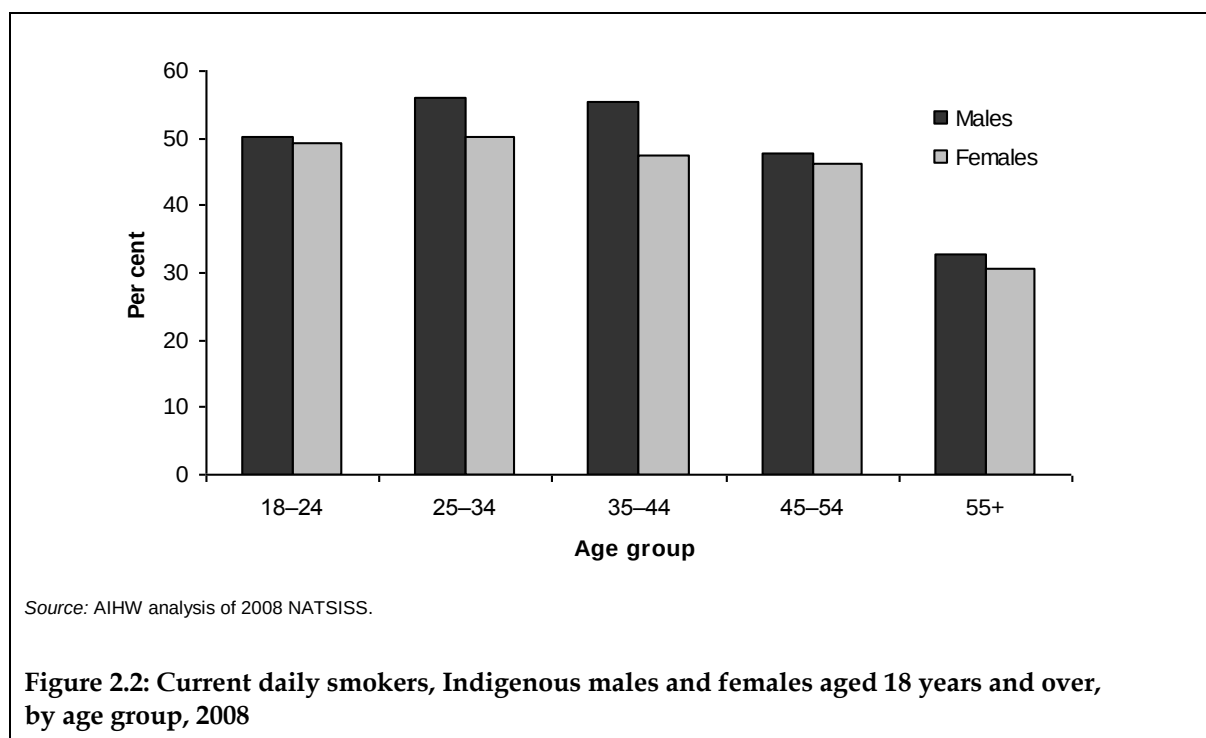
Source: AIHW analysis of 2008 NATSISS.

- The proportion of Indigenous persons who were current daily smokers in *Very remote* areas (51%) was greater than the proportion in *Major cities* (46%) (AIHW forthcoming).
- A higher proportion of Indigenous people in the age groups 25–34 and 35–44 years were current daily smokers than those in younger and older age groups (Figure 2.2).

Higher smoking rates for Indigenous Australians were associated with a range of social and economic measures:

- Those on low incomes had higher smoking rates than those on high incomes.

- Those with non-school qualifications (for example, bachelor degree, and diploma) had lower smoking rates than those without qualifications.
- Those who were unemployed had higher smoking rates than those who were employed (AIHW forthcoming).



After adjusting for differences in age structure between the Indigenous and non-Indigenous populations, Indigenous Australians were:

- more than twice as likely as non-Indigenous Australians to be current daily smokers
- just over half as likely as non-Indigenous Australians to have never smoked (Table 2.2).

Table 2.2: Age-standardised smoking rates, by Indigenous status, persons aged 18 years and over, 2008 (per cent)

	Age-standardised rate		Ratio	Rate difference ^(a)
	Indigenous	Non-Indigenous		
Current smoker	49.8	20.5	2.4	29.3
Daily	47.7	18.6	2.6	29.1
Other	2.2	1.9	1.2	0.3
Ex-smoker	21.4	29.9	0.7	-8.5
Never smoked	28.8	49.6	0.6	-20.8
Total^(b)	100	100	..	..

(a) Indigenous rate minus non-Indigenous rate.

(b) Includes those whose smoking status is not known.

Note: Proportions are directly age-standardised to the 2001 Australian standard population.

Source: Data for Indigenous people are from the 2008 NATSISS, for non-Indigenous people are from the 2007-08 National Health Survey.

2.2 Trends in smoking rates

The NATSISS found that there was a decline in Indigenous smoking rates in the last two surveys, though the data should be interpreted with care as this fall is based on a single data point.

- The proportion of smokers (whether daily or less frequently) dropped from 53% in 2002 to 50% in 2008.
- There was a corresponding increase in the proportion of ex-smokers from 17% in 2002 to 21% in 2008 (Table 2.3).

Table 2.3: Smoking status, Indigenous persons aged 18 years and over, 2002 and 2008 (per cent)

Smoking status	2002	2008
Current smoker	53.1	49.8
Ex-smoker	16.5	21.4
Never smoked	29.7	28.8
Total^(a)	100	100
Total number^(a)	251,398	290,937

(a) Includes those whose smoking status is not stated.

Source: AIHW analysis 2002 and 2008 NATSISS.

2.3 Tobacco smoking during pregnancy

The main source of national data on smoking during pregnancy is the National Perinatal Data Collection (NPDC). Data are available from seven jurisdictions (New South Wales, Queensland, Western Australia, South Australia, Tasmania, the Australian Capital Territory and the Northern Territory). The definitions used for smoking during pregnancy differ among the jurisdictions and comparisons between states and territories should be interpreted with caution (AIHW: Leeds et al. 2007). In addition to this, there are some data available from the 2008 NATSISS on tobacco use during pregnancy of mothers of Indigenous children aged 0–3 years.

Self-reported smoking rates

The 2008 NPDC reported that there were 11,181 Aboriginal and Torres Strait Islander mothers in New South Wales, Queensland, Western Australia, South Australia, Tasmania, the Australian Capital Territory and the Northern Territory who identified as Aboriginal or Torres Strait Islander. A relatively high proportion of these mothers reported that they smoked during pregnancy.

- Over half of the Indigenous mothers reported smoking during pregnancy (50.9%), compared with 14.4% of non-Indigenous women who gave birth. Indigenous mothers accounted for 14.9% of mothers who smoked during pregnancy in the jurisdictions which provided smoking data.
- In 2007, smoking rates varied by jurisdiction and ranged from 46% in the Northern Territory to 63% in South Australia (Table 2.4).

Table 2.4: Tobacco smoking during pregnancy, Indigenous mothers, 2007

Smoking status	NSW	Qld	WA	SA ^(a)	Tas	ACT	NT ^(b)	Total
Number								
Smoked	1,466	1,667	944	380	131	35	640	5,263
Did not smoke	1,440	1,478	827	213	99	32	580	4,669
Not stated	10	17	5	15	1	—	182	230
Total	2,916	3,162	1,776	608	231	67	1,402	10,162
Per cent								
Smoked	50.3	52.7	53.2	62.5	56.7	52.2	45.6	51.8
Did not smoke	49.4	46.7	46.6	35.0	42.9	47.8	41.4	45.9
Total^(c)	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

(a) For South Australia, 'smoked' includes women who quit before the first antenatal visit.

(b) For the Northern Territory, smoking status was recorded at the first antenatal visit.

(c) Includes mothers for whom smoking status was not stated.

Notes

1. Data not available for Victoria.

2. State-level data are based on place where birth occurred, not place of usual residence.

3. Smoking status during pregnancy is not part of the Perinatal NMDS. The current question is not consistent across jurisdictions; therefore, caution should be used when interpreting these numbers.

Source: AIHW NPDC.

Age-standardised rates showed that, in 2007, the rate of smoking during pregnancy was much higher for Indigenous women compared with non-Indigenous women:

- Indigenous women smoked during pregnancy at over 3 times the rate of non-Indigenous women (Table 2.5).
- There was more than a 35 percentage point difference between the proportion of Indigenous women who smoked during pregnancy compared with the proportion of non-smokers (Table 2.5).

Table 2.5: Smoking during pregnancy by Indigenous status: rate ratios and rate differences, 2007^(a)

Smoking status	NSW	Qld	WA	SA ^(b)	Tas	ACT	NT ^(c)	Total
Rate ratio ^(d)	3.9	2.9	3.7	3.1	2.1	3.2	2.9	3.3
Rate difference ^(e)	36.2	34.0	39.3	41.1	26.3	29.8	29.5	35.4

(a) Excludes births where the mother's Indigenous status was not stated.

(b) For South Australia, 'smoked' includes women who quit before the first antenatal visit.

(c) For the Northern Territory, smoking status was recorded at the first antenatal visit.

(d) Rate ratio is the directly age-standardised Indigenous proportion divided by the directly age-standardised non-Indigenous proportion using the Australian female population who gave birth in 2007 as the standard population.

(e) Rate difference is the directly age-standardised Indigenous proportion less the directly age-standardised non-Indigenous proportion using the Australian female population who gave birth in 2007 as the standard population.

Notes

1. Data not available for Victoria.
2. State-level data are based on place where birth occurred, not place of usual residence.
3. Smoking status during pregnancy is not part of the Perinatal NMDS. The current question is not consistent across jurisdictions; therefore caution should be used when interpreting these numbers.
4. Proportions on which above rate ratios and rate differences are based have been directly age-standardised to account for differences in the age structure of the Indigenous and non-Indigenous females who give birth.

Source: AIHW NPDC.

Smoking rates for Indigenous mothers varied by region and age:

- Smoking rates were highest for those living in *Outer regional* (56.0%) areas and lowest for those living in *Major cities* (49.3%).
- Smoking rates were highest among younger Indigenous mothers: 53.6% of those aged under 20 years smoked during pregnancy. The proportion of women smoking during pregnancy shows a gradual decline with increasing age (Table 2.6).

Table 2.6: Smoking during pregnancy by Indigenous status and maternal characteristics, 2007^(a)

	Indigenous proportion		Non-Indigenous proportion		Rate ratio ^(b)
	Smoked	Did not smoke	Smoked	Did not smoke	Smoked
Remoteness^(c)					
Major cities	49.3	50.7	12.6	87.4	3.9
Inner regional	54.2	45.8	20.3	79.7	2.7
Outer regional	56.0	44.0	20.6	79.4	2.7
Remote	52.6	47.4	18.7	81.3	2.8
Very remote	54.9	45.1	16.3	83.7	3.4
Total^(d)	50.5	47.4	14.8	84.7	3.4
Age of mother					
< 20	53.6	44.0	37.9	61.4	1.4
20–24	52.9	44.8	27.0	72.5	2.0
25–29	50.9	46.3	14.9	84.6	3.4
30–34	49.5	48.5	9.8	89.7	5.0
35–39	49.6	49.2	9.6	89.9	5.2
40+	47.9	49.6	10.5	89.1	4.6
Total^(d)	51.8	46.0	14.8	84.7	3.5
Total ASR^(c)	50.5	47.4	14.8	84.7	3.4

(a) Includes data for all jurisdictions except Victoria.

(b) Rate ratio: proportion for Indigenous divided by proportion for non-Indigenous.

(c) Proportions are directly age-standardised using women aged 15–44 years who gave birth in all states as the standard.

(d) Includes non-resident mothers.

Source: AIHW analysis of National Perinatal Statistics Unit (NPSU) NPDC.

The ABS NATSISS collected information on smoking during pregnancy from the mothers of Indigenous children aged 0–3 years. Among these mothers:

- 42% reported that they used tobacco (either smoked or chewed) during pregnancy
- 24% reported that they used less tobacco than usual during pregnancy (Table 2.7).

Table 2.7: Tobacco use by child's mother during pregnancy, Indigenous children aged 0–3 years, 2008

	Number	Per cent
Smoked/chewed tobacco during pregnancy		
Used more during pregnancy	1,160	2.7
Used about the same during pregnancy	6,567	15.4
Used less during pregnancy	10,264	24.0
<i>Total used tobacco</i>	<i>17,991</i>	<i>42.1</i>
Did not smoke/chew tobacco during pregnancy	24,781	57.9
Total^(a)	42,772	100.0

(a) Excludes not stated/not collected.

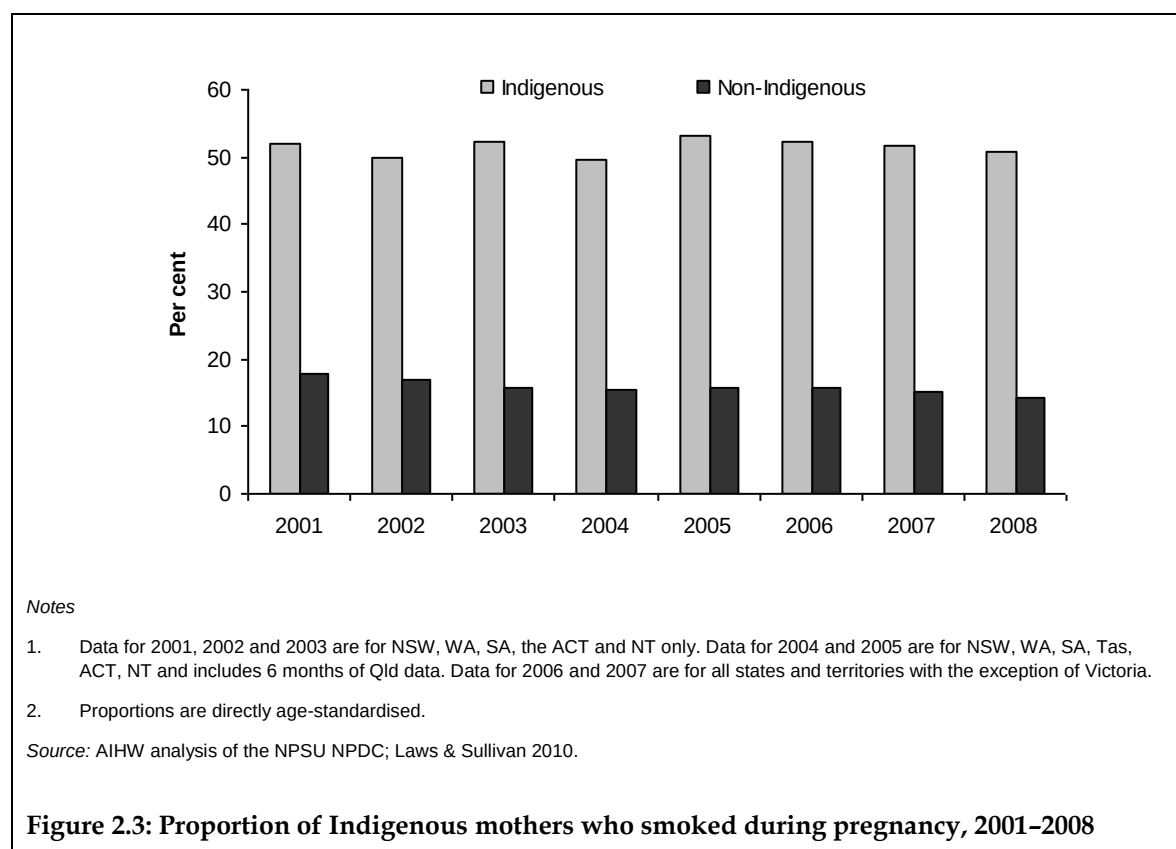
Source: AIHW analyses of 2008 NATSISS.

Trends in smoking during pregnancy

The NPDC found that the proportion of Indigenous women who smoked during pregnancy remained relatively stable over the period from 2001 to 2008.

- The proportion of Indigenous mothers who reported smoking during pregnancy was around 50% over this period (Figure 2.3).

The proportion for non-Indigenous women who smoked declined slightly over the period from 17.8% in 2001 to 14.4% in 2008.



2.4 Summary

In 2008, just under half of Indigenous adults were current smokers (49.8%): 47.7% were current daily smokers while just over 2% smoked less frequently. Indigenous smoking rates were higher in remote areas than in non-remote areas.

The proportion of Indigenous Australians who smoked was more than twice the rate of non-Indigenous Australians in 2008. On the other hand, the proportion of non-Indigenous Australians who had never smoked was just over half the rate of Indigenous Australians.

The NATSISS data showed the first significant decline in smoking rates for Indigenous Australians, with rates decreasing from 53% in 2002 to 50% in 2008. This trend was consistent with the findings from the 2001 and 2004–05 NATSIHS, when there was a small decline in Indigenous smoking rates, though this decline was not significant.

Smoking rates for Indigenous women during pregnancy remained high. In 2008, more than half of Indigenous mothers (51%) reported that they smoked during pregnancy, and this rate had remained steady over the period from 2001 to 2008.

3 Alcohol use

Both Indigenous and non-Indigenous people in Australia use alcohol widely. The moderate use of alcohol can have positive health and social effects. For example, low levels of alcohol consumption have been associated with a protective effect against some diseases, including hypertension, ischaemic heart disease and stroke (Mathers et al. 1999).

Excessive alcohol consumption, however, can cause significant harm. It is a major risk factor for morbidity and mortality in all populations (AIHW 2006). It increases the risk of heart, stroke and vascular diseases, liver cirrhosis and several types of cancers (AIHW 2005).

Excessive alcohol consumption has also been associated with domestic violence and family breakdown (AIHW 2002c), and is often a contributing factor for antisocial behaviour and increased involvement in the criminal justice system (AHMAC 2006). Alcohol consumed by mothers during pregnancy can cause babies to be born with fetal alcohol syndrome (AHMAC 2006).

A number of factors are thought to contribute to risky alcohol use among Aboriginal and Torres Strait Islander people, including economic marginalisation, discrimination, cultural dispossession and cultural assimilation difficulties, family conflict and/or violence and family history of alcohol misuse (Kelly & Kowalyszyn 2003; Saggars & Gray 1998). A reduction in misuse of alcohol and other substances is found to improve the overall health and wellbeing of the general population, and may increase levels of educational achievement, household income and reduce the rate of crime and imprisonment (SCRGSP 2007b).

This chapter provides data on self-reported alcohol consumption for both Indigenous and non-Indigenous Australians. It includes data on two measures of alcohol consumption risk levels – long-term risk (or chronic) patterns of alcohol consumption, and short-term risk (or binge) drinking. Data on trends in alcohol consumption are also provided.

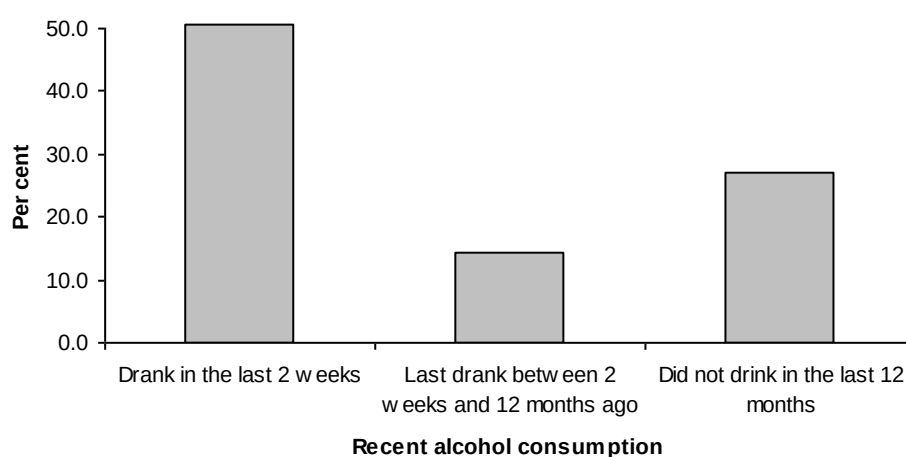
3.1 Self-reported consumption

The two main data sources for self-reported alcohol consumption used in this chapter are the ABS NATSISS and the ABS NATSIHS. (See Appendix 1 for more information about data sources.)

Alcohol use

The most recent data available comes from the 2008 NATSISS, which collected information on patterns of alcohol consumption. There are no comparison data for non-Indigenous people. The survey estimated that:

- just over one-quarter (27%) of Indigenous persons did not drink in the last 12 months
- on the other hand, nearly three-quarters (73%) of Indigenous people drank in the last 12 months – just over half reported that they drank in the last 2 weeks (Figure 3.1).



Source: AIHW analysis of 2008 NATSISS.

Figure 3.1: Indigenous persons aged 15 years and over, by recent alcohol consumption, 2008

The 2004–05 NATSIHS collected similar information, but used slightly different measures of consumption. Comparison data for non-Indigenous Australians were also available from the National Health Survey (NHS).

The 2004–05 data showed that a higher proportion of Indigenous than non-Indigenous people did not drink alcohol in the last 12 months.

- The age-standardised data showed that nearly twice (1.9) as many Indigenous people did not consume alcohol in the 12 months prior to the survey than non-Indigenous people.
- The rate of Indigenous people who drank in the last week was 0.7 times the rate for non-Indigenous people.

Table 3.1: When alcohol was last consumed by Indigenous people: crude rates, rate ratios and rate differences compared to non-Indigenous Australians, persons aged 18 years and over, 2004–05

	Crude rate (per cent)	Age-standardised	
		Rate difference	Rate ratio
Did not drink in the last 12 months	24.1	13.8	1.9
Drank between 1 week and 12 months ago	26.2	3.5	1.2
Drank in the last week	48.8	–17.2	0.7
Total^(a)	100	..	..

(a) Includes persons who reported time since last consumed alcohol 'not known'.

Note: Proportions are directly age-standardised to the 2001 Australian standard population.

Source: ABS and AIHW analysis of 2004–05 NATSIHS and 2004–05 NHS.

Alcohol consumption patterns for Indigenous Australians in 2004–05 varied by sex and by region.

- A higher proportion of Indigenous females than Indigenous males reported abstaining from alcohol consumption in the 12 months prior to survey (30% compared with 17%).
- Indigenous adults in remote areas were more likely to have abstained from alcohol consumption in the previous 12 months than Indigenous adults in non-remote areas (38% compared with 19%).

Box 3.1: Measures of alcohol risk levels

ABS Surveys

Two measures of alcohol consumption are collected in ABS Indigenous household surveys: risk level associated with long-term (or chronic) patterns of alcohol consumption; and risk level associated with episodes of short-term (or binge) drinking. Risk levels in both the NATSIHS and NATSISS were based on the 2001 National Health and Medical Research Council's risk levels for harm in the long-term and short-term (NHMRC 2001). Both surveys assume the level of long-term alcohol consumption in the reference week was the person's usual consumption pattern.

In the 2004–05 NATSIHS, information on long-term risky/high-risk alcohol consumption was collected for Indigenous persons aged 18 years and over, based on the average self-reported daily amount (ml) of alcohol consumed in the week prior to interview. This methodology was essentially the same as that used in the 2001 NATSIHS therefore the results for the two surveys are considered directly comparable.

Information on short-term (or binge) risky/high-risk alcohol consumption was collected in the NATSIHS for the first time in 2004–05. This measure was based on the self-reported frequency of consuming five or more (for females) or seven or more (for males) standard drinks on any one occasion in the 12 months prior to interview. The output for this item comprised two parts: short-term risky/high-risk alcohol consumption at least once a week in the last 12 months; and short-term risky/high-risk alcohol consumption on at least one occasion in the last 12 months.

The NATSISS also collected both long-term and short-term measures of alcohol consumption, but these measures were different to those used in the NATSIHS. The long-term risky/high-risk measure was collected for Indigenous persons aged 15 years and over and was based on the self-reported amount of alcohol (ml) consumed on a usual drinking day, as well as the frequency of consumption, in 12 months prior to interview. The short-term measure was based on the self-reported largest quantity of alcohol consumed on a single day during the fortnight prior to interview.

Due to the different conceptual elements and collection methodologies in the two surveys (particularly for short-term alcohol risk) the results cannot be directly compared. The NATSIHS and NATSISS, however, produced very similar estimates of the proportion of Indigenous adults who drink at chronic risky/high-risk levels (ABS & AIHW 2008).

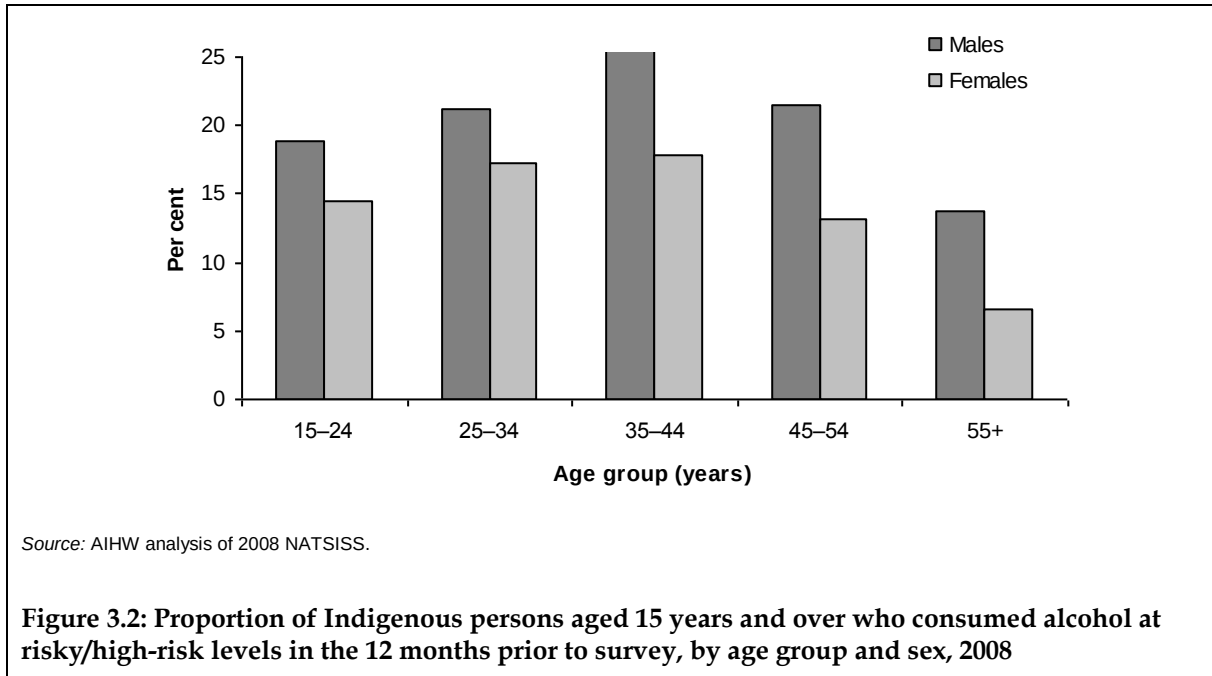
Alcohol risk levels

The two ABS surveys also estimated both long-term and short-term alcohol risk levels (see Box 3.1 for details). The measures used in the different surveys were slightly different so direct comparisons cannot be made. The surveys, however, produced similar estimates of the proportion of Indigenous people who drank at long-term and short-term risky and high-risk levels.

Long-term risk (chronic alcohol consumption)

The 2008 NATSISS found that:

- approximately 17% of Indigenous persons aged 15 years and over reported consumption patterns at risky/high-risk levels in the 12 months prior to the survey



- a higher proportion of Indigenous males than Indigenous females consumed alcohol at risky/high-risk levels (20% compared with 14%)
- Indigenous persons aged 35-44 years were most likely to report drinking at risky/high-risk levels, followed by those aged 25-34 years (Figure 3.3)
- the proportion of Indigenous persons who drank alcohol at risky/high-risk levels in remote and non-remote areas was not statistically different
- compared with those who consumed alcohol at low risk levels or not at all, a higher proportion of Indigenous people who consumed alcohol at risky/high-risk levels regularly smoked (63% compared with 46%) and used illicit substances in the last 12 months (37% compared with 22%).

Estimates of the long-term risk from alcohol consumption from the 2004-05 NATSIHS showed that a similar proportion of Indigenous and non-Indigenous people drank at risky/high-risk levels:

- There was no significant difference in the proportion of Indigenous and non-Indigenous people who drank at risky or high-risk levels (Table 3.2).
- The rate of Indigenous people who did not drink alcohol in the last week was, however, 1.5 times the rate of non-Indigenous people.

Table 3.2: Long-term risks from alcohol consumption, by Indigenous status and sex, 2004–05 (per cent)

	Males			Females			Persons		
	Indigenous	Non-Indigenous	Ratio	Indigenous	Non-Indigenous	Ratio	Indigenous	Non-Indigenous	Ratio
Drank alcohol in the last week									
Low long-term risk	36	50	0.7	24	43	0.6	30	49	0.6
Risky or high-risk	18	15	1.2	13	12	1.1	15	14	1.1
Total ^(a)	55	71	0.8	38	55	0.7	46	63	0.7
Did not drink alcohol in the last week	45	26	1.7	62	45	1.4	53	36	1.5
Total^(b)	100	100	..	100	100	..	100	100	..
Total number ('000)	120.5	7,257.7	..	137.8	7,495.6	..	258.3	14,753.3	..

(a) Includes persons whose risk level was reported as 'not known'.

(b) Includes persons who reported time since last consumed alcohol 'not known'.

Notes

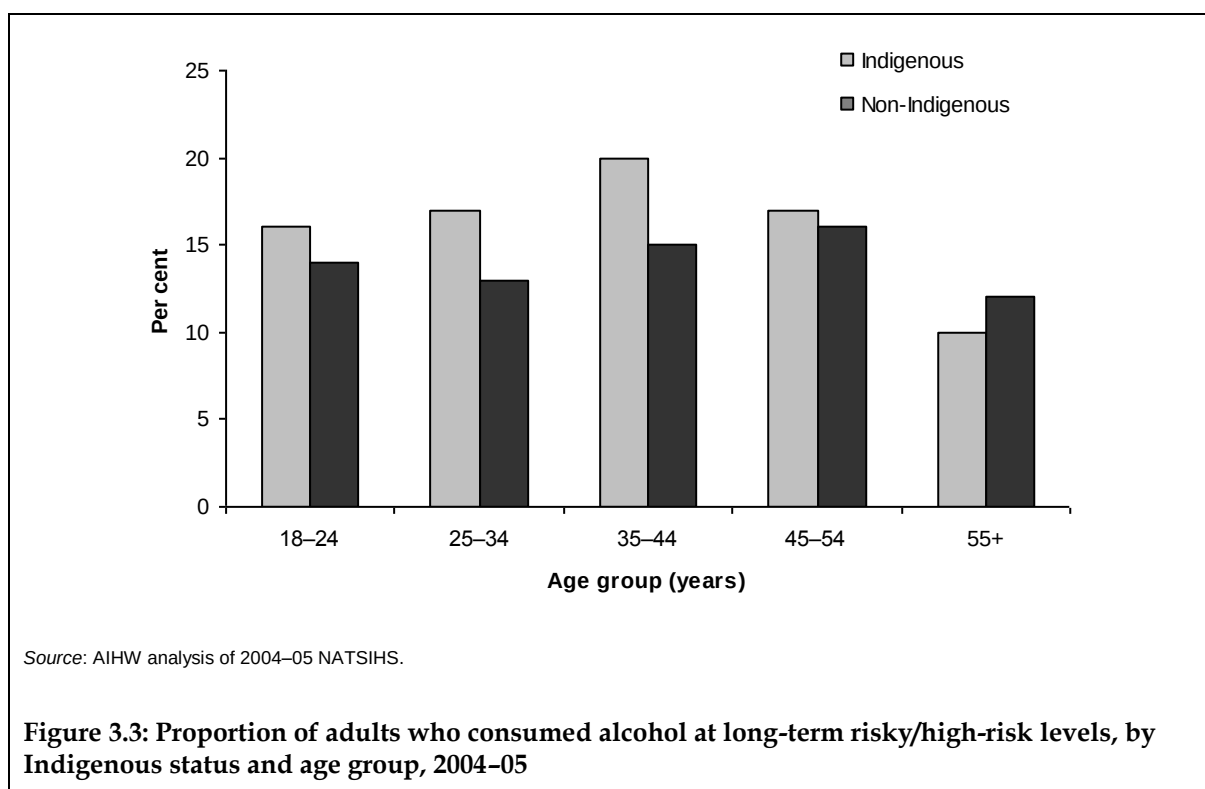
1. See Box 3.1 for information about the alcohol risk levels used.

2. Proportions are directly age-standardised to the 2001 Australian standard population.

Source: ABS and AIHW analysis of 2004–05 NATSIHS and 2004–05 NHS.

In comparing Indigenous and non-Indigenous long-term risks, there were some differences by age and sex:

- The rate of Indigenous males who did not drink in last week was 1.7 times the rate of non-Indigenous males, while for females the corresponding rate ratio was 1.4 (Table 3.2).
- A significantly higher proportion of Indigenous Australians aged 25–34 and 35–44 years drank at long-term risky/high-risk levels in the previous week than non-Indigenous Australians of the same age, while for those aged 55 years and over the rates were higher for non-Indigenous Australians (Figure 3.3).



Short-term risk (binge drinking)

In relation to short-term risky drinking, the 2008 NATSISS found:

- almost two-fifths (37%) of Indigenous people aged 15 years and over reported consuming risky or high-risk amounts of alcohol in the 2 weeks prior to interview
- a higher proportion of males than females drank at risky/high-risk levels (46% compared with 28%)
- risky/high-risk binge drinking was associated with higher rates of daily smoking (59% compared with 33% for low-risk drinkers) and substance use in the last 12 months (32% compared with 18%).

The 2004-05 NATSIHS used two different estimates of short-term risks from drinking alcohol – short-term risky/high-risk alcohol consumption at least once a week in the last 12 months; and short-term risky/high-risk alcohol consumption on at least one occasion in the last 12 months. Estimates for the non-Indigenous population were also available from the NHS.

The 2004-05 NATSIHS found that a higher proportion of Indigenous Australians drank at short-term risky/high-risk levels than non-Indigenous Australians.

- The rate of Indigenous adults who drank at short-term risky/high-risk levels in the previous 12 months was 1.2 times the rate of non-Indigenous adults.
- The rate of Indigenous Australians who drank at short-term risky/high-risk levels at least once a week in the previous 12 months was more than twice the rate of non-Indigenous Australians (Table 3.3).

Table 3.3: Alcohol short-term risk levels by Indigenous status and sex, 2004–05 (per cent)

	Males			Females			Persons		
	Indigenous	Non-Indigenous	Ratio	Indigenous	Non-Indigenous	Ratio	Indigenous	Non-Indigenous	Ratio
Short-term risk^(a)									
Drank at risky/ high-risk levels in last 12 months	56	48	1.2	40	31	1.3	47	40	1.2
Drank at risky/ high-risk levels at least once a week	21	12	1.8	14	5	3.0	17	8	2.1
Total number ('000)	120.5	7,257.7	..	137.8	7,495.6	..	258.3	14,753.3	..

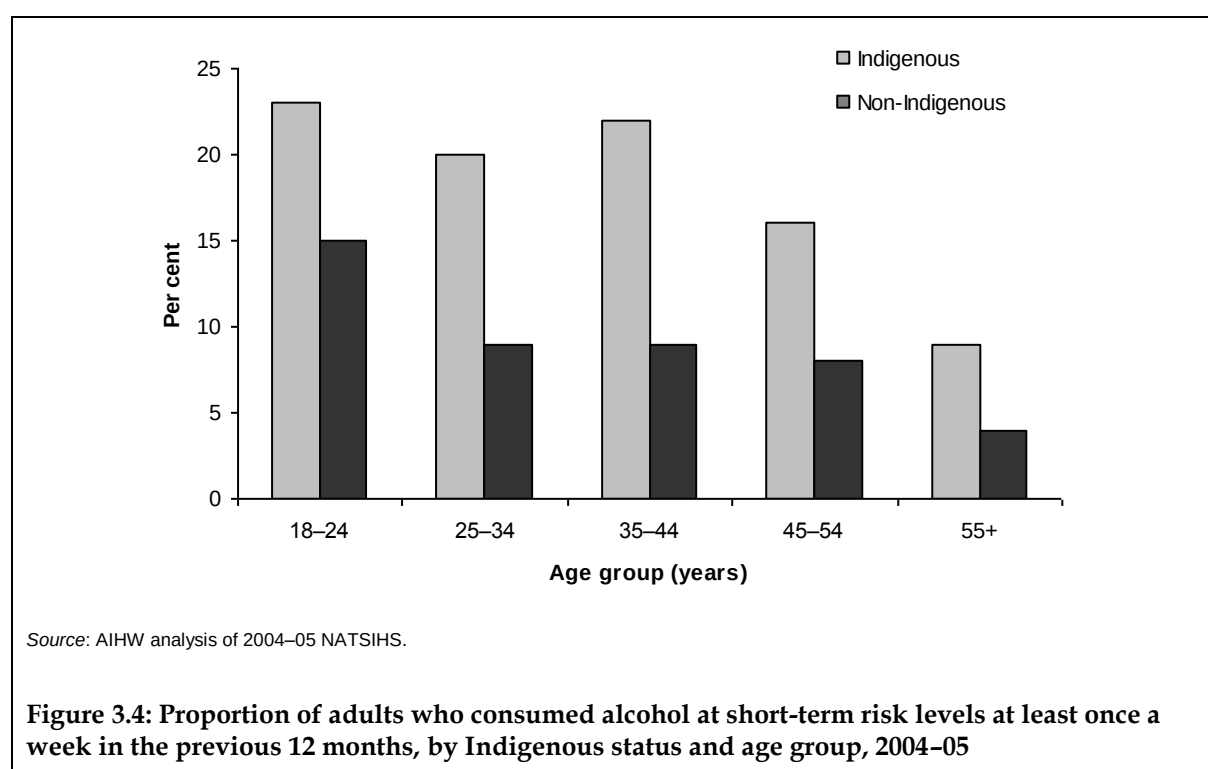
(a) See Box 3.1 for information on the alcohol risk levels used.

Note: Proportions are directly age-standardised to the 2001 Australian standard population.

Source: ABS and AIHW analysis of 2004–05 NATSIHS and 2004–05 NHS.

There were differences in the levels of short-term risky drinking between Indigenous and non-Indigenous Australians across sex and age categories:

- Indigenous males and females were 2 and 3 times as likely as non-Indigenous males and females to report drinking at short-term risky/high-risk levels at least once a week in the previous 12 months (Table 3.3).
- Indigenous Australians were more likely than non-Indigenous Australians to report drinking at short-term risky/high-risk levels at least once in the previous 12 months across all age groups (Figure 3.4).



The 2004–05 NATSIHS also found that there were some variations in short-term drinking risk levels by region.

- Indigenous adults in remote areas were more likely than those in non-remote areas to report drinking at short-term risky/high-risk levels at least once a week in the last 12 months (23% compared with 18%).
- The opposite was true for Indigenous adults who reported drinking at short-term risky/high-risk levels on at least one occasion in the last 12 months (57% for non-remote compared with 49% for remote).

3.2 Trends in alcohol consumption

The NATSISS data indicated that between 2002 and 2008 there was:

- a small decrease (from 31% to 27%) in the proportion of Indigenous people who did not drink in the 12 months prior to being interviewed (Table 3.4)
- a small increase in the proportion of people who drank in the 2 weeks prior to the survey (from 47% in 2002 to 51% in 2008).

Table 3.4: Last alcohol consumption for Indigenous persons aged 15 years and over, 2002 and 2008

	2002		2008	
	Number	Per cent	Number	Per cent
Drank in the last 12 months ^(a)	194,060	69.4	238,898	73.0
Drank in the last 2 weeks	130,679	46.7	165,304	50.5
Last drank between 2 weeks and 12 months ago	63,381	22.7	46,845	14.3
Did not drink in the last 12 months	82,211	30.6	88,203	27.0
Total	276,271	100.0	327,101	100.0

(a) In 2008, persons who last drank 2 weeks to 12 months ago and persons who drank in the last 2 weeks do not add up to total persons who drank in the last 12 months due to 'not applicable' responses.

Source: AIHW analysis of 2002 and 2008 NATSISS.

In relation to trends in Indigenous and non-Indigenous drinking patterns, the NATSIHS found that there was a small increase in the proportion of both Indigenous and non-Indigenous Australians who drank at long-term risky/high-risk levels (Table 3.5).

Table 3.5: Trends in alcohol consumption long-term risk levels^(a) by Indigenous status, 2001 and 2004–05 (per cent)

	2001		2004–05	
	Indigenous	Non-Indigenous	Indigenous	Non-Indigenous
Did not consume alcohol in the last week ^(b)	58	38	53	36
Low risk	30	51	30	49
Risky/high-risk	12	11	15	14
Total^(c)	100	100	100	100

(a) Risk level based on Australian Alcohol Guidelines 2000.

(b) Includes persons whose risk level was reported as 'not known'.

(c) Includes persons who reported time since last consumed alcohol 'not known'.

Note: Proportions are directly age-standardised to the 2001 Australian standard population.

Source: ABS and AIHW analysis of 2004–05 NATSIHS and 2004–05 NHS.

3.3 Summary

The 2008 NATSISS data indicated that over one-quarter (27%) of Indigenous persons did not drink in the last 12 months, while just over half drank in the last 2 weeks.

In 2004–05, nearly twice as many Indigenous Australians as non-Indigenous Australians did not drink in the last 12 months (29% compared with 15%). The rate of short-term risky/high-risk drinking (binge drinking) for Indigenous Australians, however, was twice the rate of non-Indigenous Australians (17% compared with 8%). The proportion of Indigenous (15%) and non-Indigenous people (14%) who drank at long-term risky levels (chronic drinkers) was similar.

Data on trends in alcohol consumption suggest some changes in patterns of alcohol consumption. Between 2002 and 2008 there was a decrease in the proportion of Indigenous people who abstained from alcohol in the last 12 months and an increase in the proportion who drank in the last 2 weeks.

Between 2001 and 2004–05 there was a small increase in the proportions of both Indigenous and non-Indigenous Australians drinking at long-term risky/high-risk levels.

4 Illicit substance use

An illicit substance is a drug whose production, sale or possession is prohibited (MCDS 2004). Illicit substance use covered in this chapter includes the use of substances that are illegal to possess (such as heroin and ecstasy); and the misuse of substances that are legally available (for example the use of solvents and petrol as inhalants, and the non-medical use of prescribed drugs, such as pain-killers).

There is considerable evidence on the harm caused by illicit substance use. Illicit substance use is a contributing factor to illness and disease, accident and injury, and workplace problems. It is also a risk factor for ill health, such as HIV/ AIDS, hepatitis C, malnutrition, low birthweight, poisoning, suicide, infective endocarditis (inflammation of the lining of the heart), self-inflicted injury and death by overdose (AIHW 2008a). The use of inhalants (for example, petrol sniffing or solvent abuse) can lead to serious health consequences, including brain damage, disability or even death (SCRGSP 2007a).

Illicit drug use may also have severe social and economic impacts on communities, including issues associated with family and social disruption, such as domestic violence, crime and assaults, which can be more apparent in smaller remote and rural Aboriginal and Torres Strait Islander communities (Gray et al. 2002; McAllister & Makkai 2001). In addition, illicit drug consumption has played a significant role in Aboriginal and Torres Strait Islander people's involvement in the criminal justice system (SCRGSP 2007a).

The extent of the usage of illicit substances is likely to be under-reported because the substances are generally illegal. The national self-reported data that are available indicate that prevalence of illicit substance use is lower than the prevalence of tobacco and alcohol use.

This chapter provides national data on self-reported patterns of illicit substance use for Indigenous Australians and some data on trends. Comparable data on non-Indigenous Australians are only available from one data source. The chapter also includes some data from the Petrol Sniffing Data Collection that provide some indication of the extent of this problem in selected Indigenous communities.

4.1 Self-reported consumption

The three main data sources for self-reported consumption of illicit substances used in this chapter are the ABS NATSISS, the ABS NATSIHS and the National Drug Strategy Household Survey (NDSHS). The NDSHS is the only survey which provides comparable data on illicit substance use by non-Indigenous Australians. These surveys were conducted at different times, used different questions about illicit drug use, and report on different groupings (AIHW 2008b) so the NDSHS is not included in this report. Hence no non-Indigenous comparison of illicit substance use is presented. (See Appendix 1 for more information about data sources.)

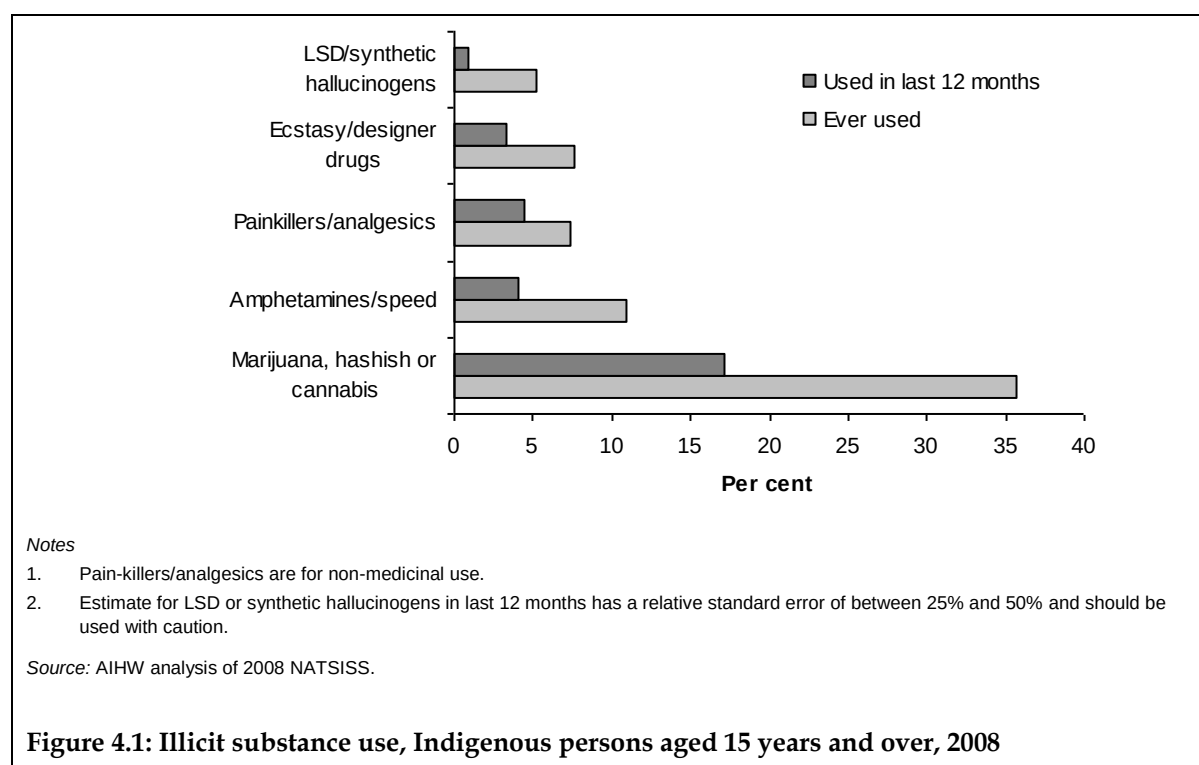
Information on substance use by Aboriginal and Torres Strait Islander people was collected in the 2008 NATSISS for those aged 15 years and over. A significant proportion of Indigenous Australians have used illicit substances. In 2008, among Indigenous persons aged 15 years and over who completed a substance use form:

- 43% reported that they had tried at least one illicit substance in their lifetime

- 23% reported that they had recently used an illicit substance (that is, they had used a substance in the last 12 months prior to interview).

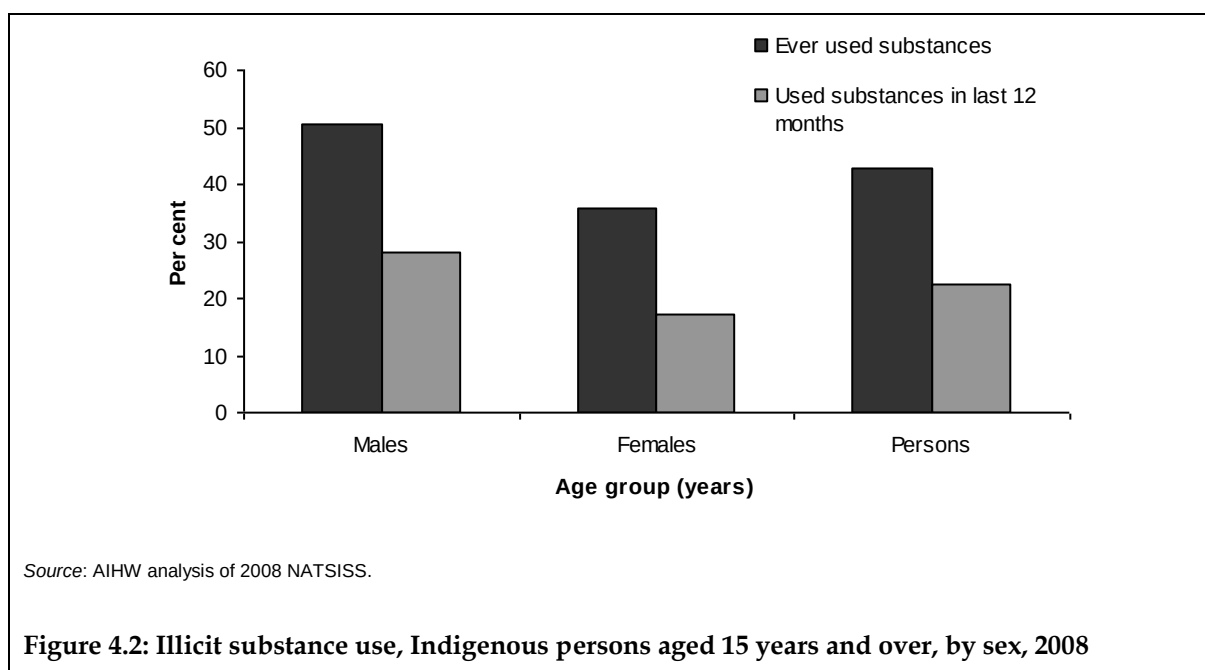
In relation to type of drug used, the data showed:

- marijuana was the most common substance used in the last 12 months (17%), followed by non-medicinal use of pain-killers/analgesics (5%), and amphetamines or speed (5%).
- these three substances, along with ecstasy and designer drugs, were also the most common type of substances reported to have been ever used by Indigenous persons (Figure 4.1).



Other findings from the 2008 NATSISS were:

- Indigenous males were more likely than Indigenous females to have ever used substances (51% compared with 36%) and to have used substances in the last 12 months (28% compared with 17%) (Figure 4.2).
- Compared with those who had never used illicit substances, a higher proportion of Indigenous people who had used substances in the last 12 months smoked regularly (68% compared with 38%) and consumed alcohol at risky/high-risk levels (31% compared with 13%) (AIHW forthcoming).



4.2 Trends in illicit substance use

Data on trends in illicit substance use were available from ABS NATSISS, indicating that the rates of illicit drug use for Indigenous Australians in non-remote areas were relatively stable between 2002 and 2008. For both periods, the proportion of Indigenous Australians who had:

- used illicit substances in the last 12 months was just over one-fifth
- ever used illicit substances was around four in ten.

Table 4.1: Proportion of Indigenous Australians who used illicit drugs, Indigenous Australians aged 15 years and over, non-remote areas, 2002 and 2008 (per cent)

	Used in the last 12 months	Ever used
2002	23.5	39.6
2008	22.5	42.8

Source: AIHW analysis 2002 and 2008 NATSISS.

4.3 Petrol sniffing

Limited data are available on the prevalence of petrol sniffing in Australia, as there are no ongoing data collections focused on the use of this inhalant and its resulting health problems (SCRGSP 2007a). James Cook University has undertaken the Petrol Sniffing Data Collection for the Department of Health and Ageing's (DoHA) Petrol Sniffing Prevention Program, providing some data on the extent of this problem (see Appendix 1 for more details).

Baseline data were collected to estimate the prevalence of petrol sniffing and its effects in 74 remote Indigenous communities throughout Australia that have begun using Opal fuel. The data are presented at regional level only to ensure that the privacy of individual communities is maintained, given the sensitive nature of data relating to petrol sniffing. These data should be interpreted with caution due to small numbers of users in some regions.

Data were obtained from 55 communities that either granted the consultants direct access to the community and relevant data or for which alternative data sources were utilised. These data show that:

- there were 1,281 Indigenous persons in the 55 communities who were identified as petrol sniffing (Table 4.3)
- the estimated proportion of the population who were identified as petrol sniffers varied greatly by region
- the subregions with the highest proportions of petrol sniffers were the South Central Australian subregion (16%) and the Ngaanyatjarra Lands in Western Australia (14%)
- the subregions with the lowest proportion of petrol sniffers were the Northern Central Australia subregion and Alice Springs Town Camps, both with less than 1%.

Table 4.2: Prevalence of sniffing in communities at the time of data collection, by region

Region	Pop. 5–40 years	No. of users	% of users	Time of data collection
APY Lands ^(a)	1,969 (10–40 years)	219	11.1	Sept 05
Central Australia	4,418	244	5.5	Nov 05–Feb 06 (1 community Feb 07)
East Kimberley	547	32	5.8	Jan 06
Eastern Goldfields	92	5	5.4	Nov 06
Far North Queensland	1,861	96	5.2	Feb–May 06
Ngaanyatjarra Lands (WA)	1,035	145	13.9	Nov 05–06
Northern Central Australia subregion	2,188	<5	<1	Oct 06
Southern Central Australia subregion	619	102	16.4	Nov–Dec 05
Top End ^(b)	12,985	266	2.0	Sept 06–Feb 07
Western Central Australia subregion	1,195	141	11.8	Dec 05–Feb 06
Alice Springs Town Camps ^(c)	3,300	30	<1	Oct 07

APY = Anangu Pitjantjatjara ankurtyjatjara (Lands of South Australia)

(a) Population data are for those aged 10–40 years.

(b) The population number may be artificially low due to a lack of data from four communities.

(c) The population data includes the total population of residents and visitors of all ages.

Note: The Central Australian region has been broken down into three distinct subregions—Northern Central Australia, Southern Central Australia and Western Central Australia—in order to highlight more local variations. Alice Springs is not included in this data.

Source: DoHA 2008 (Data Collection for the Petrol Sniffing Prevention Program).

4.4 Summary

The 2008 NATSISS data provide estimates on Indigenous use of illicit substances across Australia. Just over four in ten (43%) of Indigenous Australians had tried at least one illicit substance in their lifetime and just under one-quarter (23%) had used an illicit substance in the last 2 weeks. The most common illicit substances used were marijuana, followed by amphetamines and pain-killers. Indigenous males had higher rates of illicit substance use than females. There were no comparative data available for non-Indigenous Australians.

In relation to trends, the NATSISS data indicated that the proportion of Indigenous Australians who used illicit substances was relatively stable between 2002 and 2008.

Estimates of the prevalence of petrol sniffing in selected Indigenous communities are available from the Petrol Sniffing Prevention Program data collection. During 2005–07, the subregions with the highest proportions of petrol sniffers were the South Central Australian subregion (16%) and the Ngaanyatjarra Lands in Western Australia (14%).

5 Impact on health and service use

Substance use and misuse plays a significant role in the disparities between Indigenous and non-Indigenous Australians in life expectancy and health outcomes. The differences in the substance use patterns between Indigenous and non-Indigenous Australians outlined in previous chapters, particularly the higher rates of smoking and short-term risky drinking, contribute to the much poorer health outcomes of Indigenous Australians.

This chapter provides national data on the association between substance use and various health measures for Aboriginal and Torres Strait Islander people. These data are particularly important in the context of COAG commitments to closing the gap between Indigenous and non-Indigenous Australians.

The health data included in this chapter are self-assessed health, disability adjusted life years, visits to general practitioners (GPs), hospitalisations and mortality.

5.1 Self-reported health status

The NATSISS collected information on self-assessed health status, as well as the use of tobacco, alcohol and illicit substances.

Smoking

Indigenous Australians who smoked reported poorer health than those who did not smoke where:

- 25% of current smokers rated their health as fair/poor compared with 16% of those who had never smoked
- 39% of current smokers rated their health as excellent/very good compared with 53% of those who never smoked.

Table 5.1: Self-assessed health status, per cent, by smoking status, Indigenous persons aged 15 years and over, 2008

Self-assessed health status	Current smoker	Ex-smoker	Never smoked
Excellent/very good	38.5	41.0	52.6
Good	36.2	33.2	31.5
Fair/poor	25.3	25.8	15.8
Total	100.0	100.0	100.0
Total number	153,003	64,505	109,594

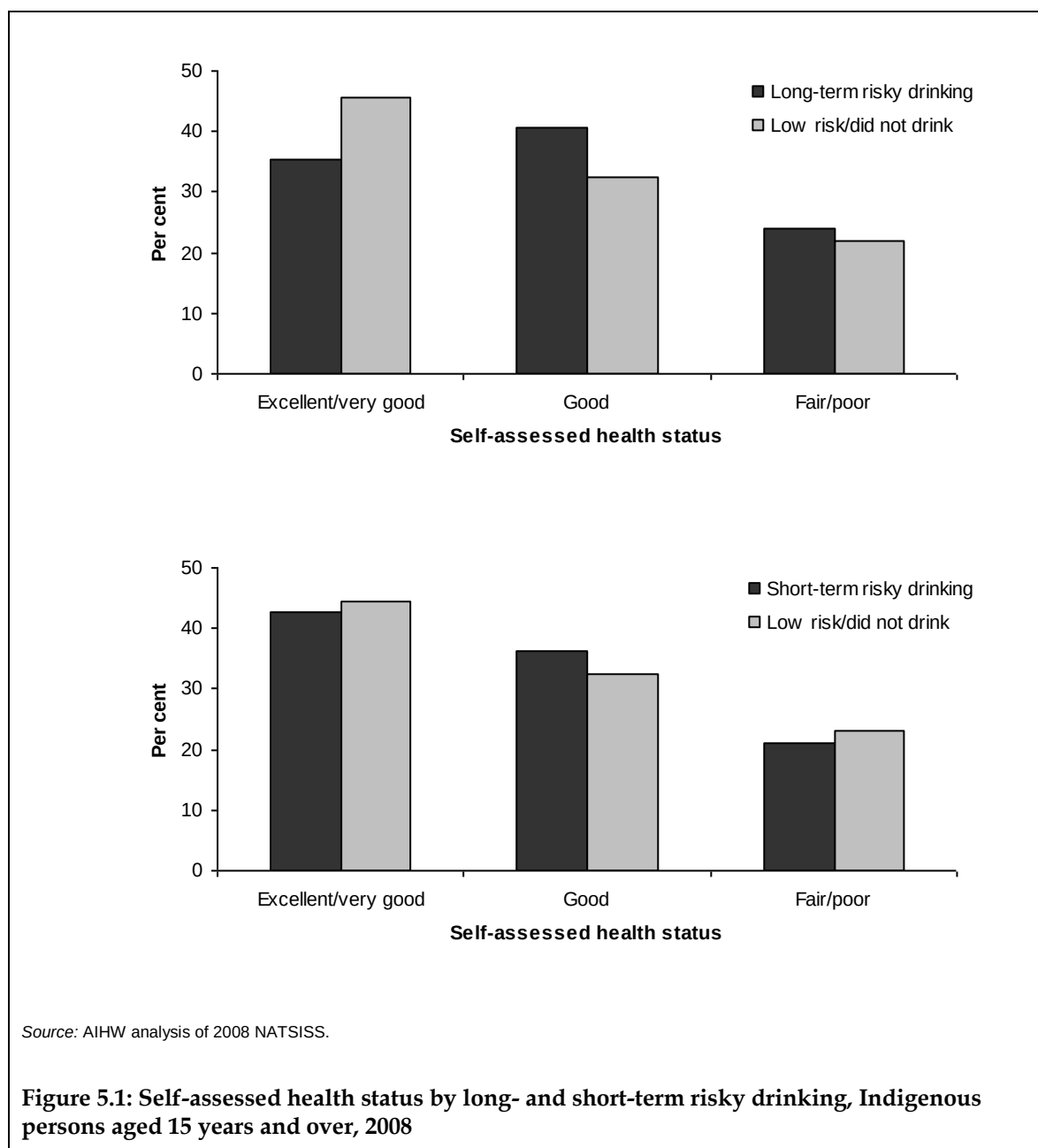
Note: Proportions exclude 'not known' and 'not stated' responses.

Source: AIHW analysis of 2008 NATSISS.

Alcohol consumption

There were some differences in the self-assessed health status of Indigenous Australians who drank at risky/high-risk levels and those who drank at low risk levels.

- A lower proportion of those who drank at long-term risky/high-risk levels (35%) rated their health as excellent/very good compared with those who drank at low risk levels or did not drink (46%)
- The differences in self-assessed health were not as large between those who drank at short-term risky levels and those who drank at low risk levels or did not drink (Figure 5.1).



Illicit drug use

The self-assessed health status of Indigenous people who had used illicit substances was similar to those who had never used illicit substances.

Table 5.2: Illicit substance use by self-assessed health status, Indigenous persons aged 15 years and over, 2008

Self-assessed health status	Never used illicit substances	Ever used illicit substances ^(a)	Recent illicit substance use ^(b)
Excellent/very good	44.3	43.0	40.5
Good	33.8	34.4	35.4
Fair/poor	21.9	22.6	24.0
Total	100.0	100.0	100.0

(a) People who accepted the substance use form are included.

(b) Excludes data obtained through child proxy.

Note: Table relates to those who completed the substance use form.

Source: AIHW analysis of 2008 NATSISS.

5.2 Disability adjusted life years

The disability adjusted life year (DALY) is a summary statistic used to estimate the burden of disease by combining years of healthy life lost to disability and years of life lost due to premature mortality. One DALY represents one lost year of 'healthy life'. The most recent estimates of the burden of disease due to alcohol, tobacco and illicit substances for Aboriginal and Torres Strait Islander people are for 2003 (Vos et al. 2007).

The burden of disease and injury in Aboriginal and Torres Strait Islander peoples report estimated the contribution of 11 health risk factors (tobacco, high body mass, physical inactivity, high blood cholesterol, alcohol, high blood pressure, low fruit and vegetable intake, illicit drugs, intimate partner violence, child sexual abuse and unsafe sex) to the total burden of disease. These 11 risk factors together explained 37.4% of the total burden of disease that Indigenous Australians experience (Vos et al. 2007).

Of the 11 risk factors analysed:

- tobacco smoking was the number one risk factor, accounting for 12.1% of the total burden of disease (Table 5.3)
- alcohol use was the fifth highest ranked risk factor, accounting for 5.4% of the burden of disease
- illicit drugs were the eighth highest ranked risk factor, accounting for 3.4% of the total burden of disease.

These three risk factors were estimated to be responsible for 10%, 4% and 2% respectively of the health gap in disease burden between Indigenous and non-Indigenous Australians (Vos et al. 2007). Of all the risk factors examined, tobacco contributed the most to cardiovascular disease (33%) and cancer (35%). Alcohol contributed the most to burden due to mental disorders (16%) and injury (22%). Ischaemic heart disease, chronic obstructive pulmonary disease, and lung cancer attributable to tobacco accounted for almost three-quarters of overall burden due to tobacco.

Table 5.3: Disability adjusted life years attributable to tobacco, alcohol and illicit drugs, Indigenous and total Australian population, 2003

Risk factor	Indigenous Australian			Total Australian			Rate ratio
	DALY	% of total burden	Rate per 1,000	DALY	% of total burden	Rate per 1,000	
Tobacco	11,633	12.1	24.5	204,788	7.8	3.9	6.3
Alcohol	5,171	5.4	10.9	61,091	2.3	2.9	3.8
Illicit drugs	3,264	3.4	6.9	51,463	2.0	2.4	2.9

Source: Vos et al. 2007.

5.3 General practitioner encounters

Information about tobacco, alcohol and drug abuse problems managed at general practice encounters is available from the Bettering the Evaluation and Care of Health (BEACH) survey. The AIHW Australian GP Statistics and Classification Centre, University of Sydney, conducts the BEACH survey annually. Information is collected from a random sample of approximately 1,000 GPs from across Australia each year. A sample of 100 consecutive encounters is collected from each GP.

The number of GP encounters with Indigenous Australians in the BEACH survey is likely to be underestimated. Therefore this data should be interpreted with caution. The data provided in this section relate to encounters during the 4-year period 2004–05 to 2008–09.

Tobacco smoking

There were 69 GP encounters with Aboriginal and Torres Strait Islander patients between 2004–05 and 2008–09 at which problems related to tobacco abuse were managed.

- This represented 0.7% of all problems managed for Indigenous patients, and a rate of 0.9 per 100 GP encounters.
- After adjusting for differences in age distribution, problems related to tobacco abuse were managed at GP encounters with Indigenous patients at 2.4 times the rate of other patients (Table 5.4).

Alcohol

Over the same 4-year period, there were 73 GP encounters with Aboriginal and Torres Strait Islander patients at which problems related to alcohol abuse were managed.

- This represented 1.2% of all problems managed for Indigenous patients, and a rate of 1.2 per 100 GP encounters.
- Problems related to alcohol abuse were managed at GP encounters with Indigenous patients at 2.9 times the rate of other patients (Table 5.4).

Illicit substance use

There were 120 GP encounters with Aboriginal and Torres Strait Islander patients over the 4-year period at which problems related to drug abuse were managed.

- This represented 1.3% of all problems managed for Indigenous patients, and a rate of 2.0 per 100 GP encounters.

- Drug misuse problems were managed at GP encounters with Indigenous patients at more than 3 times the rate of GP encounters with other patients (Table 5.4).

Table 5.4: Most frequently reported mental health related problems^(a) managed by general practitioners, by Indigenous status of patient, 2004–05 to 2008–09^(b)

Problem managed	Number of encounters		Crude rate per 100 encounters		Age-standardised rate per 100 encounters ^(c)		Rate ratio ^(e)
	Indigenous	Other ^(d)	Indigenous	Other ^(d)	Indigenous	Other ^(d)	
Tobacco abuse	69	2,142	1.1	0.4	1.1	0.4	2.4
Alcohol abuse	74	1,697	1.2	0.4	1.0	0.4	2.9
Drug misuse	120	2,137	2.0	0.4	1.4	0.4	3.2

(a) Classified according to ICPC-2 codes (Classification Committee of the World Organization of Family Doctors 1998).

(b) Data for Indigenous and other Australians have not been weighted.

(c) Directly age-standardised rate (no. per 100 encounters). Figures do not add to 100 as more than one problem can be managed at each encounter.

(d) Includes non-Indigenous patients and patients for whom Indigenous status was not stated.

(e) Rate ratio = Indigenous rate divided by rate for other Australians.

Source: AIHW analysis of BEACH survey of general practice, Australian General Practice Statistics and Classification Centre.

5.4 Hospitalisations

Data presented in this section come from the National Hospital Morbidity Database which is a compilation of episode-level records from admitted patient morbidity data collection systems in Australian hospitals. State and territory health departments provide information annually to the AIHW on the characteristics, diagnoses and care of admitted patients in public and private hospitals.

Data are presented on hospitalisations with a principal diagnosis related to tobacco use, alcohol use and drug use for the period 2006–07 to 2007–08. Data are presented for the six jurisdictions which the AIHW has assessed as having adequate identification of Indigenous hospitalisations since 2004–05 – New South Wales, Victoria, Queensland, Western Australia, South Australia and the Northern Territory.

Tobacco smoking

For the period 2007–08 to 2008–09, there were 1,850 hospitalisations of Indigenous Australians in New South Wales, Victoria, Queensland, Western Australia and the Northern Territory combined, with a principal diagnosis related to tobacco use.

- Indigenous males had a slightly higher rate of encounters than Indigenous females
- Indigenous Australians had 4 times the rate of hospitalisations with a principal diagnosis related to tobacco use as non-Indigenous Australians (3.3 per 1,000 compared with 0.8 per 1,000 population) (Table 5.5).

Table 5.5: Hospitalisations related to tobacco use, by Indigenous status and sex, NSW, Vic, Qld, WA, SA and NT, 2007–08 to 2008–09

Indigenous status and sex	Indigenous		Other Australians ^(b)		Rate ratio ^(c)
	Number	Rate ^(a)	Number	Rate ^(a)	
Males	932	3.4	21,142	1.1	3.2
Females	918	3.2	13,987	0.6	5.1
Persons	1,850	3.3	35,129	0.8	4.0

(a) Separations per 1,000 population. Directly age-standardised using the Australian 2001 standard population.

(b) Includes hospitalisations of non-Indigenous people and those for whom Indigenous status was not stated.

(c) Rate ratio = Indigenous rate divided by rate for other Australians.

Note: Excludes private hospitals from the Northern Territory. Data are by state of usual residence of the patient.

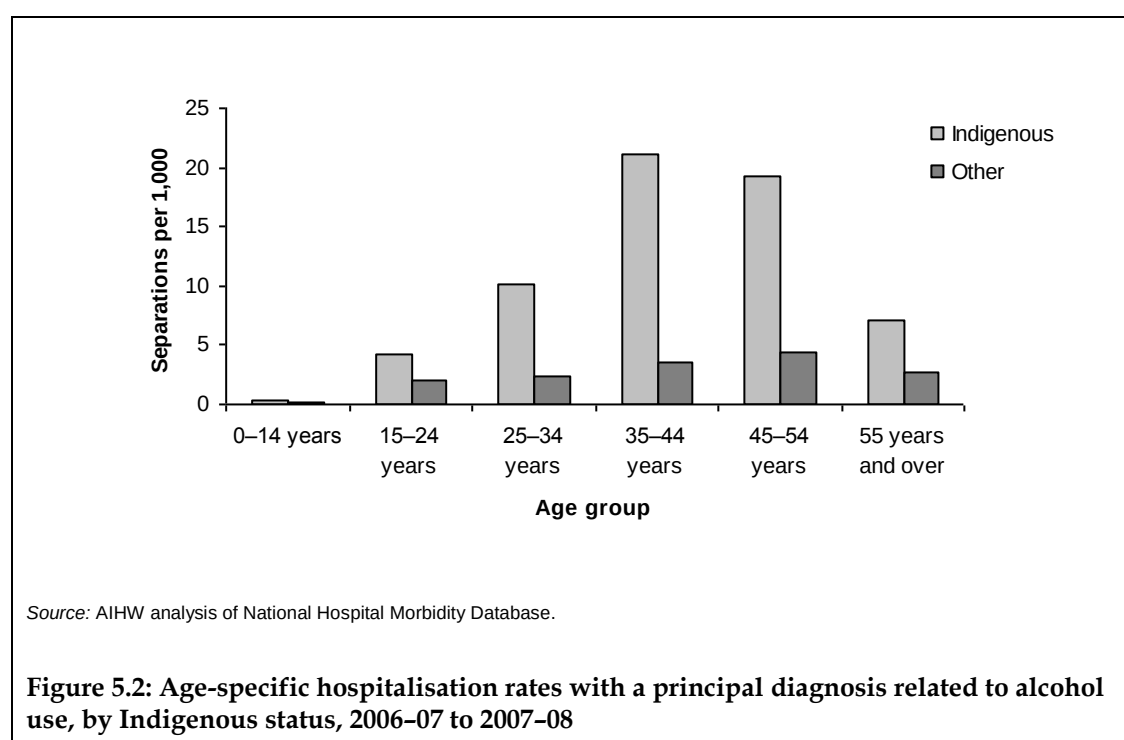
Source: AIHW analysis of National Hospital Morbidity Database.

Alcohol use

In 2006–07 to 2007–08, there were 7,354 hospitalisations of Indigenous Australians with a principal diagnosis related to alcohol use in the six jurisdictions with adequate coverage of Indigenous hospitalisations. This represented approximately 1.4% of all hospitalisations of Indigenous Australians in these jurisdictions.

There were variations in hospitalisation rates for alcohol-related diagnoses by age:

- Rates were highest among Indigenous Australians aged 35–44 years (21 per 1,000).
- This age group also had the greatest disparity in hospitalisation rates between Indigenous and other Australians, with Indigenous Australians being hospitalised at 6 times the rate of other Australians for alcohol-related diagnoses (Figure 5.2).



Over four-fifths (82%) of all hospitalisations of Indigenous Australians related to alcohol use had a principal diagnosis of mental and behavioural disorders due to alcohol use (6,015 hospitalisations).

- The most common type of mental and behavioural disorder due to alcohol use for Indigenous Australians was acute intoxication, followed by dependence syndrome and withdrawal state
- Indigenous Australians were hospitalised for diagnoses related to alcohol use at 4 times the rate of other Australians
- The difference in rates for these two groups was highest for psychotic disorder (Indigenous Australians were hospitalised at 17 times the rate of other Australians), withdrawal state and acute intoxication (8 times the rate) (Table 5.6).

Table 5.6: Hospitalisations for principal diagnoses related to alcohol use, NSW, Vic, Qld, WA, SA and NT, July 2006 to June 2008^{(a)(b)(c)(d)}

Principal diagnosis	Number		Number per 1,000 ^(e)		Rate ratio ^(g)
	Indigenous	Other Australians ^(f)	Indigenous	Other Australians ^(f)	
Mental and behavioural disorders related to alcohol use (F10)					
Acute intoxication (F10.0)	2,951	19,545	3.6	0.5	7.4
Dependence syndrome (F10.2)	1,453	42,985	1.9	1.1	1.8
Withdrawal state (F10.3, F10.4)	1,098	7,079	1.4	0.2	8.1
Psychotic disorder (F10.5)	174	490	0.2	—	16.6
Harmful use (F10.1)	253	2,506	0.3	0.1	4.9
Other ^(h) (F10.6–F10.9)	86	1,063	0.1	—	5.3
<i>Total F10 categories</i>	<i>6,015</i>	<i>73,668</i>	<i>7.6</i>	<i>1.8</i>	<i>4.2</i>
Alcoholic liver disease (K70)	784	10,088	1.1	0.2	4.7
Intentional self-poisoning by alcohol (X65)	365	8,862	0.4	0.2	1.9
Accidental poisoning by alcohol (X45)	104	1,956	0.1	—	2.4
Poisoning by alcohol undetermined intent (Y15)	86	1,840	0.1	—	2.0
Total	7,354	96,414	9.4	2.4	3.9

(a) Data are from public and most private hospitals. Excludes private hospitals in the Northern Territory.

(b) Categories are based on ICD-10-AM fifth edition (National Centre for Classification in Health 2006).

(c) Financial year reporting.

(d) Data are reported by state/territory of usual residence of the patient hospitalised and are for New South Wales, Victoria, Western Australia, South Australia, the Northern Territory and Queensland only. These six jurisdictions are considered to have adequate levels of Indigenous identification, although the level of accuracy varies by jurisdiction and hospital. Hospitalisation data for these six jurisdictions should not be assumed to represent the hospitalisation experience in the other jurisdictions.

(e) Separations per 1,000 population. Directly age-standardised using the Australian 2001 standard population.

(f) Includes hospitalisations of non-Indigenous people and those for whom Indigenous status was not stated.

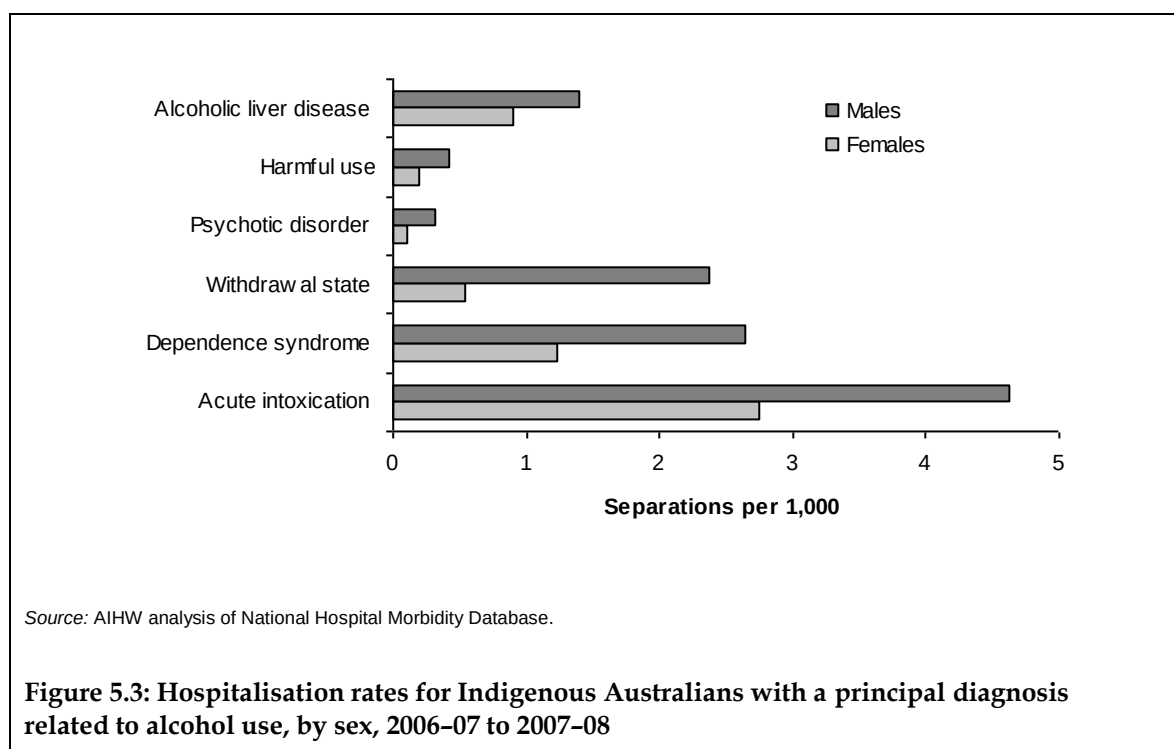
(g) Rate ratio = Indigenous rate divided by rate for other Australians.

(h) Includes amnesic syndrome, residual or late onset psychotic disorder, other and unspecified mental and behavioural disorders due to alcohol use.

Source: AIHW analysis of National Hospital Morbidity Database.

There were notable differences by sex in hospitalisation rates with a principal diagnosis related to alcohol use in 2006–07 to 2007–08:

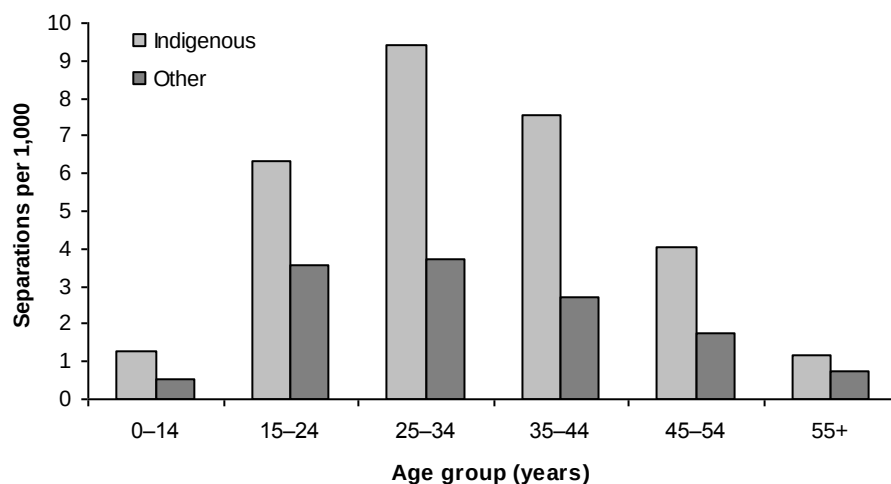
- Indigenous males had higher rates of hospitalisation than Indigenous females for almost all of the diagnoses related to alcohol use
- The largest difference between the two sexes was for hospitalisations for a principal diagnosis of withdrawal state from alcohol, with Indigenous males being hospitalised for this condition at a rate of 2.4 per 1,000 compared with 0.5 per 1,000 for Indigenous females (Figure 5.3).



Illicit drug use

During the period July 2006 to June 2008, in New South Wales, Victoria, Queensland, Western Australia, South Australia and the Northern Territory, there were 4,333 hospitalisations of Indigenous Australians relating to substance use. This represented around 1% of total hospitalisations of Indigenous Australians in these jurisdictions.

Hospitalisation rates for drug-related diagnoses were highest among Indigenous Australians aged 25–34 years (9 per 1,000). This age group and those aged 35–44 years had the greatest disparity in hospitalisation rates between Indigenous and other Australians, with Indigenous Australians in these age groups being hospitalised at over two and a half times the rate of other Australians for drug-related diagnoses (Figure 5.4).



Source: AIHW analysis of National Hospital Morbidity Database.

Figure 5.4: Age-specific hospitalisation rates with a principal diagnosis related to drug use, by Indigenous status, 2006-07 to 2007-08

Indigenous Australians were hospitalised for conditions relating to substance use at over twice the rate of other Australians.

- The most common principal diagnosis related to substance use for Indigenous Australians was mental and behavioural disorders due to use of cannabis (656 Indigenous persons), with Indigenous persons being hospitalised for this disorder at almost 5 times the rate of other Australians.
- The next most common principal diagnoses for Indigenous Australians were poisoning due to anti-epileptic, sedative-hypnotic and anti-Parkinson disease drugs (616 Indigenous persons) and mental and behavioural disorders due to psychotropic drugs including antidepressants (595 Indigenous persons). Indigenous Australians were hospitalised with these two diagnoses at over one and a half times the rate of other Australians (Table 5.7).
- Indigenous Australians were hospitalised for mental and behavioural disorders from use of volatile solvents at over 39 times the rate of other Australians.

Table 5.7: Hospitalisations with principal diagnoses related to drug use in NSW, Vic, Qld, WA, SA and NT, 2006–07 to 2007–08

Principal diagnosis	Number		Number per 1,000 ^(a)		Rate ratio ^(c)
	Indigenous	Other Australians ^(b)	Indigenous	Other Australians ^(b)	
Poisoning					
Antiepileptic, sedative-hypnotic and anti-Parkinson disease drugs (T42)	616	16,805	0.7	0.4	1.6
Psychotropic drugs, includes antidepressants (T43)	595	13,472	0.6	0.3	1.6
Antibiotics and hormones (T36–T39)	466	11,406	0.5	0.3	1.7
Narcotics, including opium, heroin, methadone and cocaine (T40)	239	6,213	0.3	0.2	1.7
Toxic effect of organic solvents (T52)	62	430	0.0	0.0	3.6
Mental/behavioural disorders					
From use of cannabinoids (F12)	656	5,093	0.6	0.1	4.7
From use of multiple drug and psychoactive substances (F19)	516	5,814	0.5	0.1	3.3
From use of other stimulants (F15)	418	5,418	0.4	0.1	3.0
From use of opioids (F11)	383	7,097	0.4	0.2	2.2
From use of volatile solvents (F18)	137	103	0.1	0.0	39.4
From use of sedatives (F13)	78	2,223	0.1	0.1	1.6
From use of cocaine (F14)	11	322	0.0	0.0	1.8
Other					
Neonatal withdrawal symptoms from maternal use of drugs of addiction (P96.1)	130	853	0.1	0.0	3.0
Acute hepatitis C (B17.1)	21	182	0.0	0.0	5.2
Maternal care for suspected damage to foetus by drugs (O35.5)	5	20	0.0	0.0	8.2
Total	4,333	75,451	4.3	1.9	2.2

(a) Separations per 1,000 population. Directly age-standardised using the Australian 2001 standard population.

(b) Includes hospitalisations of non-Indigenous people and those for whom Indigenous status was not stated.

(c) Rate ratio = Indigenous rate divided by rate for other Australians.

Source: AIHW analysis of National Hospital Morbidity Database.

5.5 Mortality

The data on mortality are from the National Mortality Database, a national collection of de-identified information for all deaths in Australia that the AIHW maintains. The Registrars of Births, Deaths and Marriages provide information on the characteristics and causes of death of the deceased and the ABS codes this nationally. The medical practitioner certifying the death or a coroner supplies information on the cause of death. The data are updated each calendar year.

Data presented below are for deaths related to alcohol use and drug use of Indigenous Australians in New South Wales, Queensland, Western Australia, South Australia and the Northern Territory combined, over the period 2003–2007. The ABS and the AIHW have

assessed these five states and territories as having adequate identification of Indigenous deaths in their death registration systems over this period.

Tobacco smoking

Between 2003 and 2007, there were nine deaths of Indigenous Australians, and 301 deaths of non-Indigenous Australians, in New South Wales, Queensland, Western Australia, South Australia and the Northern Territory combined, with an underlying cause of death related to tobacco use. Over the same period, there were 327 deaths of Indigenous Australians and 7,582 deaths of non-Indigenous Australians in these five jurisdictions recorded with an associated cause of death related to tobacco use. The large majority of these deaths were for mental and behavioural disorders due to tobacco use.

Alcohol consumption

In New South Wales, Queensland, Western Australia, South Australia and the Northern Territory, there were 382 deaths of Indigenous Australians related to alcohol use. This represented approximately 4% of total deaths of Indigenous Australians in these states and territories.

- Of all deaths related to alcohol use among Indigenous people, the majority were for alcoholic liver disease (269 deaths) (Table 5.8).
- Indigenous people died from alcohol-related causes at nearly 5 times the rate of non-Indigenous people.

Table 5.8: Deaths related to alcohol use, NSW, Qld, WA, SA and NT, 2004–2008^{(a)(b)}

Principal diagnosis	Persons				
	Number		No. per 100,000 ^(c)		Rate ratio ^(d)
	Indigenous	Non-Indigenous	Indigenous	Non-Indigenous	
Alcoholic liver disease (K70)	269	2,284	52.0	11.3	4.6
Mental & behavioural disorders due to alcohol use (F10)	91	746	17.6	3.7	4.8
Poisoning by alcohol (X45, X65, Y15)	22	118	4.3	0.6	7.2
Total	382	3,148	73.9	15.6	4.7

(a) Deaths are by year of registration and state/territory of usual residence.

(b) Excludes 62 deaths for which Indigenous status was not stated.

(c) Directly age-standardised using the Australian standard population.

(d) Rate ratio = Indigenous rate divided by rate for non-Indigenous Australians.

Source: AIHW analysis of National Mortality Database.

Illicit substance use

During the period 2003–2007, there were 63 deaths of Indigenous Australians with an underlying cause of death related to drug use in the five jurisdictions with adequate coverage of Indigenous deaths. Of these deaths, 33 were due to accidental poisoning from narcotics and 11 were due to accidental poisoning due to organic solvents. Over the same period, there were 993 deaths of non-Indigenous Australians from drug-related causes in these five jurisdictions, 53% of which were due to accidental poisoning due to narcotics and 28% were due to accidental poisoning from antidepressants.

5.6 Summary

The various health measures included in this chapter indicate poorer health outcomes for Indigenous people who smoke, drink at risky levels or use illicit drugs. Smokers assessed their health as poorer than non-smokers, and those who drank at long-term risky levels assessed their health as poorer than those who drank at low risk levels or did not drink. Tobacco smoking was the number one risk factor for Indigenous Australians and accounted for 12% of the burden of disease, with alcohol accounting for 5% and illicit drugs 3% of the total burden.

In the 2-year period from 2006–07 to 2007–08 there were over 7,300 hospitalisations of Indigenous Australians related to alcohol use, 3 times as many as those related to tobacco use. Hospitalisations for alcohol-related diagnosis were highest among Indigenous Australians aged 35–44 years (21 per 1,000). Some 4% of Indigenous deaths were related to alcohol use. Indigenous people died from alcohol-related causes at 5 times the rate of non-Indigenous people.

6 Treatment services

There are a range of different treatment services available for Aboriginal and Torres Strait Islander people who require interventions for alcohol and drug use. Services generally offer some form of counselling or other support, and may be residential or community based. Improved access to treatment is one of the priority areas of the National Drug Strategy (MCDS 2004).

This chapter includes data from the main national data collections that capture information on drug treatment services provided to Indigenous Australians. The chapter includes information from the following data collections that the AIHW holds:

- The Alcohol and Other Drug Treatment Services National Minimum Data Set (AODTS-NMDS) captures data on some of the publicly funded agencies that provide treatment to Aboriginal and Torres Strait Islander people.
- The OATSIH Services Reporting (OSR) data collection that collects data on both Aboriginal and Torres Strait Islander primary health-care services that deliver substance use services, as well as stand-alone Indigenous specific substance use services (AIHW 2010a).

It should be noted that the AODTS-NMDS and OSR have different collection purposes, scope and counting rules. For example, the OSR collects service-level estimates for client numbers and episodes of care, while the AODTS-NMDS collects unit records for closed treatment episodes. The definitions of 'closed treatment episodes' (AODTS-NMDS) and 'episodes of care' (OSR) are not consistent (see Box 6.1).

There is also some overlap between the AODTS-NMDS and OSR, with some of the Australian Government-funded services reporting in the OSR also reporting in the AODTS-NMDS.

Box 6.1: Definitions of 'episodes of care' (OSR) and 'closed treatment episodes' (AODTS-NMDS)

The OSR definition of 'episode of care' starts at admission and ends at discharge (from residential treatment/rehabilitation and sobering-up/respite). In the case of 'other care', the definition of 'episode of care' relates more to the number of visits or phone calls undertaken with clients. In contrast to the definition of 'closed treatment episode' used in the AODTS-NMDS, the definition used in this collection does not require agencies to begin a new 'episode of care' when the main treatment type ('treatment type') or primary drug of concern ('substance/drug') changes. It is therefore likely that this concept of 'episode of care' produces smaller estimates of activity than the AODTS-NMDS concept of 'closed treatment episode'.

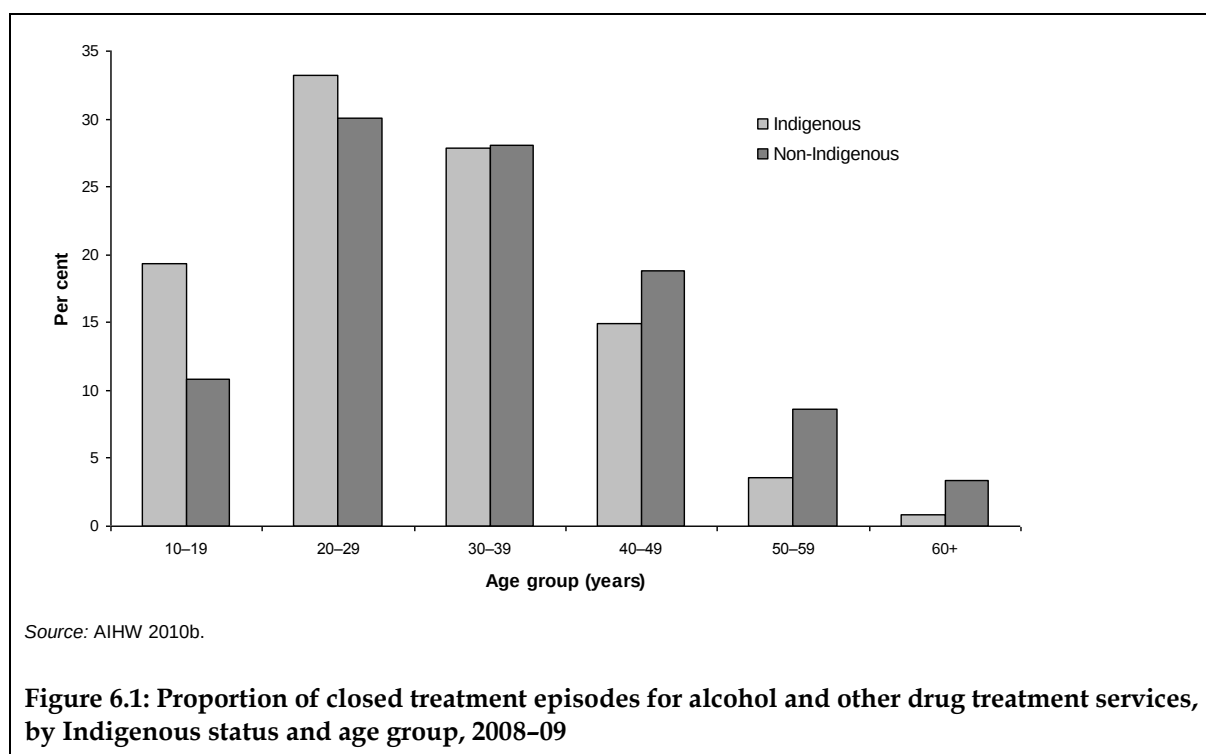
The OSR collection records information about clients of any age, whereas the AODTS-NMDS reports only about clients aged 10 years and over. Any comparisons drawn between the collections should therefore be made with caution.

6.1 Alcohol and other drug treatment services

The AODTS-NMDS is a nationally agreed set of data items collected by government-funded service providers in the government and non-government sectors. This data set does not provide a complete picture of alcohol and other drug treatment services in Australia. The AODTS-NMDS collects demographic information about clients who use treatment services, data about the drugs that concern clients and information about the treatment clients receive. Some administrative information about treatment agencies is also collected.

The following data are for services that reported to the AODTS-NMDS in 2008–09:

- There were 17,043 closed treatment episodes for clients that identified as being of Aboriginal and/or Torres Strait Islander origin, 12% of all closed treatment episodes, including client type 2 (those seeking treatment for someone else's drug use).
- There was a higher number of male than female Indigenous clients with closed treatment episodes (10,986 compared with 6,052).
- Indigenous clients tended to be younger than other Australians with 19% of episodes for Indigenous clients being for those aged 10–19 years, compared with 11% for other Australians (Figure 6.1).



Indigenous clients reported the same four principal drugs of concern as the total population:

- alcohol (54% of episodes), cannabis (23%), opioids (10%, with heroin accounting for 6%) and amphetamines (8%) (Table 6.1).

There were, however, differences between Indigenous and non-Indigenous people in principal drugs of concern:

- A higher proportion of Indigenous clients nominated alcohol as their principal drug of concern than non-Indigenous clients (54% compared with 45%).
- A lower proportion of Indigenous clients nominated opioids as their principal drug of concern (10% compared with 16%) (Table 6.1).

Table 6.1: Closed treatment episodes^(a) by principal drug of concern and Indigenous status, 2008–09

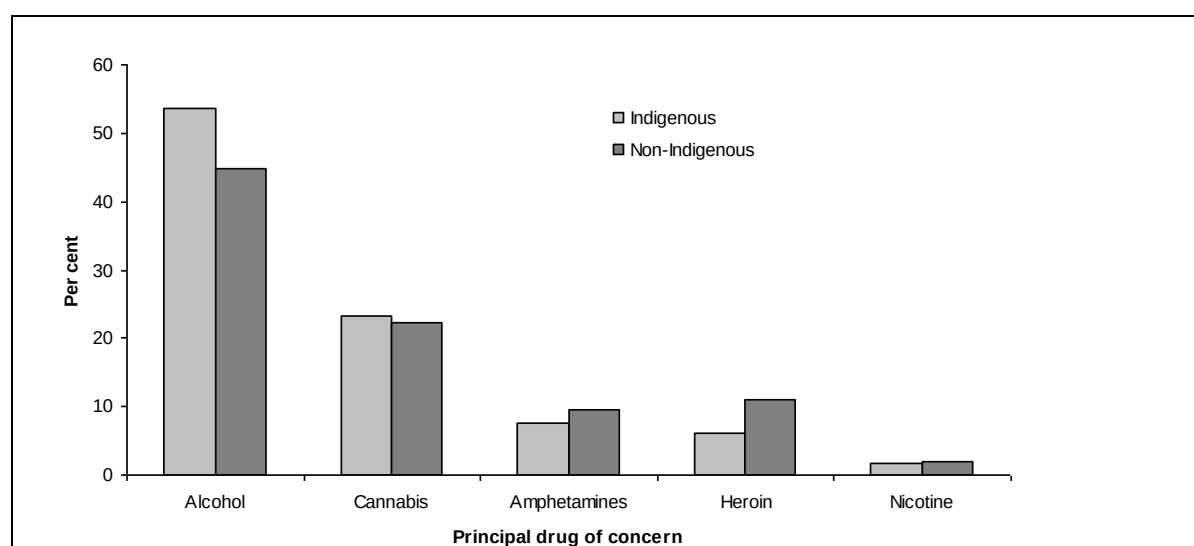
Principal drug of concern	Indigenous		Non-Indigenous		Not stated		Total	
	No.	%	No.	%	No.	%	No.	%
Alcohol	8,937	53.7	50,805	44.8	3,530	44.1	63,272	45.8
Amphetamine	1,253	7.5	10,829	9.6	657	8.2	12,739	9.2
Benzodiazepines	100	0.6	1,867	1.6	113	1.4	2,080	1.5
Cannabis	3,887	23.4	25,236	22.3	1,977	24.7	31,100	22.5
Cocaine	27	0.2	435	0.4	17	0.2	479	0.3
Ecstasy	42	0.3	1,286	1.1	69	0.9	1,397	1.0
Nicotine	272	1.6	2,096	1.8	93	1.2	2,461	1.8
Opioids								
Heroin	1,019	6.1	12,398	10.9	805	10.1	14,222	10.3
Methadone	217	1.3	1,821	1.6	98	1.2	2,136	1.5
Morphine	191	1.1	1,576	1.4	110	1.4	1,877	1.4
Total opioids ^(b)	1,576	9.5	18,119	16.0	1,195	14.9	20,890	15.1
All other drugs ^(c)	539	3.2	2,715	2.4	355	4.4	3,609	2.6
Total	16,633	100.0	113,388	100.0	8,006	100.0	138,027	100.0
% Indigenous status	12.1	..	82.1	..	5.8	..	100	..

(a) Excludes treatment episodes for clients seeking treatment for the drug use of others.

(b) 'Total opioids' includes the balance of opioids drugs coded according to ASCDC.

(c) Includes balance of principal drugs of concern coded according to ASCDC.

Source: AIHW 2010b.



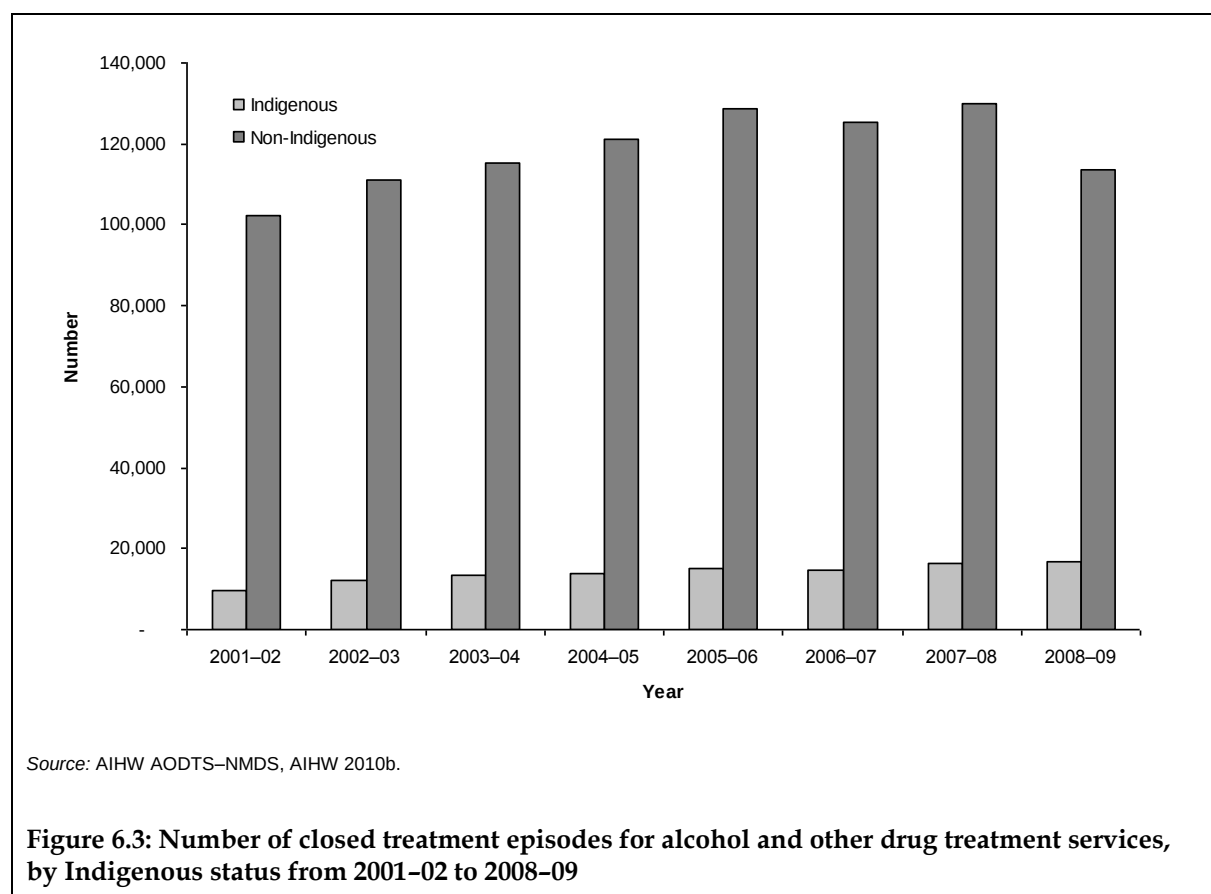
Source: AIHW 2010b.

Figure 6.2: Proportion of closed treatment episodes for alcohol and other drug treatment services, by Indigenous status and principal drug of concern, 2008–09

Time series

Trend data are presented for the 6-year period from 2001–02 to 2008–09:

- The total number of closed treatment episodes increased for both Indigenous (9,615 to 16,663) and non-Indigenous (102,071 to 113,388) clients (Figure 6.3).
- The proportion of episodes for Indigenous clients increased slightly from 8% in 2001–02 to 12% in 2008–09. (The increase in Indigenous clients may be partly attributable to an increase in the propensity of people to identify as Indigenous in the AODTS–NMDS.)



6.2 Aboriginal and Torres Strait Islander substance use services

In 2008–09, 45 stand-alone Aboriginal and Torres Strait Islander substance use services with over 23,000 clients responded to the 2008–09 OSR questionnaire. This was 90% of the 50 substance use services that OATSIH funded for the financial year.

Information about the services

These services were located in cities, regional and remote locations in all states and territories, with the exception of Tasmania and the Australian Capital Territory. Over a quarter (27% or 12) of these substance use services were located in *Remote* areas, with a further quarter (24% or 11) of the services being located in *Major cities*. The remaining services were located in *Outer regional* (20% or 9), *Inner regional* (18% or 8) and *Very remote* areas (11% or 5).

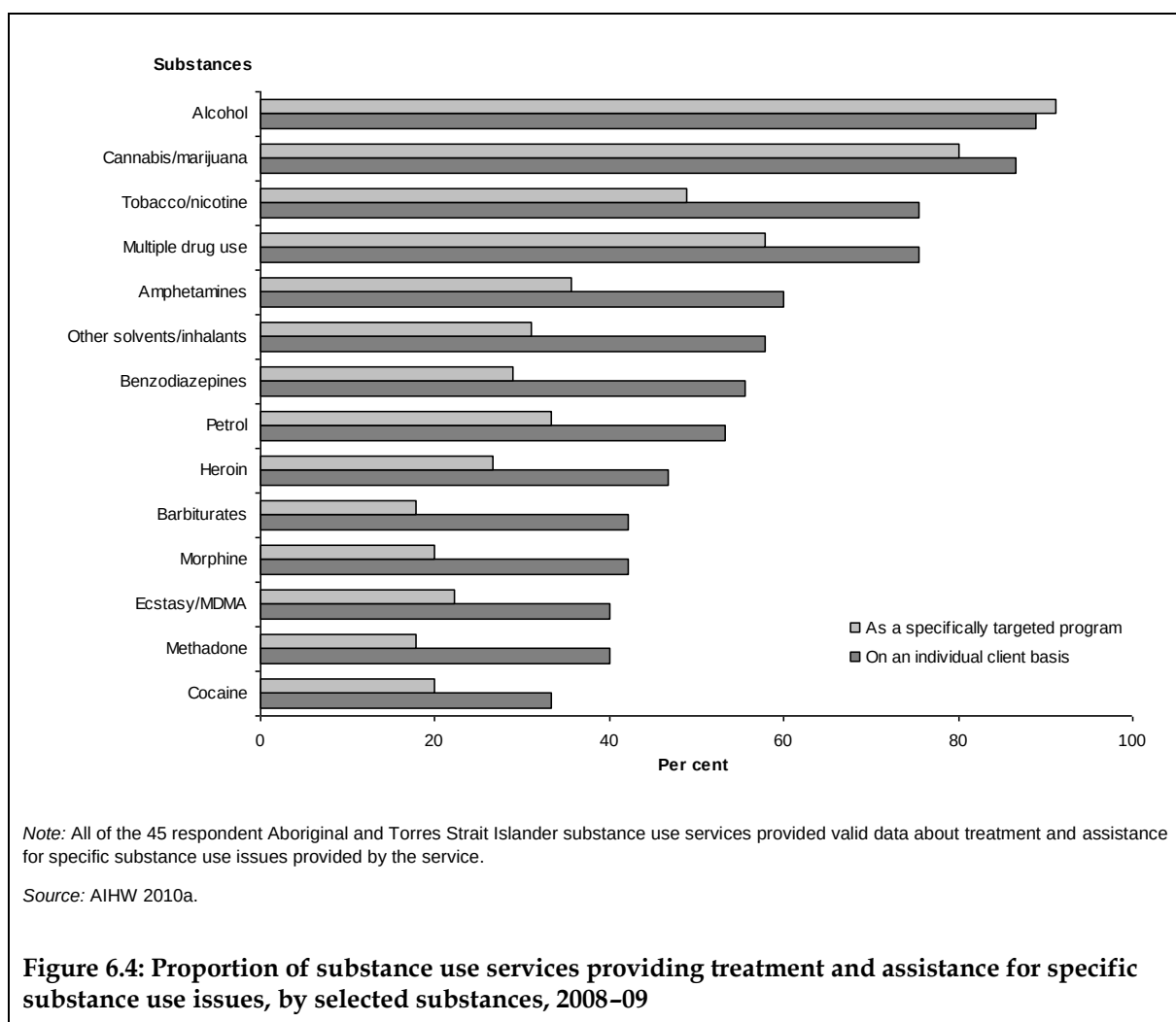
Around three in ten (29% or 13) substance use services were located in Queensland. Two in ten (22% or 10) services were located in the Northern Territory, with a similar number of services located in New South Wales (18% or 8) and Western Australia (18% or 8). One in ten (11% or 5) services were located in South Australia, while 2% (1 service) was located in Victoria.

Treatment and assistance

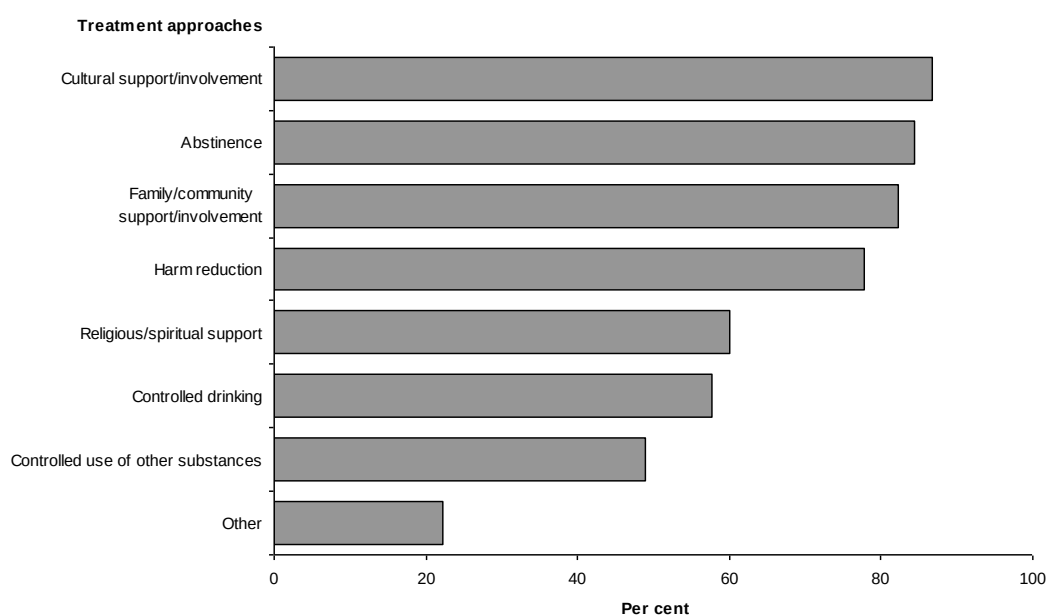
Substance use services reported providing treatment and assistance for a wide range of substance use issues that their clients experienced. Most commonly, this treatment or assistance was provided to individual clients, although many services did provide specifically targeted programs for specific substance use issues.

Alcohol, tobacco and nicotine, cannabis and marijuana, or multiple drug use, were the most common substances for which treatment or assistance was provided. The vast majority of services provided treatment or assistance to individual clients for alcohol (89% of all services), and cannabis and marijuana (87%). Just over three-quarters of services provided treatment or assistance for tobacco and nicotine to individual clients, or for multiple drug use (both 76%).

Nine in ten (91%) drug and alcohol services provided specifically targeted programs for treatment and help with alcohol, while eight in ten (80%) services provided a program to deal with cannabis and marijuana use. Six in ten (58%) services provided programs to tackle multiple drug use. Nearly half of all services (49%) offered programs specifically aimed at managing tobacco and nicotine use (Figure 6.4).



Drug and alcohol services used a variety of approaches to treatment. The vast majority of services (87%) used approaches that involved traditional cultural elements, such as bush camps, traditional healing, arts and crafts, and mentor programs with elders. Other common treatment approaches included abstinence (84%), family and community support and involvement (82%), and harm reduction (78%). Just over one-fifth of services (22%) used other treatment approaches, including social and emotional wellbeing, cultural support, cognitive behaviour therapy and Alcoholics Anonymous (Figure 6.5).



Note: All of the 45 responding Aboriginal and Torres Strait Islander substance use services provided valid data about treatment approaches used by the service.

Source: AIHW 2010a.

Figure 6.5: Proportion of Aboriginal and Torres Strait Islander substance use services that used particular treatment approaches, 2008-09

Clients of substance use services

There was a total of 23,200 clients of substance use services in 2008-09, with 11,400 (49%) male clients, 6,500 (28%) female clients and 5,300 (23%) clients for whom sex was not recorded. Just over three-quarters (77% or 17,700) of all clients were Aboriginal or Torres Strait Islander, while nearly a quarter (23% or 5,400) were non-Indigenous (Table 6.2).

Table 6.2: Clients of Aboriginal and Torres Strait Islander substance use services, by Indigenous status and sex, 2008-09

Indigenous status	Male	Female	Unknown	Total (number)	Total (per cent)
Aboriginal and Torres Strait Islander	8,528	4,891	4,302	17,721	76.5
Non-Indigenous	2,809	1,555	989	5,353	23.1
Unknown Indigenous status	60	42	2	104	0.4
Total	11,397	6,488	5,293	23,178	100.0

Notes

1. The total estimated number of clients refers to individual clients, and does not include clients that attended groups only.
2. Unknown clients refer to any client for whom the substance use service did not record their sex.
3. All of the 45 respondent Aboriginal and Torres Strait Islander substance use services provided valid data for the number of clients.

Source: AIHW 2010a.

Close to three in ten of all clients sought treatment or assistance at Aboriginal and Torres Strait Islander substance use services located in Queensland (29% or 6,600). There were similar numbers of clients at substance use services in South Australia and Victoria (5,600), the Northern Territory (5,200) and Western Australia (4,700). Almost all (97%) clients of services in the Northern Territory were Aboriginal or Torres Strait Islander, while just over a half (51%) of clients of services in Queensland were Aboriginal or Torres Strait Islander people (Table 6.3).

Table 6.3: Estimated number of clients of Aboriginal and Torres Strait Islander substance use services, by Indigenous status, and state and territory, 2008–09

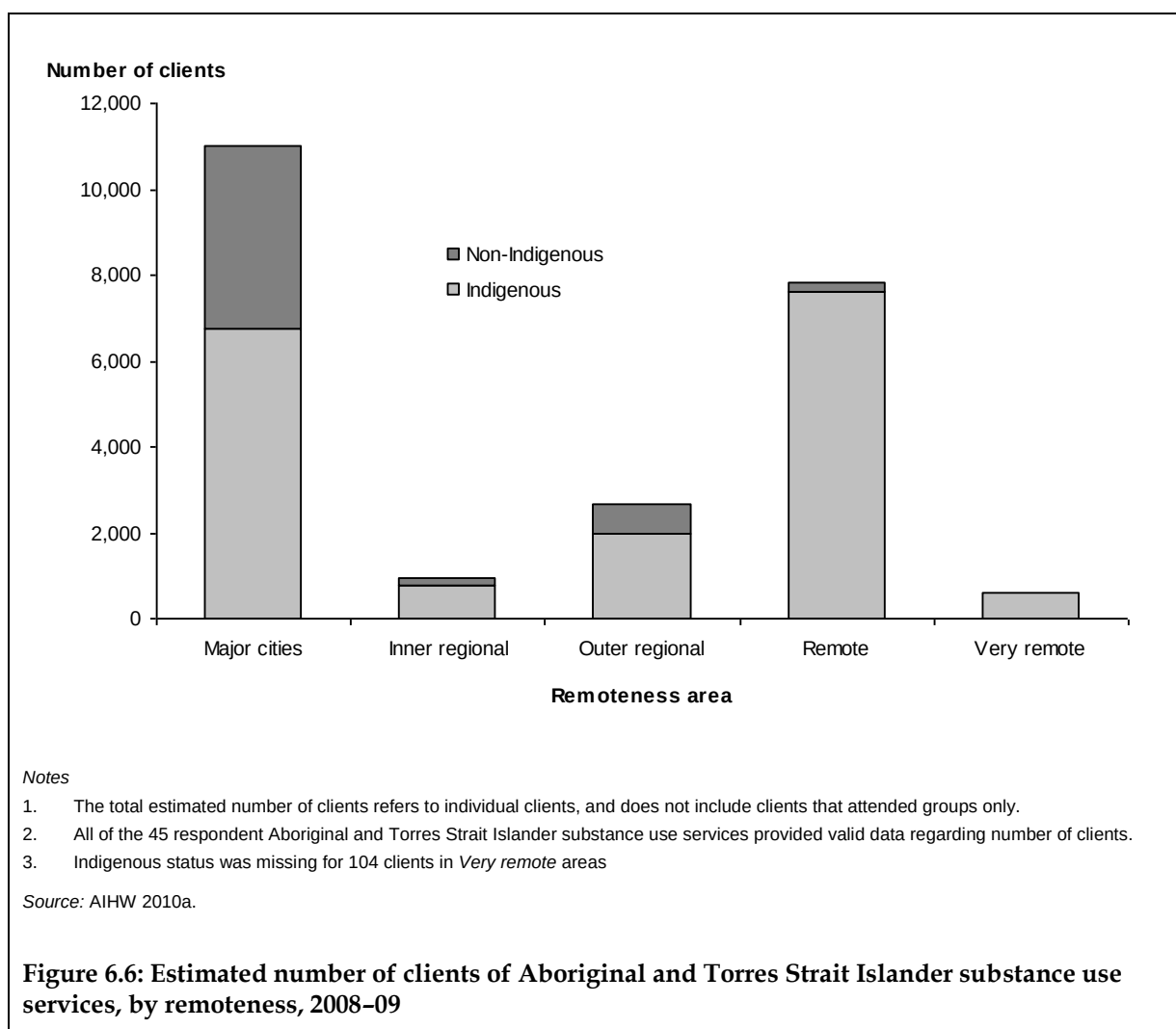
Indigenous status	NSW	Vic & SA	Qld	WA	NT	Total
Aboriginal and Torres Strait Islander	749	4,540	3,388	3,993	5,051	17,721
Non-Indigenous	349	1,056	3,242	557	149	5,353
Unknown Indigenous status	..	..	..	104	..	104
Total clients (number)	1,098	5,596	6,630	4,654	5,200	23,178
Total clients (per cent)	4.7	24.1	28.6	20.1	22.4	100.0

Notes

1. The total estimated number of clients refers to individual clients, and does not include clients that attended groups only.
2. Data for Vic and SA have been combined due to the small number of services in Vic.
3. All of the 45 respondent Aboriginal and Torres Strait Islander substance use services provided valid data for the number of clients.

Source: AIHW 2010a.

Nearly half (48% or 11,000) of all clients who received treatment at services were in *Major cities* while over two-fifths (34% or 7,800) of all clients received treatment at a substance use service located in *Remote* areas. Of the Indigenous clients receiving treatment at these services, the majority were in *Remote* areas (43%), followed by *Major cities* (38%) (Figure 6.6).



Types of treatment

Residential treatment

In 2008–09, 30 substance use services provided residential treatment and rehabilitation programs for 3,400 clients. Just over four-fifths (81% or 2,700) of clients of these services were Aboriginal or Torres Strait Islander people. Among these clients, over two-thirds (68%) were male and around one-fifth (22%) were female, with the sex not recorded for the remaining 10% of clients.

Just over four in ten (43%) of all Aboriginal and Torres Strait Islander clients were aged between 19 and 35 years of age, with 37% aged 36 years or over. One in ten (11%) Aboriginal and Torres Strait Islander clients were aged 18 years or under.

Table 6.4: Estimated number of clients of Aboriginal and Torres Strait Islander substance use services receiving residential treatment, by Indigenous status and sex, 2008–09

Indigenous status	Male	Female	Unknown	Total (number)	Total (per cent)
Aboriginal and Torres Strait Islander	1,877	605	260	2,742	81.3
Non-Indigenous	498	89	44	631	18.7
Total	2,375	694	304	3,373	100.0

Notes

1. The total estimated number of clients excludes a small number of clients for whom Indigenous status was unknown.
2. 30 of the 45 respondent Aboriginal and Torres Strait Islander substance use services provided valid data for the number of residential treatment/rehabilitation clients.

Source: AIHW 2010a.

The length of stay for clients in residential treatment varied. Over one-third of clients (37%) in residential treatment and rehabilitation had a length of stay ranging from 2 to 8 weeks. Nearly one-third (32%) of clients had a length of stay ranging from 9 to 16 weeks. Very short and relatively long stays in residential treatment and rehabilitation were less common, with a small proportion of clients having a stay of less than 2 weeks (11%) or a stay of greater than 17 weeks (6%). The length of stay was unknown for 14% of clients.

Episodes of care

A residential treatment and rehabilitation episode of care refers to one treatment period, that is, from the time of admission into treatment through to discharge. If a client receives treatment from the service on two separate occasions, then this is two episodes of care.

The 30 substance use services that offered residential treatment and rehabilitation programs reported 3,600 episodes of care during 2008–09. Aboriginal or Torres Strait Islander clients received a little over three-quarters (77% or 2,800) of all episodes of care, while non-Indigenous clients received 17% or 600 episodes of care. Two-thirds (67% or 20) of the residential treatment and rehabilitation substance use services maintained a waiting list in 2008–09. The majority (60% or 12) of these services had 10 or more people waiting to receive treatment or assistance for substance use.

Sobering-up, residential respite and short-term care

Sobering-up, residential respite and short-term care clients are in residential care overnight to sober up or stay between 1 and 7 days for respite and do not receive formal rehabilitation. Sobering-up clients include mobile assistance patrol clients, night patrol clients and ‘walk-in’ clients who stay overnight.

In 2008–09, 14 substance use services reported that almost 4,600 clients received sobering-up, residential respite or short-term care. Almost all (98% or 4,500) of the clients were Aboriginal or Torres Strait Islander people. Around six in ten (57%) clients were male, and four in ten (43%) were female (Table 6.5).

Almost half (48%) of all Aboriginal and Torres Strait Islander clients were aged 36 years or over, while nearly a third (32%) of clients were aged between 19 and 35 years. Clients aged 18 years of age or less comprised a small proportion (2%) of all Aboriginal or Torres Strait Islander clients. The age of clients was unknown for about one in five (18%) of clients.

Table 6.5: Estimated number of clients of Aboriginal and Torres Strait Islander substance use services receiving sobering-up, residential respite and short-term care, by Indigenous status and sex, 2008–09

Indigenous status	Male	Female	Total (number)	Total (per cent)
Aboriginal and Torres Strait Islander	2,516	1,942	4,458	97.5
Non-Indigenous	94	18	112	2.5
Total	2,610	1,960	4,570	100.0

Notes

1. The total estimated number of clients excludes a small number of clients for whom Indigenous status was unknown.
2. 14 of the 45 respondent Aboriginal and Torres Strait Islander substance use services provided information about the number of clients in sobering-up, residential respite and short-term care.

Source: AIHW 2010a.

Episodes of care

In 2008–09, there were 13 substance use services that reported a total of 14,300 episodes of care for sobering-up, residential respite and short-term care. On average, each client had three episodes of care in 2008–09.

Aboriginal or Torres Strait Islander clients received almost all (99% or 14,100) episodes of care. Of these, nearly six in ten (59%) episodes of care were for male clients, while four in ten (41%) were for female clients. Aboriginal or Torres Strait Islander clients aged 36 years and over received about six in ten (62%) of all episodes of care.

Non-residential, follow-up and after-care

Non-residential, follow-up and after-care clients are those clients who received non-residential care. Typically, services delivered this type of care as counselling, assessment, treatment, education, support and home visits. It also included follow-up care from residential services (after discharge), or mobile assistance patrol and night patrol services.

In 2008–09, 35 substance use services reported 15,000 non-residential, follow-up and after-care clients. Around two-thirds (67% or 10,100) of all clients were Aboriginal or Torres Strait Islander people, while one-third (29% or 4,300) were non-Indigenous. Indigenous status was unknown for a small proportion (4% or 600) of clients.

Over a half (57%) of all Aboriginal and Torres Strait Islander clients were male and over a third (36%) were female, with the sex not recorded by the service for the remainder of clients (Table 6.6). Close to a half (45%) of all Aboriginal and Torres Strait Islander clients were aged between 19 and 35 years, while nearly a third (32%) were aged 36 and over.

Table 6.6: Estimated number of clients of Aboriginal and Torres Strait Islander substance use services receiving non-residential, follow-up and after-care, by Indigenous status and sex, 2008–09

Indigenous status	Male	Female	Unknown	Total (number)	Total (per cent)
Aboriginal and Torres Strait Islander	5,712	3,636	743	10,091	67.4
Non-Indigenous	2,675	1,617	0	4,292	28.6
Unknown Indigenous status	60	42	491	593	4.0
Total	8,447	5,295	1,234	14,976	100.0

Note: 35 of the 45 respondent Aboriginal and Torres Strait Islander substance use services provided valid data for the number of non-residential, follow-up and aftercare clients.

Source: AIHW 2010a.

Episodes of care

In 2008–09, 29 substance use services reported 50,200 episodes of non-residential, follow-up and after-care. On average, each client had about three episodes of care during 2008–09.

Aboriginal or Torres Strait Islander clients received almost three-quarters (74% or 37,200) of the episodes of care. Small proportions of episodes of care were provided to non-Indigenous clients (15% or 7,500 episodes) and clients whose Indigenous status was not recorded by the service (11% or 5,500 episodes).

Close to six in ten (56%) of all episodes of care made available to Aboriginal and Torres Strait Islander clients were provided to male clients, while four in ten were provided to female clients (42%). Just over seven in ten (72%) of all episodes of care provided to Aboriginal and Torres Strait Islander clients were for clients aged 19 to 35 years old (35%) or for clients aged 36 years and over (36%) (AIHW 2010).

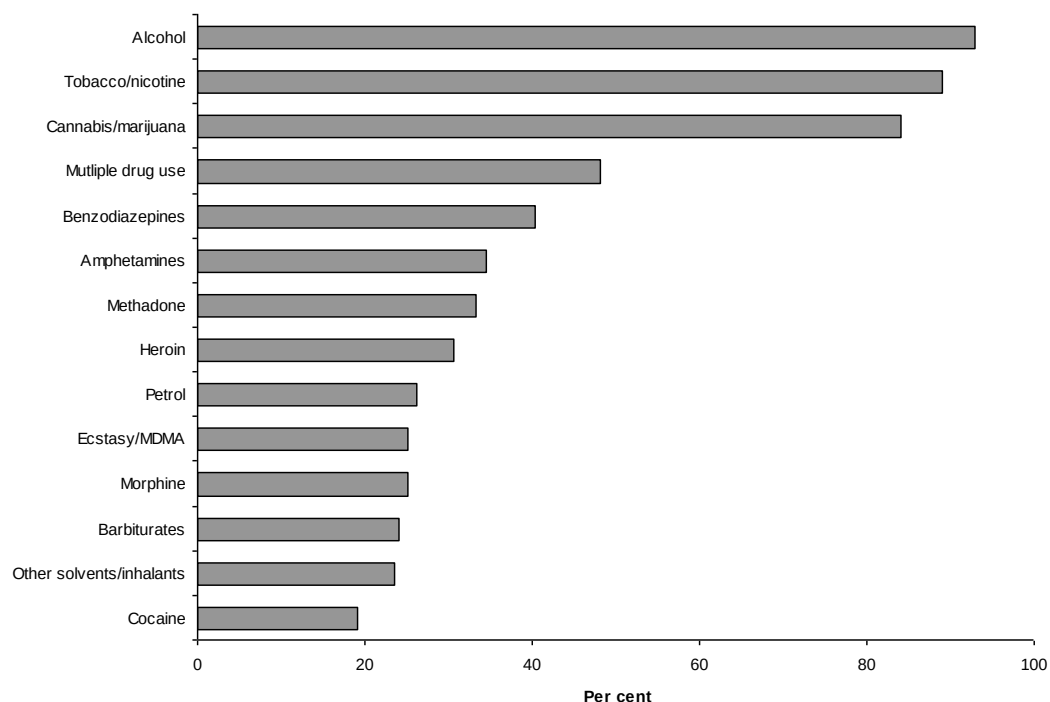
6.3 Aboriginal and Torres Strait Islander primary health care services

In 2008–09, 183 (89%) of the 205 Aboriginal and Torres Strait Islander primary health-care services that responded to the OSR reported that they provided treatment or assistance to clients for a range of substance use issues. This treatment or assistance was provided most commonly to individual clients, although some services did run specifically targeted programs.

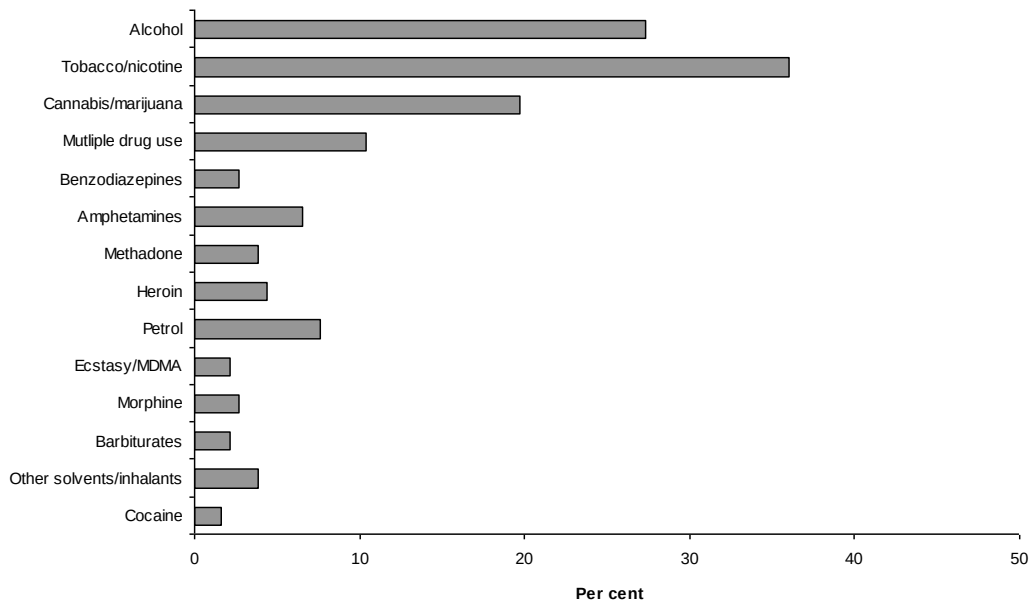
Alcohol, and tobacco and nicotine were the most common substances for which treatment or assistance was provided. Just over nine in ten services that offered treatment or assistance for substance use issues to individual clients did so for alcohol (93% or 170 services), and tobacco and nicotine (89% or 163 services), while eight in ten services provided treatment or assistance for cannabis/marijuana (84% or 154 services). Treatment or assistance for multiple drug use on an individual client basis was provided by almost half of all primary health-care services (48% or 88 services) that reported providing treatment or assistance for substance use issues.

Over a third of Indigenous primary health-care services (36% or 66 services) that provided treatment for substance use issues reported providing specifically targeted programs for tobacco and nicotine. Specifically targeted programs for alcohol were provided by close to three in ten services (27% or 50 services), while two in ten services (20% or 36 services) provided programs for cannabis/marijuana (Figure 6.7).

Substances on an individual client basis



Substances as a specifically targeted program



Note: 183 of the 205 responding Aboriginal and Torres Strait Islander primary health-care services provided valid data about treatment and assistance provided for specific substance use issues.

Source: AIHW 2010a.

Figure 6.7: Proportion of Aboriginal and Torres Strait Islander primary health-care services providing treatment and assistance for substances, by selected substances, 2008–09

In 2008–09, almost all (93% or 190) Aboriginal and Torres Strait Islander primary health-care services provided one or more activities to tackle substance use issues. The two most common activities were provision of information and education about substance use, and individual counselling, each of which were provided by a little over three-quarters of these services (78% or 148 services and 77% or 147 services respectively). Nearly seven in ten services (68% or 129) provided support for clients accessing mainstream services, while seven in ten services provided case management of clients (62% or 117) (AIHW 2010a).

6.4 Summary

Aboriginal and Torres Strait Islander people used mainstream drug and alcohol treatment services at a higher rate than non-Indigenous people. Across Australia there were 45 Aboriginal and Torres Strait Islander substance use services that reported on their activities in 2008–09. These services provided assistance and treatment to some 23,200 clients. Around three-quarters (17,700) of these clients were Aboriginal or Torres Strait Islander. Alcohol (52.8%) and cannabis (21%) were the two main drugs of concern that Indigenous people cited when using these services.

The most common substances for which treatment was provided were alcohol (89% of services) and marijuana (87%). Most clients of these services were from Queensland (28.6%), Victoria and South Australia (24.1%) and the Northern Territory (22.4%). Treatment and assistance provided included residential treatment (3,400 clients); sobering-up, residential respite and short-term care (4,600 clients); and non-residential, follow-up and after care (15,000 clients).

Around nine in ten Aboriginal and Torres Strait Islander primary health care services (183) reported that they provided treatment or assistance to clients for substance use issues in 2008–09. The most common substances for which assistance was provided were alcohol (93% of services), tobacco and nicotine (89%) and marijuana (84%).

Appendix 1: Information about the data sources and data quality issues

National Aboriginal and Torres Strait Islander Social Survey

The ABS conducts the National Aboriginal and Torres Strait Islander Social Survey (NATSISS) every 6 years. The first survey was conducted in 2002, with the latest conducted in 2008. The 2008 survey collected information from 13,300 Indigenous Australians across all states and territories of Australia. The sample covered persons aged 15 years and over who were usual residents of private dwellings. It collected information on a wide range of subjects including family and culture, health, education, employment, income, financial stress, housing, and law and justice. The 2002 and 2008 NATSISS provide time series data. There is no directly comparable non-Indigenous source for the 2008 NATSISS; however, selected comparisons can be made with the non-Indigenous population from other ABS surveys run in 2008.

Data quality issues

The NATSISS uses the standard Indigenous status question. The NATSISS sample was specifically designed to select a representative sample of Aboriginal and Torres Strait Islander Australians and thus overcome the problems inherent in most national surveys with small and unrepresentative Indigenous samples. As with other surveys, the NATSISS is subject to sampling and non-sampling errors. Calculations of standard errors and significance testing help to establish the accuracy of the estimates and differences.

Care has been taken to ensure that the results of this survey are as accurate as possible. Trained ABS officers conducted all interviews. Extensive reference material was developed for use in the field enumeration and intensive training was provided to interviewers.

There remain, however, other factors which may have affected the reliability of results, and for which no specific adjustments can be made. The following factors should be considered when interpreting the estimates for this survey:

- information recorded in this survey is 'as reported' by respondents, and therefore may differ from information available from other sources or collected using different methodologies
- imperfect recall or individual interpretation of survey questions may affect responses
- some respondents may have provided responses that they felt were expected, rather than those that accurately reflected their own situation (ABS 2010).

Every effort has been made to minimise such issues through the development and use of culturally appropriate survey methodology.

Time series comparisons for the 2008 survey are available through the 1994 National Aboriginal and Torres Strait Islander Survey and the 2002 NATSISS. There are no strictly comparable non-Indigenous results available for the 2008 NATSISS as the latest General Social Survey (which has been used in the past to compare with Indigenous results from the NATSISS) was run in 2006, with the next being run in 2010. Data from other ABS surveys run in 2008 may, however, be used to obtain rough non-Indigenous comparisons for some data items.

There was a relatively large level of under-coverage in the 2008 NATSISS when compared to other ABS surveys. As under-coverage can result in variances across population

characteristics, as well as across some data items, caution should be used when interpreting the survey results (ABS 2010).

Further information on NATSISS data quality issues can be found in the 2008 NATSISS user's guide (ABS 2010).

National Aboriginal and Torres Strait Islander Health Survey

The NATSIHS was first conducted in 2004–05 and is to be conducted every 6 years thereafter, with the next scheduled for 2010–11. The 2004–05 survey collected information from 10,439 Indigenous Australians of all ages. This sample was considerably larger than the supplementary Indigenous samples in the 1995 and 2001 National Health Surveys. The survey was conducted in remote and non-remote areas of Australia and collected a range of information from Indigenous Australians about health-related issues including health-related actions, health risk factors, health status, socioeconomic circumstances and women's health. Selected non-Indigenous comparisons are available through the 2004–05 NHS.

Data quality issues

The NATSIHS uses the standard Indigenous status question. The NATSIHS sample was specifically designed to select a representative sample of Aboriginal and Torres Strait Islander Australians and thus overcomes the problem inherent in most national surveys with small and unrepresentative Indigenous samples. As with other surveys, the NATSIHS is subject to sampling and non-sampling errors. Calculations of standard errors and significance testing help to establish the accuracy of the estimates and differences. Information recorded in this survey is essentially 'as reported' by respondents. The ABS makes every effort to collect accurate information from respondents, particularly through careful questionnaire design, pre-testing of questionnaires, use of trained interviewers and assistance from Indigenous facilitators. Nevertheless, imperfect recall or individual interpretation of survey questions may affect some responses.

Non-Indigenous comparisons are available through the NHS. The NHS was conducted in *Major cities, Inner and outer regional areas* and *Remote areas*, but *Very remote areas* were excluded from the sample. Time series comparisons are available through the 1995 and 2001 National Health Surveys.

In remote communities there were some modifications to the NATSIHS content in order to accommodate language and cultural appropriateness in traditional communities and help respondents understand the concepts. Some questions were excluded and some reworded. Also, paper forms were used in communities in remote areas and computer-assisted interview (CAI) instruments were used in non-remote areas. The CAI process included built-in edit checks and sequencing.

Further information on NATSIHS data quality issues can be found in the 2004–05 NATSIHS publication (ABS 2006b).

National Drug Strategy Household Survey

The AIHW conducts the NDSHS every 2–3 years, collecting information relating to drug use in Australia. The latest survey was run in 2007, the ninth in a series which began in 1985, and the fourth that the AIHW managed, under DoHA's commission. In the 2007 survey, almost 25,000 persons aged 12 years and over were asked about their knowledge of, and attitudes towards drugs, their drug consumption histories, and related behaviours. The NDSHS does

not have an enhanced Indigenous sample. In 2007, 372 Indigenous respondents were included. The sample size for Indigenous Australians is very small and therefore the estimates should be interpreted with caution (ABS & AIHW 2005). NDSHS data are reportable at the national level only. Data are not available for remoteness areas, regional areas, and state and territory levels.

Data quality issues

The NDSHS is designed to capture information from a random sample of Australian households. It does not have an enhanced Indigenous sample. Therefore, only a small number of Indigenous respondents are picked up in this survey. In some years of the collection, the sample of Indigenous Australians who reported to the survey was smaller than anticipated (based on ABS population estimates). As stated above, in 2007 approximately 372 Indigenous respondents were included. The sample size for Indigenous Australians is very small and therefore the estimates should be interpreted with caution. This small Indigenous sample size also limits the reliability of time series analyses.

NDSHS data are reportable at the national level only. Data are not available for remoteness areas, regional areas and state and territory levels.

National Perinatal Data Collection

The national data on births are based on notifications to the perinatal data collection in each state and territory. Midwives and other staff, using information obtained from mothers and from hospital or other records, complete notification forms for each birth in each jurisdiction. Information is included in the NPDC for all live births and stillbirths of at least 400 grams birthweight or at least 20 weeks gestation.

Each state and territory collects more information than is specified on the Perinatal National Minimum Data Set (NMDS), and the National Perinatal Statistics Unit (NPSU) requests some of these additional items. The information includes characteristics of the mother, such as previous pregnancies and smoking during pregnancy, and information about the baby, such as neonatal death. The state and territory health authorities undertake data processing, analysis and publication of reports. Each state and territory provided data in an electronic format to the NPSU. Because of data editing and subsequent updates of state and territory databases, the numbers in this report may differ slightly from those in reports that the states and territories have published.

Data quality issues

All jurisdictions collect the Indigenous status of the mother. However, this does not provide the Indigenous status of the baby and will underestimate Indigenous births. In addition, not all jurisdictions use the standard wording for the Indigenous status question in the NPDC. This affects the quality and comparability of the data collected. There are also problems with the accuracy of the identification of Indigenous mothers.

Studies linking perinatal data with birth registration data and hospital admissions show that Indigenous women are under-identified. However, there has not been a systematic audit of the accuracy of these data across the nation. Therefore, at this stage, it is not possible to quantify or adjust for errors in identification. All jurisdictions are working towards improving the quality of the Indigenous status data (AIHW: Laws & Sullivan 2004).

Data on smoking during pregnancy are not currently included in the Perinatal NMDS. All states except Victoria currently provide data on smoking during pregnancy. Victoria collects

information on smoking during pregnancy using mechanisms other than their perinatal data collection. Work has been underway from 2006 to develop a national definition for inclusion in the Perinatal NMDS.

Under-reporting of smoking status has been found to range from 5% to 25% depending on the circumstances (AIHW: Laws & Sullivan 2004). In addition, the accuracy of recall could be a problem depending on when the questions are asked.

Given the small numbers involved, small errors in Indigenous identification can result in large proportional differences and changes over time and between jurisdictions. Fluctuations in the smoking status during pregnancy of Indigenous mothers over time partly reflect changing levels of identification of Indigenous women in the perinatal data. Caution should be exercised in assessing trends over time or comparisons with the non-Indigenous population. Given the different questions currently asked in the seven jurisdictions, it is recommended that no comparisons between jurisdictions be undertaken at this stage.

GP encounters—BEACH survey

Information about tobacco, alcohol and drug abuse problems managed at general practice encounters is available from the BEACH survey. The AIHW Australian GP Statistics and Classification Centre, University of Sydney, conducts the BEACH survey annually. Information is collected from a random sample of approximately 1,000 GPs from across Australia each year. A sample of 100 consecutive encounters is collected from each GP.

Data quality issues

The BEACH data on Indigenous Australians should be treated with care. First, the sample frame has not been designed to produce statistically significant results for population subgroups, such as Indigenous Australians. Second, the identification of Indigenous Australians is not complete. In the BEACH survey 'not stated' responses to the Indigenous identification question are often higher than the 'yes' responses. It can be assumed, therefore, that the survey consistently undercounts the number of Indigenous Australians visiting GPs, but the extent of this undercount is not measurable.

National Hospital Morbidity Database

The National Hospital Morbidity Database is a compilation of episode-level records from admitted patient morbidity data collection systems in Australian hospitals. State and territory health departments provide information annually to the AIHW on the characteristics, diagnoses and care of admitted patients in public and private hospitals.

Data are presented for hospitalisations with a principal diagnosis related to tobacco use, alcohol use and drug use for the period 2005–06 to 2006–07. Data are presented for the six jurisdictions which the AIHW has assessed as having adequate identification of Indigenous hospitalisations since 2004–05 – New South Wales, Victoria, Queensland, Western Australia, South Australia and the Northern Territory. Time series analyses are presented for Queensland, Western Australia, South Australia and the Northern Territory combined, for the period 2001–02 to 2006–07.

Data quality issues

The incompleteness of Indigenous identification means the number of hospital separations recorded as Indigenous is an underestimate of hospitalisations involving Aboriginal and

Torres Strait Islander people. The AIHW has recently completed an assessment of the level of Indigenous under-identification in hospital data in all states and territories. Results from this assessment indicate that New South Wales, Victoria, Queensland, Western Australia, South Australia and the Northern Territory have adequate Indigenous identification (20% or less overall under-identification of Indigenous patients) in their hospital separations data (AIHW unpublished). It has therefore been recommended that reporting of Indigenous hospital separations data be limited to aggregated information from New South Wales, Victoria, Queensland, Western Australia, South Australia and the Northern Territory. These six jurisdictions cover 96% of the Indigenous population. The following caveats have also been recommended for analysis of hospitalisation data from selected jurisdictions (ABS & AIHW 2005):

- Interpretation of results should take into account the relative quality of the data from the jurisdictions included (currently a small degree of Indigenous under-identification in data for Western Australia and the Northern Territory and relatively marked Indigenous under-identification in data for South Australia and Victoria).
- Data for these six jurisdictions over-represent Indigenous populations in less urbanised and more remote locations.
- Hospitalisation data for these six jurisdictions are not necessarily representative of the jurisdictions not included.

Some jurisdictions have slightly different approaches to the collection and storage of the standard Indigenous status question and categories in their hospital collections. The 'not stated' category is missing from several collections.

National Mortality Database

The National Mortality Database is a national collection of de-identified information for all deaths in Australia that the AIHW maintains. The Registrars of Births, Deaths and Marriages provide information on the characteristics and causes of death of the deceased and the ABS codes this nationally. The medical practitioner certifying the death, or a coroner, supplies information on the cause of death. The data are updated each calendar year.

Data quality issues

The mortality rate for Indigenous Australians can be influenced by identification of Indigenous deaths, late registration of deaths, and changes to death forms and/or processing systems. Because of the small size of the Indigenous population, these factors can significantly affect trends over time and between jurisdictions.

Almost all deaths in Australia are registered. However, the Indigenous status of the deceased is not always recorded or recorded correctly. The incompleteness of Indigenous identification means the number of deaths registered as Indigenous is an underestimate of deaths occurring in the Aboriginal and Torres Strait Islander population (ABS & AIHW 2008). As a result, the observed differences between Indigenous and non-Indigenous mortality are underestimates of the true differences.

Although the identification of Indigenous deaths is incomplete in all state and territory registration systems, the ABS and the AIHW have assessed four jurisdictions (Queensland, Western Australia, South Australia and the Northern Territory) as having adequate identification. Longer term mortality trend data are limited to three jurisdictions (Western Australia, South Australia and the Northern Territory) with 10 years of adequate identification of Indigenous deaths in their recording systems.

Note that different causes may have levels of under-identification that differ from the all-cause coverage estimates. Note also that the quality of the cause of death data depends on every step of the process of recording and registering deaths (including the documentation available at each step of the process) from certification to coding of cause of death. There are also current concerns about data quality for causes of death, especially relating to external causes of death of all Australians (not just Indigenous) (ABS 2007).

Alcohol and other drug treatment services

Information on Aboriginal and Torres Strait Islander peoples accessing alcohol and other drug treatment services is available from the AODTS-NMDS. The AODTS-NMDS has been implemented to help monitor and evaluate key objectives of the National Drug Strategy 2004–2009 and to help plan, manage and improve the quality of alcohol and other drug treatment services.

The AODTS-NMDS is a nationally agreed set of data items that government-funded service providers in both the government and non-government sectors collect. State and territory health authorities collate these data and the AIHW compiles them into a national data set. The AODTS-NMDS provides demographic information about clients who use treatment services, data about the drugs that concern clients and information about the treatments clients receive. Some administrative information about treatment agencies is also collected.

Data quality issues

Many drug treatment services that Indigenous people use do not report to the AODTS-NMDS. Similar to all episodes reported in the collection, some of the episodes involving Indigenous clients may have been provided to the same individuals. The current collection methodology does not allow analysis of this issue. Therefore, direct comparisons with the overall Indigenous/non-Indigenous composition of the Australian population are not appropriate. Indigenous status was 'not stated' for 5% of episodes nationally.

Drug and alcohol services data

The Drug and Alcohol Service Report (DASR) details the activity of Australian Government-funded Aboriginal and Torres Strait Islander substance use specific services.

The DASR collects data from approximately 40 Australian Government-funded Indigenous substance use services and is held at DoHA. Service-level data on substance use and related activities are collected by survey questionnaire over a 12-month period. Response rates to the DASR by Indigenous substance-use services are usually between 93% and 100%.

Data quality issues

The DASR only includes Aboriginal and Torres Strait Islander health organisations that receive at least some Australian Government funding. The DASR questionnaire collects a broad set of indicators for the services and does not aim to provide a comprehensive set of statistics on the activities of the services or their needs.

Data provided are often estimates and, although these are thought to be reasonable, there has been no audit to check the accuracy of these figures.

Petrol Sniffing Data Collection

The Petrol Sniffing Prevention Program (PSPP) that DoHA administers includes the provision of subsidised Opal, an unleaded fuel that contains lower levels of aromatics than regular unleaded petrol. The lower aromatic content reduces the long-term effect of petrol sniffing on an individual. The data collection for the PSPP, undertaken by James Cook University, was intended to meet the following objectives:

- formulate a set of indicators for use as a minimum data set in monitoring petrol sniffing prevalence and effects
- use these indicators to collect 'baseline' health and social outcomes data relating to petrol sniffing in 74 remote Indigenous communities throughout Australia that have begun using Opal fuel
- make recommendations relating to ongoing future monitoring of the impact of Opal fuel (DoHA 2008).

The data collection brought together information on the prevalence of petrol sniffing prevalence and its effects in 74 remote Indigenous communities throughout Australia that have begun using Opal fuel. The data collection instrument used to measure prevalence included all residents aged 5–40 years and utilised community population lists from clinical registers. The instrument was based on one that Nganampa Health Service developed and is used for conducting annual surveys of petrol sniffing in communities in the Anangu Pitjantjatjara and Yankunytjatjara (APY) Lands of South Australia.

Data quality issues

The data collected for this project should not be viewed as true baseline (that is, pre-Opal) data. This is because individual communities switched to using Opal at different times, and some communities had previously been supplying Comgas (subsidised Avgas) (DoHA 2008). The data collected should therefore be viewed as a series of snapshots in time that provide a reference point for future comparisons.

Seventy-four communities were approached to participate in the data collection activities. In 47 cases the consultants were given direct access to the communities and relevant data. In 12 cases, communities denied access on the grounds of no petrol sniffing in the community. In these cases, the consultants spoke to at least two key informants via phone to confirm the no sniffing status. In eight cases the consultants utilised alternative sources of data, including the Nganampa Health Survey on the APY Lands (seven communities) and the Central Australian Youth Link Up Service (one community). In one case the community identified one sniffer but would not allow further access to the community. In two cases, the regional health board would not allow access to the population lists and in another two cases the consultants were unable to make contact with the communities due to remoteness and very small populations. In the remaining two cases the consultants were unable to make arrangements to visit the communities (DoHA 2008).

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