

Plain language review of the harmful use of alcohol among Aboriginal and Torres Strait Islander people

Millie Harford-Mills

2019

Preface

This plain language review of the harmful use of alcohol among Aboriginal and Torres Strait Islander people is based on the *Review of the harmful use of alcohol among Aboriginal and Torres Strait Islander people* (2017) by Dennis Gray, Kimberly Cartwright, Anna Stearne, Sherry Siggers, Edward Wilkes and Mandy Wilson.

Why do a review?

Most Aboriginal and Torres Strait Islander and non-Indigenous people drink alcohol in a way that does not cause harm. However, this review is about the **harmful** use of alcohol among Aboriginal and Torres Strait Islander people. It questions why more Aboriginal and Torres Strait Islander people than non-Indigenous people use alcohol at harmful levels. It looks at the types of harm caused by regular alcohol use, as well as the effects that occasional heavy drinking (binge drinking) has on drinkers and their communities.

The focus of this review is on alcohol use, but also includes information on the effects of combining alcohol with other drugs. Tobacco is the most common drug used with alcohol, but cannabis and some other illicit (illegal) drugs, such as ice (crystal methamphetamine) are also used. Mixing different drugs, like alcohol and tobacco, can be more harmful to a person's health and wellbeing than just drinking alcohol.

This review reports on:

- how people use alcohol
- the effect of alcohol on health
- why people drink alcohol
- policies, programs and services relating to alcohol
- reducing alcohol harm.

Contents

Preface	1
Why do a review?	1
Key facts.....	3
What factors contribute to alcohol use among Aboriginal and Torres Strait Islander people?	4
The current situation	4
Historical factors	5
Alcohol and alcohol use disorders	6
How much alcohol do Aboriginal and Torres Strait Islander people drink?	6
Risky drinking	7
What does drinking alcohol do for the health of Aboriginal and Torres Strait Islander people?	8
Measuring the amount of harm caused by alcohol.....	8
Death	8
Hospitalisation.....	9
Fetal alcohol spectrum disorder (FASD)	11
Mental health and social and emotional wellbeing.....	11
How alcohol contributes to burden of disease and injury.....	13
Why do some Aboriginal and Torres Strait Islander people drink alcohol?	14
Access to alcohol.....	14
Why do people drink?	15
Social determinants of harmful alcohol use	15
Policies and strategies	18
What's being done?	18
Community control.....	20
Harm minimisation	20
Demand reduction	20
Supply reduction	23
Harm reduction.....	25
Future directions	27
Concluding comments.....	27
Appendix 1	28
References	29

Please note that this review does not contain all of the content in the full version of the *Review of the harmful use of alcohol among Aboriginal and Torres Strait Islander people*. To read the full review, please visit the [Alcohol and Other Drugs Knowledge Centre website](#).

This review uses information from journal articles, government reports, national data collections and national surveys. You can find most of these in the Australian Indigenous HealthInfoNet's Bibliography.

When referring to Australia's Indigenous people, the HealthInfoNet prefers to use the terms "Aboriginal, Torres Strait Islander", or "Aboriginal and Torres Strait Islander". However, if we are quoting from a publication that uses the word 'Indigenous', we will use that term. If you have any concerns, you are advised to contact the HealthInfoNet for further information.

Table 1. List of abbreviations

AATSIHS	Australian Aboriginal Torres Strait Islander Health Survey	NATSISS	National Aboriginal & Torres Strait Islander Social Survey
ABS	Australian Bureau of Statistics	NDS	National Drug Strategy
AIHW	Australian Institute of Health & Welfare	NDSHS	National Drug Strategy Household Survey
AOD	Alcohol and other drugs	NHMRC	National Health & Medical Research Council
AUDIT	Alcohol Use Disorders Identification Test	NIDAC	National Indigenous Drug & Alcohol Committee
CAP	National Drug Strategy Aboriginal & Torres Strait Islander Peoples' Complementary Action Plan	PAP	Population attributable fraction
DALY	Disability-adjusted life years	PAAP	Population attributable aetiologic fraction
FASD	Fetal alcohol spectrum disorder	RCIADC	Royal Commission into Aboriginal Deaths in Custody
ICD-10	International Classification of Diseases 10	RR	Rate ratio – the rate in one population group divided by that in another
IRIS	Indigenous Risk Impact Screen	SCRGSP	Steering Committee for the Review of Government Service Provision
KRA	Key result area	YLD	Years lived with disability
NATSIHS	National Aboriginal & Torres Strait Islander Health Survey	YLL	Years of Life Lost
NATSIIPDS	National Aboriginal & Torres Strait Islander Peoples' Drug Strategy		

Glossary of statistical terms

Age-standardised rates enable comparisons of rates of a disease or condition between populations that have different age structures. Age-standardisation is often used when comparing Aboriginal and Torres Strait Islander people and non-Indigenous people because the Aboriginal and Torres Strait Islander population has a younger age structure than the non-Indigenous population.

Burden of disease measures the impact of a disease or injury on a population, using the disability-adjusted life years (DALY) measure.

- **Disability-adjusted life years (DALY) measure** provides a combined estimate of years of life lost:
 - due to premature mortality (early death) caused by a particular disease or condition
 - due to disability or ill health caused by that disease or condition.

Hospitalisation - expressed as hospital separations:

- **Hospital separation** refers to a period of care for someone admitted to hospital. There are two types of hospital separation:
 - a complete hospital stay from admission through to discharge, transfer or death
 - a portion of a hospital stay ending in a change of type of care (e.g. from acute to rehabilitation).
- **Separation rate** is calculated as the total number of periods of care for admitted patients divided by the total number of members of the population. The rate is usually written "per 1,000 or per 10,000 members of the population".
 - Separation rate ratio is the separation rate for one population divided by the separation rate for another population.

Incidence is the number of new cases of a disease or condition that occur during a given period in a population.

Mortality – death.

- **Age-specific death rate** is the number of deaths per 1,000 people, at each age-group.
- **Age-standardised death rates** for Aboriginal and Torres Strait Islander people are generally calculated only for NSW, Qld, WA, SA and the NT as these are the states and territories (jurisdictions) that collect reliable data on Indigenous status.
- **Avoidable mortality** refers to deaths that could have been prevented with timely and effective health care, such as early detection, effective treatment, and appropriate lifestyle or behaviour changes (such as quitting smoking).
- **Infant mortality rate (IMR)** is the number of babies per 1,000 live births in a calendar year who die before reaching their first birthday.
- **Maternal deaths** are the number of women who die during pregnancy or up to 42 days (6 weeks) after delivery from causes linked to the pregnancy.
- **Median age at death** is the age below which half the people die. This calculation varies a lot depending on the population being assessed. If the population is young, the median age at death will be young (as with the Aboriginal and Torres Strait Islander population). “Median age at death” is not recommended for comparing different populations.

Prevalence is the number or proportion of cases of a disease or condition in a population at a given time.

Key facts

Alcohol use in Australia

- The harmful use of alcohol is a problem for the entire Australian community. It is estimated that, in 2011, alcohol caused 5.1% of the total burden of disease (years of life lost due to early death or living with an injury or illness) in Australia.
- The social cost of all drug use in Australia in 2004–05 was estimated at \$55.2 billion. Alcohol use contributed just over a quarter (27%) to this cost, with the use of both alcohol and illicit drugs adding a further 1.9%.

Level of alcohol use

- We need to consider social and historical factors when looking at alcohol use among Aboriginal and Torres Strait Islander people.
- Aboriginal and Torres Strait Islander people are more likely to abstain (not drink alcohol) than non-Indigenous people.
- Aboriginal and Torres Strait Islander people who do drink are more likely than non-Indigenous people to drink alcohol at levels that can harm their health.
- Aboriginal and Torres Strait Islander men are more likely than Aboriginal and Torres Strait Islander women to drink alcohol in a way that could harm their health.

Health impacts of alcohol use

- Drinking a lot of alcohol can cause a range of health and other problems, such as liver disease, road accidents, and poor mental health.
- From 2010–2014, more Aboriginal and Torres Strait Islander people than non-Indigenous people died from conditions caused by alcohol.
- In 2015, more Aboriginal and Torres Strait Islander people than non-Indigenous people committed suicide. From 2011–2015, 40% of male suicides and just under one third (30%) of female suicides were linked to alcohol use.
- Drinking a lot of alcohol can lead to social harms, such as child neglect and community violence.

Policies and strategies

- Aboriginal and Torres Strait Islander people were first to start responding to issues around harmful drinking in their communities. They raised concerns about non-Indigenous mainstream strategies, which were not appropriate for Aboriginal and Torres Strait Islander people.
- Policies and strategies to address harmful alcohol use should also look at the reasons why people drink. For Aboriginal and Torres Strait Islander people, this means tackling social inequality.

- The Australian Government's Indigenous Advancement Strategy has programs to try to tackle the social issues that cause people to drink at harmful levels.
- There are two important policy documents that aim to tackle alcohol related harm for Aboriginal and Torres Strait Islander people. These are:
 - the National Drug Strategy 2017–2026 (NDS)
 - the National Aboriginal and Torres Strait Islander Peoples' Drug Strategy 2014–2019 (NATSIPDS).
- Effective strategies to reduce alcohol use include:
 - providing other activities
 - brief interventions (a short care option)
 - treatment and ongoing support
 - taxation, price controls and other restrictions on availability of alcohol (such as dry communities)
 - community patrols and sobering-up shelters.
- There have been some improvements in tackling Aboriginal and Torres Strait Islander inequality, but progress has been slow.
- Key ways to achieve better results for Aboriginal and Torres Strait Islander people are:
 - culturally safe services provided by community-controlled organisations
 - making sure Aboriginal and Torres Strait Islander people are involved in programs which tackle alcohol use in their own communities
 - capacity building within Aboriginal Community-Controlled Organisations.

The way forward is for Australian Governments to honour the commitments made in the NATSIPDS to work with Aboriginal and Torres Strait Islander people. This includes funding services according to need.

What factors contribute to alcohol use among Aboriginal and Torres Strait Islander people?

The current situation

Alcohol is the most widely used psychoactive (mind-altering) drug in Australia. In 2014, the Australian Bureau of Statistics (ABS) estimated that people aged 15 years and older drink an average of almost 10 litres of alcohol each year. This is about two standard drinks ¹ per person per day. This amount has decreased slightly since 2005.

Information about who drinks, how often and why they drink, is collected through surveys. It is well recognised that people tend to under-report how much they are drinking. Therefore, surveys are useful but only provide estimates [1, 2].

The 2013 National Drug Strategy Household Survey (NDSHS) estimated that 78% of Australians aged 14 years and older drank alcohol in the previous 12 months; 14% said they had never consumed a standard drink [3]. This survey also found that:

- 18% of Australians (26% of males and 10% of females) drank more than two standard drinks per day (an amount that increases the risk of health problems in the long term)
- 10% of Australians (14% of males and 6% of females) drank more than four standard drinks on one occasion, every week. This put them at a greater risk of being injured [3, 4].

Alcohol was the cause of 5% of the total burden of disease in the Australian population in 2011. In 2010, alcohol was responsible for almost 5% of male and 3% of female deaths. Alcohol was also the cause of 3% of male and 1% of female hospitalisations [5, 6]. As well as having a negative effect on physical and mental health, drinking a lot of alcohol can lead to social problems, including:

¹ A drink containing 12ml or 10g of pure alcohol.

- child neglect and abuse
- interpersonal violence (violence against yourself, your partner, or other people)
- murder
- other crimes.

Drug abuse creates a huge cost for the government and society. In 2004-5, it was estimated that the social cost of all drug use in Australia was \$55.2 billion. Alcohol use contributed over one quarter (27%) to this cost. Alcohol combined with illicit drugs added a further 1.9% to the cost [7, 8].

Historical factors

When the British arrived in 1788, many Aboriginal and Torres Strait Islander people were forced off their country. This prevented them from managing their lands, and separated them from traditional food sources, their communities and their culture. The diseases and violence that the British brought with them had a devastating impact on the lives of Aboriginal and Torres Strait Islander people, and many people died. Because of the loss of their land, many people were forced into low-paid jobs, and poor living conditions. Racism against Aboriginal and Torres Strait Islander people was widespread [9].

In the 19th century, government policy focussed on ‘protecting’ the declining Aboriginal and Torres Strait Islander population by forcibly removing people from their homelands and into religious missions or government settlements [10, 11]. When the Aboriginal and Torres Strait Islander population began to increase in the mid-1900s, governments changed to a policy of ‘assimilation’. Assimilation means ‘making something similar to something else’. For Aboriginal and Torres Strait Islander people, this meant making them like the non-Indigenous population. This policy involved the removal of children of mixed race from their Aboriginal and Torres Strait Islander families and placing them in government institutions or in non-Indigenous foster families. These children are now known as the Stolen Generations. The removal of children led to many harmful outcomes for the children, their families and communities, which can still be seen today. These include:

- high levels of child neglect and abuse
- high levels of mental health problems
- harmful use of alcohol and other drugs [12, 13].

In the 1970s, the Whitlam Labor Government introduced a policy of self-determination. Under the new policy, more funding went towards trying to reduce the disadvantage experienced by Aboriginal and Torres Strait Islander people. Funding was also put towards setting up and supporting community-controlled service organisations (such as health organisations). Since then, other policies have had different names and different focusses, but the end goal of them all has been to improve the lives of Aboriginal and Torres Strait Islander people [14].

Some positive impacts of these more recent policies include:

- decreases in infant mortality
- improvements in housing and education levels
- better workforce participation.

Despite these improvements, reports show that there is still a large gap between the health and living standards of Aboriginal and Torres Strait Islander people and non-Indigenous people [15].

Alcohol has always played a part in the relationship between Aboriginal and Torres Strait Islander and non-Indigenous people [16]. For example, it was often traded in exchange for work (labour) or sex [17]. Aboriginal and Torres Strait Islander people began to use alcohol as a way of escape from their daily lives. The growing role it had in people’s lives has had many damaging effects on individuals and communities [18-21].

From 1838 to 1929, some laws were introduced to control Aboriginal and Torres Strait Islander people’s access to alcohol [18, 22]. However, limiting Aboriginal and Torres Strait Islander people’s access to alcohol led to serious social issues for Aboriginal and Torres Strait Islander people, such as [21, 23, 24]:

- being closely watched all the time
- being banned from important social spaces, like hotels
- taking part in risky drinking behaviours, such as drinking a lot of highly alcoholic drinks in a short space of time [21].

As part of the 1960s policy of assimilation, laws banning Aboriginal and Torres Strait Islander people from accessing alcohol were relaxed [25]. This, however, led to a large increase in drinking at harmful levels [26, 27]. Several government inquiries have suggested that these past policies have had an effect on alcohol use, social disadvantage and poor health for Aboriginal and Torres Strait Islander people [28-31].

The Australian Aboriginal and Torres Strait Islander experience with alcohol is also seen in other indigenous cultures around the world. The harmful use of alcohol seen today can be linked to colonialism and the loss of land and culture, as well as present-day social conditions [18, 32].

Alcohol and alcohol use disorders

Alcohol is a psychoactive (mind-altering) substance – a drug. Alcoholic drinks are produced by processes including brewing, fermentation and distillation. These processes make beer, wine and spirits. The percentage (level) of alcohol in a drink tells you how strong it is. Despite the enjoyable effects of alcohol, it is a poison. Alcohol can have different effects depending on how much has been drunk both on a single occasion and over time. Drinking a lot of alcohol can harm the drinker, causing results such as accidents or organ damage, as well as harm to other people. Drinking alcohol when pregnant can also harm the unborn baby.

The terms ‘alcoholism’ and ‘addiction’ are commonly used to describe alcohol-related conditions. However, the official terms most widely used are from the World Health Organization’s (WHO) International Classification of Diseases (ICD-10). ICD-10 identifies a number of medical conditions related to alcohol use.

Classification of alcohol-related disease

Some of the ICD-10 conditions related to alcohol use conditions include:

- acute (severe) intoxication
- harmful use
- dependence syndrome ²
- withdrawal state
- withdrawal state with delirium (mental confusion)
- psychotic (mental) disorder
- amnesiac syndrome (partial loss of memory)
- other unspecified mental and behavioural disorders [33].

Another classification used is the *Diagnostic and statistical manual of mental disorders* (DSM-5) [34]. DSM-5 identifies a single ‘alcohol use disorder’, which has three different states, ‘mild’, ‘moderate’ or ‘severe’. These are decided on using 11 criteria. The DSM-5 classification for alcohol includes many mental and physical health issues linked to problematic drinking [35].

How much alcohol do Aboriginal and Torres Strait Islander people drink?

Aboriginal and Torres Strait Islander people are much more likely than non-Indigenous people to have health and social problems because of alcohol use. In 2011, alcohol use was the cause of almost 10% of the overall burden of disease for Aboriginal and Torres Strait Islander people. This is more than double the figure for non-Indigenous people (4.3%) [36].

2 Dependence syndrome is a condition that groups the physiological, behavioural and mental causes that explain why some individuals might be more likely to use alcohol and other drugs than others.

Three national surveys provide information on alcohol use by Aboriginal and Torres Strait Islander people:

- the National Drug Strategy Household Survey (NDSHS)
- the National Aboriginal and Torres Strait Islander Social Survey (NATSISS)
- the Australian Aboriginal and Torres Strait Islander Health Survey (AATSIHS) (previously the National Aboriginal and Torres Strait Islander Health Survey (NATSIHS)).

For detailed information about the ways these surveys gather information and the reliability of their data, please see the full version of the *Review of the harmful use of alcohol among Aboriginal and Torres Strait Islander people*.

Risky drinking

Assessing risks from use of alcohol

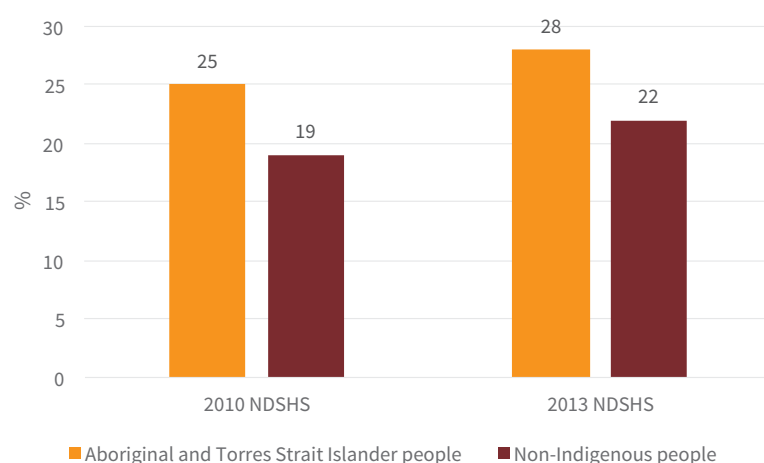
In 2009, the National Health and Medical Research Council (NHMRC) introduced revised guidelines that moved away from specifying 'risky' and 'high risk' levels of drinking. Instead, the revised guidelines seek to estimate the overall risk of alcohol-related harm over a person's lifetime. For males and females:

- Guideline 1 states that to reduce the risk of alcohol-related harm over a lifetime, no more than two standard drinks should be consumed on any day
- Guideline 2 states that to reduce the risk of injury on a single occasion of drinking, no more than four standard drinks should be consumed
- Guideline 3 recommends that the safest option for those aged under 15 years is not to drink alcohol, and for those aged 15 to 17 years is to delay alcohol use for as long as possible
- Guideline 4 recommends that the safest option for pregnant and breastfeeding women is not to drink alcohol.

Comparing alcohol use by Aboriginal and Torres Strait Islander and non-Indigenous people is complicated by the fact that the Aboriginal and Torres Strait Islander population is younger overall than the non-Indigenous population. A statistical procedure known as age-standardisation minimises the effects of differences in age structures of the two populations so that these different populations can be compared (see Glossary).

The 2010 and 2013 NDSHS surveys show that more Aboriginal and Torres Strait Islander people did not drink any alcohol (abstained) in 2013 than in 2010 (28% in 2013 compared with 25% in 2010; figure 1) [3, 37]. Also, Aboriginal and Torres Strait Islander people were more likely than non-Indigenous people to abstain from drinking. This data is similar to the information from the 2012-13 AATSIHS survey. However, data from several years using a different survey (the 2002, 2008 and 2014-15 NATSISS) suggests the number of people not drinking is even higher (38%, 35% and 38%) [38, 39].

Figure 1: Proportions of Aboriginal and Torres Strait Islander and non-Indigenous people who abstain from drinking alcohol according to the 2010 and 2013 NDSHS



Source: AIHW, 2011 [37], AIHW, 2014 [3]

Information from the NDSHS also shows a reduction in the proportion of people who reported drinking at levels that would cause lifetime or single occasion risk. This includes non-Indigenous survey participants [3, 37]. However, Aboriginal and Torres Strait Islander people were more likely than non-Indigenous people to report harmful lifetime drinking (1.6 times more in 2010 and 1.2 times more in 2013), and more single occasion harmful drinking (1.3 times more in both 2010 and 2013).

Information from the three most recent NATSISS shows:

- most Aboriginal and Torres Strait Islander people either did not drink alcohol at all, or did not drink an amount that could cause long-term harm to their health
- Aboriginal and Torres Strait Islander people were more likely than non-Indigenous people to abstain from drinking alcohol
- from 2002 to 2014-15, there was a statistically significant reduction in the number of people reporting risky drinking over their lifetime (falling from 17% to 15%)
- Aboriginal and Torres Strait Islander men were 2.8 times more likely than women to drink alcohol in a way that could lead to lifetime health risks
- based on results from the 2002 and 2008 NATSISS, men were about 2.0 times more likely than women to drink alcohol at an amount that could cause injury on a single occasion (data from the 2012-13 AATSIHS shows similar trends for men and women)
- there has been a reduction in risky drinking among Aboriginal and Torres Strait Islander people [38, 39].

What does drinking alcohol do for the health of Aboriginal and Torres Strait Islander people?

Measuring the amount of harm caused by alcohol

Drinking alcohol can lead to mental and behavioural disorders. However, these disorders are not the only health risks that come from drinking a lot of alcohol. Information about other health effects comes from two national databases:

- the National Causes of Death Database
- the National Hospital Morbidity Database.

Information is collected from the states and territories by the Australian Bureau of Statistics (ABS) and Australian Institute of Health and Welfare (AIHW). Unfortunately, there is no standard method for collecting information on people who are treated by specialists, general practitioners (GPs) or are not treated at all. For this reason, the data collected is probably only a small percentage of the true numbers of people treated [40, 41].

The identification of alcohol-related illness or death from these databases is reasonably easy for those conditions or events where alcohol is the only cause. However, for cases such as accidental drowning or liver cancer, a formula has been developed to estimate the contribution that alcohol may have played in the event. Special ways of calculating have been developed for the Aboriginal and Torres Strait Islander population [40, 41].

Death

Information about mortality (deaths) is available from the ABS. The causes of death are split into groupings of different diseases or injuries. This grouping is set out in the International Statistical Classification of Diseases and Related Health Problems 10th Revision (ICD-10). Among these groupings, there are four which may link to the use of alcohol:

- intentional self-harm (suicide)
- land transport (road) accidents
- diseases of the liver
- assault (homicide).

However, there is no way to easily find out what role alcohol played in these deaths, except for suicide.

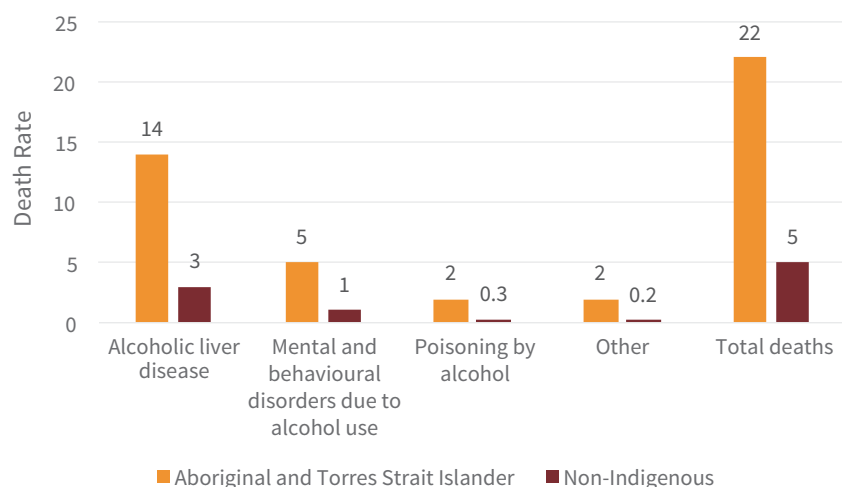
Overall :

- Aboriginal and Torres Strait Islander men were almost five times more likely than non-Indigenous men to die from these conditions
- Aboriginal and Torres Strait Islander women were more than six times more likely than non-Indigenous women to die from these conditions [42].

The two most common causes of death that were directly due to alcohol use were:

- alcoholic liver disease (alcoholic cirrhosis of the liver), which caused almost two-thirds of male deaths (61%) and more than three quarters of female deaths (78%)
- mental and behavioural illnesses due to alcohol use, which accounted for 20% of male deaths and 12% of female deaths [42].

Figure 2: Aboriginal and Torres Strait Islander and non-Indigenous death rates directly due to alcohol use, NSW, Qld, WA, SA and NT, 2010-2014



Source: Based on SCRGSP, 2016 [42].

Alcohol use is known to be a major factor in the high number of Aboriginal and Torres Strait Islander suicides and homicides.

In 2015:

- for Aboriginal and Torres Strait Islander men, suicide was the second most common cause of death
- for Aboriginal and Torres Strait Islander women, suicide was the eighth most common cause of death
- Aboriginal and Torres Strait Islander people were more than twice as likely as non-Indigenous people to die from suicide [43].

In 2011-2015:

- almost half (40%) of Aboriginal and Torres Strait Islander male suicides and just under one third (30%) of female suicides were because of alcohol use
- almost half (46%) of the homicides among Aboriginal and Torres Strait Islander men and almost half (46%) of the homicides of women were related to alcohol use [44].

Tackling the use of alcohol has the potential to reduce the burden that suicide and murder have on Aboriginal and Torres Strait Islander communities [45, 46].

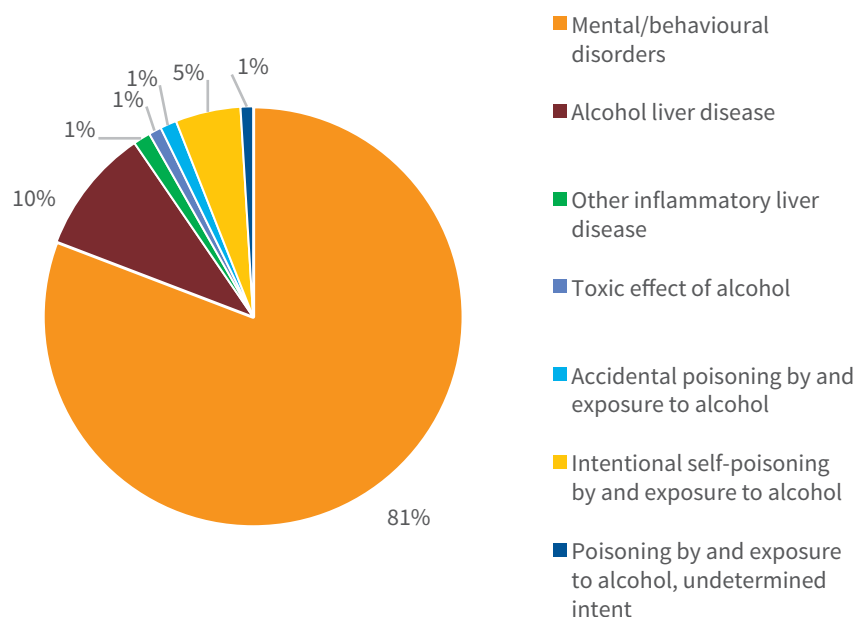
Hospitalisation

Most alcohol-related hospitalisations of Aboriginal and Torres Strait Islander people are due to injury and mental health conditions. Some of these conditions relate directly to (or are caused directly by) alcohol use, while for others, alcohol use is an underlying factor.

Hospitalisation directly caused by alcohol use

In 2014-15, just over 1% of all hospital admissions of Aboriginal and Torres Strait Islander people were directly caused by alcohol use [42]. Aboriginal and Torres Strait Islander men were 1.5 times more likely than women to be hospitalised for alcohol-related causes. Alcohol-related hospitalisations occurred much more often in remote and very remote areas than in urban and inner/outer regional areas.

Figure 3: Proportions of hospitalisations of Aboriginal and Torres Strait Islander people related to alcohol use, by cause, Australia, 2014-15.



Source: Based on SCRGSP, 2016, Tables 11A.1.8 and 11A.1.9 [42]

The specific conditions that are most commonly responsible for alcohol-caused hospitalisations of Aboriginal and Torres Strait Islander people are:

- acute intoxication³
 - in 2014-15, acute intoxication was responsible for more than half of all Aboriginal and Torres Strait Islander hospitalisations relating to alcohol use
 - Aboriginal and Torres Strait Islander people were 11.0 times more likely than non-Indigenous people to be hospitalised for acute intoxication
- dependence syndrome:
 - Aboriginal and Torres Strait Islander and non-Indigenous people were hospitalised for dependence syndrome at about the same rate
- alcoholic liver disease:
 - Aboriginal and Torres Strait Islander people were almost 6.0 times more likely than non-Indigenous people to be hospitalised for alcoholic liver disease [42].

Hospitalisation indirectly caused by alcohol use

The ICD category 'injury and poisoning and other external causes' was the second highest reason for hospitalisation of Aboriginal and Torres Strait Islander people in 2014-15 [47].

In 2014-15:

- Aboriginal and Torres Strait Islander people were 1.8 times more likely than non-Indigenous people to be hospitalised for 'injury and poisoning and other external causes'
- Aboriginal and Torres Strait Islander people in remote and very remote areas were 2.0 times more likely than those in major cities to be hospitalised for 'injury and poisoning and other external causes'
- assault was the most common external cause of hospitalisation for Aboriginal and Torres Strait Islander people

³ Acute intoxication is when a person consumes a large amount of alcohol in a short space of time, possibly leading to altered behaviour, being unable to make decisions or understand what is going on, and maybe unconsciousness or even death.

- 8.7% of Aboriginal and Torres Strait Islander people hospitalisations for external causes were related to alcohol
- 3.3% of hospitalisations for falls among Aboriginal and Torres Strait Islander people were linked to alcohol [42].

Fetal alcohol spectrum disorder (FASD)

Fetal alcohol spectrum disorder (FASD) is a diagnostic term which describes the mental and physical effects that drinking alcohol when pregnant can cause to an unborn baby. FASD is a cause for concern for indigenous populations around the world, including in North America and Australia [48].

FASD can lead to learning and behavioural problems such as:

- problems with reasoning, memory, attention and speaking
- issues with learning and movement
- difficulty controlling emotions and behaviour
- problems with understanding [49, 50].

FASD can have long-term effects that can affect people throughout their life. These effects can lead to schooling problems, unemployment, alcohol and other drug use, and sometimes problems with the criminal justice system [51].

It is hard to find out how many people suffer from FASD in Australia because there is no national data collection. Until recently, there were no reliable diagnostic measures available for clinicians to officially diagnose a person with FASD [48]. For a more detailed discussion about this subject, please see the full *Review of the harmful use of alcohol among Aboriginal and Torres Strait Islander people*.

Information on FASD is calculated from reports about the prevalence of Fetal alcohol syndrome (FAS). Information about the prevalence of FAS in Australia mostly comes from state birth defect registries. Reporting for FAS was voluntary until 2011, when it became law in all Australian states and territories. Therefore, FAS data before 2011 might not show an accurate number of cases in Aboriginal and Torres Strait Islander communities. The only national report on FAS is based on information from the Australian Paediatric Surveillance Unit. In this study, 92 cases of FAS were reported in 2001-2004. Of these, 65% were Aboriginal and Torres Strait Islander people. For the whole population, there were 0.06 new cases per 1,000 live births [52, 53].

Most of the information about how common FAS is in Aboriginal and Torres Strait Islander communities comes from Western Australia (WA). This includes from:

- notifications made in WA
- two studies based on information from the West Australian Birth Defects Registry and the Rural Paediatric Service [71]
- the Western Australia Registrar for Developmental Anomalies (WARDA) [55].

Information from the West Australian Birth Defects Registry shows that FAS is not common in the non-Indigenous population (0.04 per 1000 births in 2010). FAS was diagnosed 100 times more for Aboriginal and Torres Strait Islander people than for non-Indigenous people [55].

Other studies from the NT and WA also show high numbers of FAS for Aboriginal and Torres Strait Islander people. One of these studies, based in the Top End of the NT, found that FAS was more common in this region than in the whole of Australia [56]. Another study, the Lililwan Project, found very high numbers of FAS and partial FAS (pFAS) in Fitzroy Crossing, WA [57, 58]. The amount of FAS and pFAS found in this study was 20 times more than what was shown in the WA registry information.

Mental health and social and emotional wellbeing

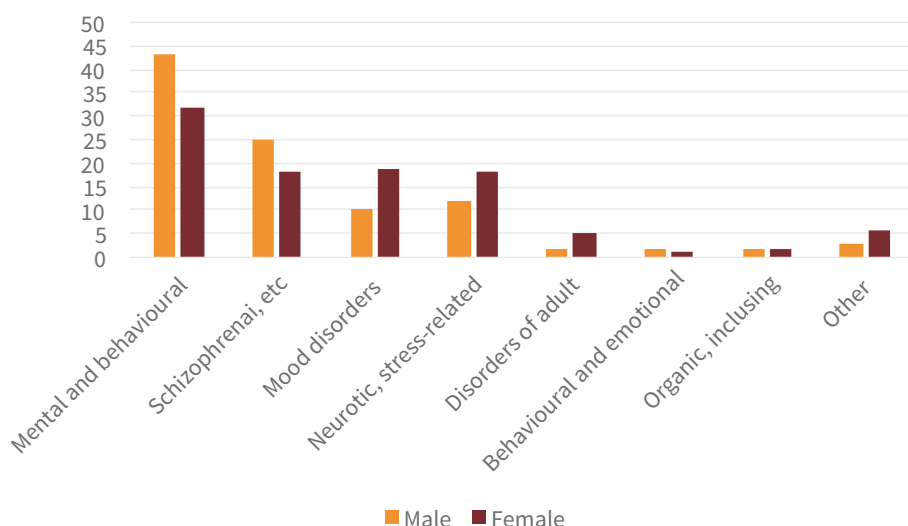
It is common for people to have both substance use problems and mental health disorders. The 2007 National Survey of Mental Health and Wellbeing shows that almost 20% of people with an affective (psychiatric) disorder (such as schizophrenia) and about 12% of people with an anxiety disorder also have issues with alcohol and other drug use [59].

There is not much information available that focusses on alcohol and other drug use and mental health among Aboriginal and Torres Strait Islander people. However, there is evidence that links alcohol and other drugs to poor mental health for Aboriginal and Torres Strait Islander people [59].

Between 2012-13 and 2014-15:

- the number of mental and behavioural issues linked to alcohol reduced by 8% for Aboriginal and Torres Strait Islander people (compared with an increase of 7% for non-Indigenous people)
- most of the reduction in hospitalisations linked to alcohol and mental disorders for Aboriginal and Torres Strait Islander people was among males [42]
- mental health problems linked to psychoactive substance use (including alcohol) were the reason for:
 - less than half (43%) of mental health hospitalisations for Aboriginal and Torres Strait Islander men
 - less than one third (32%) of mental health hospitalisations for Aboriginal and Torres Strait Islander women [60]
- Aboriginal and Torres Strait Islander men were hospitalised more than women for mental illness and schizophrenia linked to alcohol use
- Aboriginal and Torres Strait Islander women were hospitalised more than men for mood disorders and stress-related disorders linked to alcohol use.

Figure 4: Percentage of hospitalisations of Aboriginal and Torres Strait Islander males and females for mental health related conditions, Australia, 2013-15.



Source: AIHW 2017 [60]

For Aboriginal and Torres Strait Islander people, mental health is just one element of their social and emotional wellbeing (SEWB). Social and emotional wellbeing includes anything that can impact on their quality of life, such as:

- social relationships
- connection to land
- family
- community
- ancestry and spirituality [61, 62].

The medical way of talking about mental health (e.g. by using an ICD-10 diagnosis) is not culturally appropriate. This is why the National Aboriginal and Torres Strait Islander Social Survey (NATSISS) and the Australian Aboriginal and Torres Strait Islander Health Survey (AATSIHS) now collect some self-reported information on individual social and emotional wellbeing. In 2014-15:

- around two thirds (67%) of Aboriginal and Torres Strait Islander people who were 18 years and older reported low to medium distress levels in the previous 12 months
- one third (33%) of Aboriginal and Torres Strait Islander people reported feeling high to very high stress levels (almost three times more than for non-Indigenous people) [60].

A study that used some data from the Longitudinal Study of Aboriginal and Torres Strait Islander Children found that almost one quarter of children (23%) were very likely to have emotional and behavioural difficulties. This was despite the fact that most of their other mental health experiences were positive [63].

There is a complex relationship between alcohol, mental health, and social and emotional wellbeing. Drinking a lot of alcohol can cause mental health and social and emotional wellbeing problems. However, mental health and social and emotional wellbeing problems can lead to alcohol and other drug use. There is not much information about the connection between alcohol, mental health, and social and emotional wellbeing for Aboriginal and Torres Strait Islander people. However, the Australian Health Ministers' Advisory Council reported that 9% of Aboriginal and Torres Strait Islander people over the age of 18 said that alcohol problems were a source of stress [64].

How alcohol contributes to burden of disease and injury

Measuring the impact of hospitalisations and deaths resulting from a condition is known as burden of disease [6]. Burden of disease measures disability-adjusted life years or DALYs. A DALY measure provides a combined estimate of years of life lost:

- due to premature mortality (early death) caused by a particular disease or condition
- due to disability or ill health caused by that disease or condition [36].

In 2011:

- almost one tenth (8%) of the total burden of disease for Aboriginal and Torres Strait Islander people could be linked directly to alcohol
- the burden of disease for alcohol was 3.1 times higher for Aboriginal and Torres Strait Islander people than non-Indigenous people (29.1 per 1000 persons compared with 9.4 per 1,000 persons) [36].

Alcohol use does not impact on all Aboriginal and Torres Strait Islander people equally [36]. Alcohol use contributes different amounts to the burden of disease for different population groups. The impact is less for:

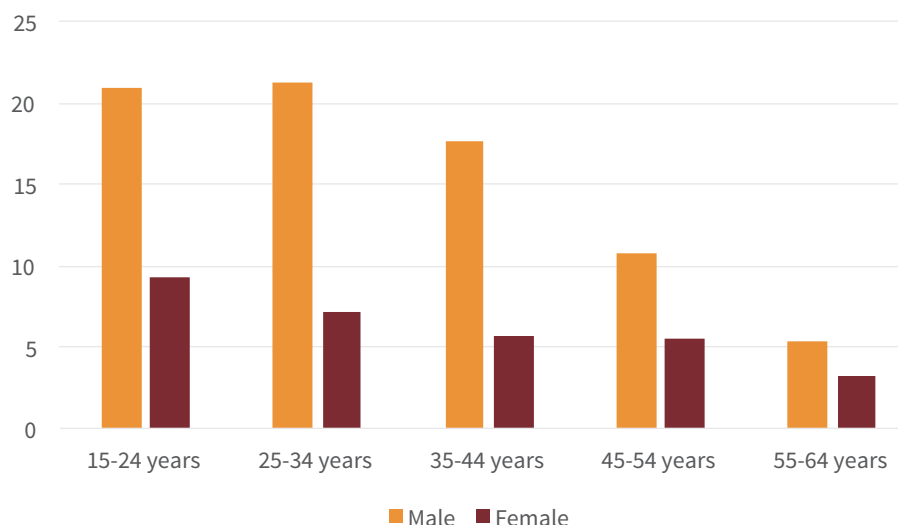
- Aboriginal and Torres Strait Islander women
- older Aboriginal and Torres Strait Islander people.

Among Aboriginal and Torres Strait Islander males and females the impact is greatest in the 15–24 and 25–34 year age groups and declines with age. Some of this decline among older people is explained by the link between higher numbers of self-harm and road accidents among younger people, especially younger men.

Alcohol also contributes different amounts to the burden of disease depending on where people live. Overall DALY rates for Aboriginal and Torres Strait Islander people were:

- lowest in major cities (379 per 1,000 persons)
- highest in remote areas (524 per 1,000 persons)
- high in very remote areas (440 per 1,000 persons).

The high number of years of life lost (YLL) in remote and very remote areas can be linked to higher numbers of alcohol-related suicide, assault and road accidents.

Figure 5: Contribution of alcohol to the total burden of disease (DALYs) among Aboriginal and Torres Strait Islander people by age and gender, 2011

Source: AIHW 2016 [36]

Why do some Aboriginal and Torres Strait Islander people drink alcohol?

The effect that alcohol has on a person is not just a result of the alcohol itself. It is also linked to:

- the type of alcohol used and how readily available it is
- the way people drink
- how much people drink
- individual characteristics of the drinker
- life experiences of the drinker
- social and emotional wellbeing of the drinker
- a combination of social and cultural influences
- social determinants of health [65-67].

Access to alcohol

The more alcohol a person drinks, the greater the amount of alcohol-related harm that they are likely to experience. This is also true at a population level, where an increase in the amount of alcohol being drunk in the community will lead to increases in health-related harm. High levels of risky alcohol drinking are partly linked to demand (the desire for alcohol), but also to supply (the availability, price and marketing) of alcohol [65].

The 'alcohol industry' is the name we give to the collection of organisations that aim to meet the population's demand for alcohol. It includes beverage (drink) producers, wholesalers, retailers, and some other related industries, like tourism [68-70]. The alcohol industry creates employment, taxation revenue, and large profits. Because of this, the industry has a lot of political power and can strongly resist attempts to limit or reduce sales. In Australia, and around the world, the alcohol industry is criticised for putting profits before the health and wellbeing of communities and individuals.

Drinking habits are influenced by alcohol availability, price and industry strategies. These aspects are usually determined at a national level, but state and territory liquor licensing laws do provide some options for Aboriginal and Torres Strait Islander people to take action to reduce harm.

Why do people drink?

Alcohol affects peoples' minds (it is a psychoactive drug), and the way it affects the brain gives people feelings of pleasure. Because of this, people are encouraged to drink more, both on a single occasion and over time. Alcohol affects the nervous system in ways that can allow a person to ignore any symptoms of mental illness, stressors, or personal threats in social situations [65, 71].

Long-term alcohol use can cause changes in neural pathways (connections in the brain). This can lead to alcohol cravings or the development of a tolerance towards alcohol. It can cause withdrawal symptoms in people who are trying to stop drinking, which can make them want to start drinking again [65, 71].

Some people might be more at risk of harmful drinking because of their genetics (inherited through their genes) [72]. But there is no evidence to show that indigenous peoples (including Aboriginal and Torres Strait Islander people) are more likely to drink alcohol at harmful levels than non-Indigenous people because of their genetics [18]. Although genetics can affect the way people drink and respond to alcohol, a person's drinking patterns and their behaviour when they are drinking are learned behaviours⁴ [73].

While the individual life choices that people make can affect their health outcomes, this alone does not fully explain the large differences in harmful alcohol use between Aboriginal and Torres Strait Islander and non-Indigenous populations. The evidence shows that both social and emotional wellbeing and other social factors (such as housing) can either cause, or protect against, poor health and alcohol and other drug use [67, 74-76].

Social determinants of harmful alcohol use

The social determinants of health are the circumstances in which a person lives and works – such as where they are born, grow up, live, work and grow old. These are often affected by events of the past and include factors such as poverty, racism, housing, employment, and access to education. These factors can either protect a person from, or lead a person towards, harmful alcohol use.

The social gradient

A British study, the Whitehall Study, looked at links between social position and health. The study found that not only did people in higher social positions have better health, but people in positions of more power in the workplace also had better health; people with lower positions in their workplace were more likely to die at an earlier age than people who had more influence [77]. This difference in health caused by social position is called the 'social gradient of health'.

The key factors that make up the social gradient of health, which can contribute to good or bad health outcomes, include:

- stress
- early life experiences
- social exclusion
- work
- social support
- food and transport
- addiction [67].

Aboriginal and Torres Strait Islander people are generally more adversely affected than non-Indigenous people by the social gradient of health. This is reflected in the higher rates of disease and injury among Aboriginal and Torres Strait Islander people compared with non-Indigenous people for heart disease, diabetes, respiratory disease, cancer, accidents and violence (conditions that show a social gradient) [78]. Policies that address the social gradient of health are the best ways of improving the negative outcomes that are associated with these experiences [79].

Stress

People who feel anxious or insecure in their lives are more likely to have health issues and to die young. This is because of the way the body's hormonal and nervous systems react to stressful or difficult situations. When the nervous system is dealing with the stress, the body is not looking after other areas, such as the heart or immune system [67]. People who are struggling with money problems, and who feel like

⁴ A behaviour that has developed over time because of an individual's experiences.

they do not have much control over their daily lives, are likely to have illnesses related to stress and anxiety [80].

Many Aboriginal and Torres Strait Islander people have stressful lives due to:

- sadness about loss of country, language and culture
- negative experiences in everyday life, like racism, unemployment and contact with the police
- early and unexpected deaths of family members [81, 82].

Policies aimed at reducing stress in Aboriginal and Torres Strait Islander communities should support community activities that promote pride in country, language, and community-controlled services, such as Ranger Caring for Country programs [83].

Early life experiences

Even before someone is born, they can experience handicaps which will affect them later in life. For example, if the mother smokes, drinks alcohol and/or has poor nutrition during pregnancy, this will have long-term impacts on the child. Aboriginal and Torres Strait Islander women are more likely than non-Indigenous women to engage in these risky behaviours [67, 84]. Early childhood experiences can have a big impact on a child's developing brain and on their emotional and social development [80]. Therefore, policy interventions, such as home visiting in pregnancy, early childhood care and education, can have positive results for both women and their children [85].

In Australia, all political parties recognise the importance of a child's early years. This is shown in the Close the Gap targets which aim to:

- halve the gap in mortality rates for Aboriginal and Strait Islander children under five within a decade (this target is on track)
- have 95% of all Aboriginal and Torres Strait Islander four-year-olds enrolled in early childhood education (this target has not been met, and was recently renewed to 2025).

There have been some improvements in childhood education: more Aboriginal and Torres Strait Islander children are getting better quality early care and education than previously; and there are more educational opportunities for the mothers and others around what a developing child needs [86].

Social exclusion and racism

People who experience poverty or racism are more likely to suffer from poor health and an early death [80]. According to a recent review of racism and health, there is a strong link between experiencing racism and having poor mental health. This review also found a strong relationship between racism and poor health behaviours, like drinking or smoking [87].

Historically, Aboriginal and Torres Strait Islander people experienced racism and discrimination due to the government policies that were in place during much of the 20th century. The ongoing effects of this racism and discrimination, and the lived experience of many older Aboriginal and Torres Strait Islander people, have had a serious impact on the health of many Aboriginal and Torres Strait Islander people today [88]. Although more Australians now know about the history of Aboriginal and Torres Strait Islander people, and are aware of the injustices that came with colonisation and other experiences, for many Aboriginal and Torres Strait Islander people racism is still a big part of daily life. In a recent survey, 27% of Aboriginal and Torres Strait Islander people reported that they had faced some kind of discrimination in the last year [87]. Aboriginal and Torres Strait Islander people also experience 'inbuilt' racism in housing, education, employment, health, and the justice system.

Attempts to put a stop to social exclusion and racism have included the Racial Discrimination Act 1975 (which makes it illegal to discriminate because of race) and Prime Minister Rudd's 'Sorry' address to the Australian Parliament in 2008 [89].

Work

Having a stable and satisfying job can protect against poor health [67, 80]. Unemployment has been found to be a big health risk, especially when a lot of people in one local area are unemployed [67]. A six-year study from Eastern Europe found that men and women who were unemployed were more likely to die early, compared to people who had a job, and were also more likely to smoke, drink, and eat unhealthy food [80].

This research is important for Aboriginal and Torres Strait Islander people who face high levels of unemployment. Between 2008 and 2012-13:

- the percentage of non-Indigenous people who had paid work rose from 75% to 76%

- the percentage of Aboriginal and Torres Strait Islander people who had paid work dropped from 54% to 48% [78].

There is a Closing the Gap target to halve the gap in employment between Aboriginal and Torres Strait Islander and non-Indigenous people. This target is currently reported as having made ‘no progress’ [90].

Having a low level of education is a risk factor for being unemployed. People who have not had access to good education often struggle to find a job. Although the number of Aboriginal and Torres Strait Islander people completing Year 12 has increased in recent years, there have been no overall improvements in reading and numeracy since 2008 [78].

To fix issues related to employment, policy interventions need to look at:

- why people do not attend school
- why those who attend school do not do particularly well
- what access there is to post-school training
- what access there is to meaningful employment [90].

Social support

Having good social support at both an individual and community level can help support good health, and reduce alcohol and other drug use. There are certain times in a person’s life when social supports are really important:

- pregnancy
- early childhood
- when someone starts primary or secondary school
- entering post-school training
- starting employment [67, 80].

The Australian Government does provide some financial support for people in need. This financial support can be:

- conditional (the government can place ‘conditions’ on the support they offer for people in need, such as paying people if they attend school or have a health check)
- unconditional (payments are unrestricted, such as with the cashless welfare card).

The evidence about the effectiveness of these measures is not clear and certain [80, 91]. In Aboriginal and Torres Strait Islander communities there are also many mixed opinions. However, there is agreement that for education and employment there should be no condition forcing people to participate. To get people into schools or jobs, the quality of education, training and employment needs to be improved first [80, 90].

Food and transport

Access to affordable and good quality food and exercise is essential for good health [67, 80]. Aboriginal and Torres Strait Islander people are less likely to have access to healthy food than non-Indigenous people, especially in remote areas [92].

Historically, the way missions provided Aboriginal and Torres Strait Islander people with poor quality food has resulted in a preference for unhealthy food choices. This preference for unhealthy food combined with less physical activity has had many negative impacts on health [93].

There are some policy interventions that have had some encouraging outcomes, such as community kitchens where healthy food is produced by a group of community members [92].

Policies and strategies

What's being done?

There are many reasons why people become involved in harmful alcohol and other drug (AOD) use. Wilkes and Gray have written that dealing with harmful AOD use requires a broad approach that tackles the many possible causes [94]. This broad approach includes developing strategies to:

- tackle the reasons why people are drinking or taking drugs
- prevent or reduce the start of harmful AOD use
- provide safe care for those who are intoxicated
- provide treatment for those who depend on AOD
- support those whose harmful AOD use has left them physically or intellectually disabled
- support those whose lives are affected by other people's harmful AOD use.

It was in the 1970s that concerns about harmful AOD use in Aboriginal and Torres Strait Islander communities began to gain attention. And it was Aboriginal and Torres Strait Islander people who were the first to respond to these concerns. They recognised that mainstream services were not culturally appropriate, and so they set up new services, like Benelong's Haven in New South Wales [95]. Since then, Aboriginal and Torres Strait Islander community groups (often led by women) have been the ones leading action against alcohol [96, 97]. Governments (national, state and territory) have responded through the development of policies and strategies, and provide most of the funding for their implementation. Funding to address the harmful use of AOD has increased in recent years [42], but this is not enough to meet the need for services and fill the gaps in service delivery [97, 98].

There are three government policies that are most relevant to reducing alcohol-related harm among Aboriginal and Torres Strait Islander people:

- National Drug Strategy 2017-2026 (NDS)
- National Drug Strategy Aboriginal and Torres Strait Islander Peoples' Complementary Action Plan 2006-2009 (the CAP)
- National Aboriginal and Torres Strait Islander Peoples' Drug Strategy 2014-2019 (NATSIPDS) [99, 100].

Since the creation of the first NDS in the mid-1980s, there have been a few updates. These have all been based on:

- the idea that harmful AOD use is primarily a health problem
- the core strategy of minimising AOD-related harm
- the three secondary strategies of demand, supply and harm reduction.

The NDS provides a plan that governments and other organisations can use as a guide to how they will tackle the problems of harmful AOD use. It also provides an outline for how the governments should spend their money on interventions [101].

The first Complementary Action Plan (CAP) was developed to specifically address the issue of AOD use among Aboriginal and Torres Strait Islander people. This was because it was recognised that a greater proportion of Aboriginal and Torres Strait Islander people than non-Indigenous people were taking part in harmful AOD use. The CAP covered the years 2003-2006 and was later extended to cover 2006-2009. Like the NDS, the CAP was planned as a guide for state and territory governments. It was designed around six 'key result areas', which each had objectives, action areas and examples of possible actions:

- increased possibilities for Aboriginal and Torres Strait Islander people to address harmful AOD use
- a whole of government promise to carry out, evaluate and improve interventions
- improved access to services
- provision of a full range of services
- increase the workforce
- create stronger and more lasting partnerships between Aboriginal and Torres Strait Islander communities and the government and non-government sectors [100].

Various reviews of the CAP have found that this strategy did not have much success [97, 98, 102].

In 2014, the CAP was replaced by the National Aboriginal and Torres Strait Islander Peoples' Drug Strategy 2014-19 (NATSIPDS) [103]. The NATSIPDS is a guide for governments and organisations on how to minimise the harm caused by AOD use to Aboriginal and Torres Strait Islander individuals and communities. The goal of the NATSIPDS is:

‘...to improve the health and wellbeing of Aboriginal and Torres Strait Islander people by preventing and reducing the harmful effects of alcohol and other drugs (AOD) on individuals, families, and their communities.’ [103]

The NATSIPDS identifies four key principles (rules or values) which the strategy is built on:

1. Aboriginal and Torres Strait Islander ownership of solutions (Aboriginal and Torres Strait Islander people should be consulted and included in the development of solutions to harmful AOD use)
2. holistic approaches that are culturally safe, competent and respectful (approaches need to respect the cultural rights, values, beliefs and expectations of Aboriginal and Torres Strait Islander people)
3. whole-of-government effort and partnerships (action must involve all relevant government departments (not just health), Aboriginal Community Controlled Health Organisations (ACCHOs) and the non-government sector)
4. resourcing on the basis of need (funding needs to be made available at levels to support both long-term and short-term interventions) [103].

The NATSIPDS also identifies four priority areas:

1. build the capacity of the AOD system by developing and strengthening the skills of people providing AOD services, especially the Aboriginal and Torres Strait Islander workforce
2. make more culturally responsive and culturally appropriate services available for individuals, families and communities
3. strengthen partnerships based on respect between Aboriginal and Torres Strait Islander, government and mainstream service providers
4. set up systems to measure the performance of any interventions, including community-led monitoring and evaluation [103].

The NATSIPDS did not receive any federal government funding to put it into action, and is funded instead by some state and territory programs. At the time of this review, no evaluation on the NATSIPDS has taken place.

From 2005-2014, the National Indigenous Drug and Alcohol Committee (NIDAC) provided policy advice to the government. NIDAC was a sub-committee of the Australian National Council on Drugs (ANCD). Some successes of NIDAC were:

- pushing for the introduction of low aromatic fuel to tackle petrol sniffing
- providing feedback into a number of government enquiries
- publication of policy and information papers
- hosting of a six-monthly Aboriginal and Torres Strait Islander AOD conference
- involvement in the development of the NATSIPDS.

NIDAC came to an end when the ANCD was replaced by the Australian National Advisory Committee on Alcohol and Drugs (ANACAD). ANACAD only has two Aboriginal and Torres Strait Islander members.

Other policy responses to harmful alcohol use include taxation and regulation. These control the price of alcoholic drinks and how much people drink [104]. State and territory liquor licensing legislation regulates access to alcoholic drinks. This legislation does include some harm minimisation goals, but the liquor industry's interests are also taken into consideration [105]. While the key principle of the policies discussed above is that harmful alcohol use is a health problem, there are issues with the way alcohol use is perceived by the law. In some states and territories, the law has a focus on keeping social order, and is used harshly against Aboriginal and Torres Strait Islander people [106-108].

There are also some situations where other government policy does not support policies that are directly focussed on alcohol. For example, AOD policy aimed to improve access to services may be weakened by a government budget policy that aims to reduce spending.

Community control

Aboriginal and Torres Strait Islander people can use mainstream AOD services (services delivered by non-Indigenous government and non-government organisations and available for all Australians), as well as services provided by Aboriginal and Torres Strait Islander organisations. Some Aboriginal and Torres Strait Islander people prefer to use mainstream services because of:

- convenience
- privacy
- the ‘shame’ factor linked to alcohol use in their own communities.

There are also many Aboriginal and Torres Strait Islander people who think mainstream services are not suitable for their needs [98, 109]. This is one of the reasons why there are increasing numbers of Aboriginal and Torres Strait Islander community-controlled organisations. Evidence shows that these community-controlled organisations generally have greater success with their clients. However, this success depends on funding [98, 110]. This is recognised in the National Aboriginal and Torres Strait Islander Peoples’ Drug Strategy and the National Aboriginal and Torres Strait Islander Health Plan 2013-2023, which acknowledge the need for community control [103, 111]. However, there is concern that an increasing number of non-Indigenous and non-government organisations are receiving funds to provide services for Aboriginal and Torres Strait Islander people [97, 98]. Aboriginal and Torres Strait Islander people need to be consulted about solutions to harmful AOD use for their own communities. They should also have opportunities for developing and strengthening the skills of the Aboriginal and Torres Strait Islander AOD workforce.

Harm minimisation

The policy of harm minimisation recognises that people drink alcohol for a variety of reasons (for example, to be social, to experiment, to cope with stress, or simply because it is there) and that alcohol users require a range of supports and strategies to help them to reduce or prevent any alcohol-related harm that may happen to them, their families and communities [99]. The three main components (called the ‘three pillars’) of harm minimisation are:

- demand reduction
- supply reduction
- harm reduction.

Demand reduction

Demand reduction is based on the evidence that when less alcohol is drunk, less physical and social harm occurs [65].

Demand reduction aims to:

- prevent or delay people from using alcohol and other drugs
- reduce the use of drugs in the community
- provide support for people who are dependent on alcohol or other drugs
- support efforts to make people, families and communities stronger and more sociable and accepting of others [112].

Addressing the social determinants

To reduce the demand for alcohol, it is important to tackle the issues which lead to the demand in the first place (such as social and economic reasons). Otherwise, alcohol interventions will have less impact. Aboriginal and Torres Strait Islander people have been working for a long time to address the social and economic issues that their communities face. There are also several Australian state and territory government programs which focus on housing, education, employment, and business development (which can impact on alcohol use). Many of these are managed by the Department of Prime Minister and Cabinet’s Indigenous Advancement Strategy (IAS). The IAS has five key program areas:

1. Jobs, Land and Economy
2. Children and Schooling

3. Safety and Wellbeing
4. Culture and Capability
5. Remote Australia Strategies [113].

Alternatives to alcohol and other drug use

Another important way of reducing alcohol use, especially for young people, is to provide them with other activities [97].

These activities can be:

- sporting
- recreational
- employment
- education
- culturally focused.

These activities are important because they can strengthen what are known as ‘protective factors’, such as:

- participation in school
- positive family relationships
- increased self-esteem
- greater feelings of wellbeing and self-worth
- more cultural connection [97, 114].

Education and persuasion

There are lots of different kinds of education and health promotion interventions, such as school-based AOD programs [115]. These kinds of interventions are popular but there is no solid evidence that they work [65, 116]. While the kind of educational information provided in these programs is important, these kinds of initiatives should be used as part of a wider collection of AOD intervention strategies, not in isolation [115].

Screening and brief interventions

The Medicare health check for Aboriginal and Torres Strait Islander people screens for potentially harmful alcohol use. It can be used for early detection, diagnosis and intervention [117]. Patients are usually screened using AUDIT-C (or one of the other screening instruments mentioned in the full *Review of harmful alcohol use among Aboriginal and Torres Strait Islander people*). If needed, patients might be:

- referred
- followed-up for treatment
- offered some counselling and information (brief intervention) about safe drinking [118].

Brief interventions have been found to be a cost-effective way of reducing alcohol harm for non-Indigenous people [119], however, some barriers to using brief interventions in Aboriginal and Torres Strait Islander care settings have been identified [120, 121].

Treatment

Treatment for alcohol dependence aims to make people want alcohol less, which leads to less demand and less harm. Treatment for alcohol dependence can have a number of positive effects, including improved physical and mental health, and less criminal behaviour [116].

People who get treatment are more likely than those who do not get treatment to drink less and suffer from less alcohol-related harm [65].

The treatment options available, for both for Aboriginal and Torres Strait Islander people and mainstream clients, are:

- withdrawal management (supporting those who quit or cut down on alcohol)
- pharmacotherapies (drugs to assist with withdrawal and keep people away from alcohol)
- psychosocial therapies (including both psychological and social components) such as motivational therapy, behavioural therapy and narrative therapy [118, 122, 123].

When treating someone for alcohol misuse, it is important to treat social and emotional issues as well as any other mental health problems that might be occurring at the same time. If they are not tackled together, the treatment might not be as effective [98, 124].

Treatment can come from many different places such as:

- primary health care services
- services specialising in AOD treatment
- health care clinics
- communities
- residential services
- hospitals [97].

For non-Indigenous people, both non-residential and residential treatment has been found to be effective [65, 119]. However, this is not true for people (both Aboriginal and Torres Strait Islander and non-Indigenous) who:

- do not want to be treated
- do not have much money
- live in a place that makes it hard to recover (for physical, social or emotional reasons)
- have more serious medical or psychiatric conditions [65].

After treatment, it is unlikely that people with alcohol or other drug addictions will be able to completely stop their alcohol or other drug use [65, 125]. It is more realistic to accept that people will:

- drink or use drugs less
- have longer time periods between drinking or using drugs
- feel more healthy and be able to engage more socially
- be less likely to experience harm.

Some barriers that prevent Aboriginal and Torres Strait Islander from receiving effective treatment are:

- not enough resourcing (lack of funding)
- not enough specialist services in some areas
- the hidden cost of entering treatment programs (especially for women) [98, 126].

One of the biggest issues for alcohol and other drug treatment is funding. Research shows that there has not been enough funding for specialist Aboriginal and Torres Strait Islander services in some areas [97]. Also, it has been estimated that it costs approximately two to three times more to provide treatment for Aboriginal and Torres Strait Islander people than for non-Indigenous people because of the complexity of the issues that they can experience [127].

Culture and cultural differences are very important factors that can influence whether a particular treatment is successful or not [126-129]. Treatment that works for non-Indigenous clients might not work for Aboriginal and Torres Strait Islander clients. Service providers need to have a good understanding of the culture and social conditions that might be affecting their clients, and their organisations need to provide culturally safe care [130]. Because of this, Aboriginal and Torres Strait Islander community-controlled organisations are most suitable to provide culturally safe treatment [127].

On-going care

People who are dependent on alcohol will often relapse (after a period of not drinking alcohol, they might start drinking again), even with the best treatment. Because of this, on-going care (after-care, follow-up care) is extremely important when treating someone for alcohol issues [94, 98, 131].

Kinds of on-going care include:

- individual counselling and support
- support groups
- transitional housing
- employment support.

As people have become more aware of the importance of on-going care, some governments have provided an increase in funding for these kinds of services.

Supply reduction

Evidence shows that the best way of reducing alcohol-related harm is to reduce the amount of alcohol people drink. This can be done by controlling, managing and/or regulating how much alcohol is available (supply reduction) [65, 99].

Governments, however, are mostly hesitant to control the supply of alcohol because:

- alcohol is a legal substance
- many people enjoy having access to alcohol
- the alcohol industry plays a large role in the Australian economy so it has a lot of political power.

As a result, any attempts to control the supply of alcohol have mostly been made at a local level. These initiatives are usually targeted at, or introduced by, Aboriginal and Torres Strait Islander people.

Alcohol taxation

The best way to reduce the supply of alcohol is to increase its price. The Australian Government is able to do this by increasing taxes on alcoholic drinks. The tax on pre-mixed drinks was increased successfully in 2009, but otherwise the Government has not been willing to use taxes this way. This is despite evidence that tackling alcohol-related harm costs more than the money raised from alcohol taxes [7]. Some reasons why the Government might be unwilling to increase taxes are:

- the short-term benefits of the money that comes from alcohol taxation (\$6.0 billion in 2014-15) [132]
- pressure from the alcohol industry
- fear of criticism from the public and loss of votes at the next election.

Some organisations, including Aboriginal and Torres Strait Islander groups, have been calling for the Australian Government to introduce a 'tiered volumetric tax on alcohol'. This would mean that drinks with a lot of alcohol in them would be taxed more than drinks with not much alcohol in them [133]. The arguments for this strategy are:

- when the price of alcohol goes up, demand for it is often reduced
- extra money raised by the taxes could possibly be used to fund other harm minimisation strategies
- it would impact on both Aboriginal and Torres Strait Islander and non-Indigenous people the same way.

However, both the Liberal-National and Labor Governments are unwilling to take this approach.

In the 1990s, the NT introduced two small levies (taxes) - one on the sale of all alcoholic beverages, and later another tax on the sale of cask wine. These levies aimed to raise money for demand-reduction strategies under the Living with Alcohol Program. However, an extra benefit of the levies was an increase in alcohol cost and a reduction in how much alcohol people were drinking. This had benefits for both Aboriginal and Torres Strait Islander people and non-Indigenous people by reducing the number of alcohol-related deaths and

hospitalisations [134, 135]. Later, the Australian High Court ruled that the Northern Territory Government did not have the authority to introduce the levies, so they were stopped.

Alcohol restrictions

Liquor licensing acts put restrictions on the supply and sale of alcohol. These acts can be enforced through policing [105, 136]. The state and territory governments are not keen on applying these acts to the whole state or territory, but they can use them to target specific businesses or communities.

Liquor licensing authorities also have the power to add additional restrictions in some communities. These restrictions can be put into place at the request of Aboriginal and Torres Strait Islander communities or other organisations, such as the police or government health agencies. Some communities with additional restrictions are:

- Alice Springs and Tennant Creek in the NT
- Halls Creek and Fitzroy Crossing in WA.

These restrictions are usually applied to the whole community and can include limits on the sale of certain kinds of alcohol or on the hours that businesses selling alcohol are allowed to trade. The evidence shows that alcohol restrictions can result in less drinking and fewer alcohol-related harms [2, 105, 136-138]. However, the evidence shows that these restrictions should be used together with other demand-reduction measures. Without these other measures, it is likely the restrictions will be less effective over time [136].

Indirect price control

Indirect price control works by removing a cheap alcoholic product from the market. Consumers then buy a more expensive product but less of it, so they end up drinking less. This strategy has been effective at a local level where low-cost drinks with high amounts of alcohol (cask, table and fortified wines) have been banned [2, 139].

For example, a study from Central Australia, which mostly focused on Alice Springs, showed that when sales of table wine (in casks of more than two litres) and fortified wine (in casks of more than one litre) were banned, there were two positive effects:

- the price of pure alcohol rose from an average of \$69.75 to \$90.60
- the amount of alcohol being drunk every three months dropped from 3.9 litres to 3.4 litres per person aged 15 years and over [2].

There was also a drop in hospitalisations for alcohol-related conditions and general hospitalisations. Similar results were also seen in a study from Tennant Creek [137].

Community-wide alcohol bans

All states and territories are legally allowed to ban people from having or drinking alcohol in certain areas. It is also possible to regulate or ban the drinking of alcohol within certain Aboriginal and Torres Strait Islander lands. There is not much evidence to say whether or not these measures work, but one study found that these controls were important in reducing alcohol-related harm even if they could not prevent harm [140].

The same study also recommended three conditions which would help communities achieve greater control over alcohol:

1. community council commitment
2. genuine community support
3. agreement on enforcement (making sure community members follow the rules) [140].

Some Aboriginal and Torres Strait Islander communities have used liquor licensing laws to introduce bans. By 2005, 79% of remote Aboriginal and Torres Strait Islander communities in the NT used the NT Liquor Act to declare themselves 'dry' [141, 142].

In 2007, without consulting the Aboriginal and Torres Strait Islander communities, the Howard Government's Northern Territory National Emergency Response Act (NTER) [143] made all Aboriginal communities 'dry'. This could only be changed if the communities created and enforced government-approved alcohol management plans (AMPs). The NTER was exempt from (not governed by) the Racial Discrimination Act [144] which meant that it could be applied only to Aboriginal and Torres Strait Islander people. This was concerning for Aboriginal and Torres Strait Islander communities. The alcohol bans were continued by the Gillard Labor Government's Stronger Futures in the Northern

Territory Act [145], but they were no longer exempt from the Racial Discrimination Act. A review of the NTER found that the drinking of alcohol and related harms were reduced but this was likely to have been because of more police and enforcement of the restrictions rather than because of the bans [142].

Local dry area alcohol bans

Another kind of alcohol ban is a 'local dry area alcohol ban' [136]. These bans usually forbid people to drink in some specific public areas in cities or towns, but can also be used in other situations. For example, the 'two kilometre law' in the NT bans people from drinking alcoholic drinks within two kilometres of a licensed venue [2, 146, 147]. While these bans apply to everyone, Aboriginal and Torres Strait Islander people tend to be targeted more than non-Indigenous people when they are applied and enforced. Because of this, these bans discriminate against Aboriginal and Torres Strait Islander people and the evidence shows that they are not very effective [136, 147, 148].

Alcohol management plans (AMPs)

Alcohol management plans (AMPs) aim to help communities develop local solutions to reduce alcohol-related harm [149]. However, AMPs tend to focus on reducing supply rather than demand, particularly when they are driven by governments and not the communities. Although there are AMPs in some regional towns like Alice Springs and Port Augusta, most are in Aboriginal and Torres Strait Islander communities.

There is not much evidence about whether AMPs are effective or not, but it appears that those that are introduced for and by the communities have the best results and are more likely to last in the longer term [149].

Is controlling the supply of alcohol effective?

There are two main reasons why some people do not support the idea or practice of strict alcohol supply controls. The first reason is that people often find a way to get around the restrictions, which means they do not work. The evidence suggests, however, that the restrictions are more successful than the strategies that are used to get around them [2, 136, 137].

The second reason why some people do not support the idea or practice of strict alcohol supply controls is that people might then turn to other drugs instead of alcohol. This is known as 'substitution' [150]. In Aboriginal and Torres Strait Islander communities where there have been alcohol bans, there have been some reports that more people are using cannabis. Some of this could be because of people using cannabis instead of alcohol. However, there have also been reports of communities with no alcohol bans having increased cannabis use [151-153]. Recently, there have also been concerns about alcohol bans leading to increased methamphetamine use. These concerns are part of a larger concern about the use of methamphetamine across Australia as a whole, not just in communities with alcohol bans.

Generally, there is clear evidence that having additional controls on the supply of alcohol can be an effective way of reducing the harm it causes. For Aboriginal and Torres Strait Islander communities, it is important that these controls:

- are led and supported by the local community
- are not discriminatory [108, 154, 155].

If these conditions can be met then there will be strong Aboriginal and Torres Strait Islander support for stronger controls on alcohol [156]. If they are not led and supported by local communities, and are discriminatory, then there will be resistance to these measures.

Harm reduction

Although the main aim of the NDS and the NATSIPDS 2014-2019 is to reduce the harmful use of alcohol and other drugs, both of these strategies recognise that it is also important to reduce the harms that come directly from AOD use. Harm reduction strategies are usually aimed at the whole community, and can include:

- community policing
- family violence programs
- drink-driving prevention programs
- responsible service of alcohol
- removal of glass drinking containers from licensed premises or sporting facilities
- support services such as women's and youth shelters [99, 157].

This review will look at two harm reduction strategies that were started in Aboriginal and Torres Strait Islander communities:

- community patrols
- sobering-up shelters.

Community patrols

The first community patrols were started in the NT in the late 1980s. They are now found in urban, regional and remote areas and vary in how they operate, depending on their location. Community patrols are also known as:

- warden patrols
- night patrols
- day patrols
- foot patrols
- youth patrols.

Community patrols look after people who have drunk too much alcohol. They keep people safe by providing transport to a safe place and preventing them from harming themselves and others. Community patrols have been identified as an important way of keeping people out of the criminal justice system. These patrols were highlighted as a successful strategy by the Royal Commission into Aboriginal Deaths in Custody [158]. After the Royal Commission, more community patrols were set up in the NT and then in other parts of Australia [159].

While patrols mostly deal with people who have drunk too much alcohol, they can also be involved with issues of community safety, because they are culturally safe and do not involve the police [160, 161]. Because community patrols vary so much (for example, in how they work and what they provide), we have no data on what they have achieved [160]. However, in most cases, community patrols are supported by the community, and there are a number of qualitative (descriptive) reports that show they are effective. Some community patrols have also won awards for their work [160, 161]. Key factors which can make a community patrol successful are:

- community support and trust
- strong links with other services and agencies [161, 162].

Sobering-up shelters

The first sobering-up shelter was set up in Tennant Creek, NT, in 1983 [162, 163]. The Royal Commission into Aboriginal Deaths in Custody (RCIADIC) drew special attention to the importance of sobering-up shelters for reducing Aboriginal and Torres Strait Islander peoples' contact with the justice system, and decreasing the chance of deaths in custody. They recommended that more shelters should be set up around the country [158, 164, 165]. There are now shelters in every state and territory (except Tasmania and the ACT) [97].

As with community patrols, sobering up shelters were created to look after people who have drunk too much alcohol by preventing them from harming themselves or others. Sobering up-shelters work with community patrols and the police to:

- provide intoxicated people with a safe space that is not in police custody
- offer a space to sleep
- provide a place to shower and eat breakfast (when the person is sober).

Some sobering-up shelters also offer some brief alcohol and other drug interventions, or referrals to support services [162, 166].

A criticism of sobering-up shelters is that they do not actually provide treatment and that they enable clients to continue drinking. But the real purpose of a sobering-up shelter is to prevent harm, which they do [162].

Future directions

The evidence shows that most Aboriginal and Torres Strait Islander people do not drink alcohol at dangerous levels or do not drink at all. However, there are some Aboriginal and Torres Strait Islander people that drink alcohol at harmful levels, and at levels much higher than among the non-Indigenous population.

Evidence suggests that the main reasons Aboriginal and Torres Strait Islander people drink are:

- the historical issues around colonisation
- current inequality and experiences of racism
- higher levels of social and emotional issues and mental illness.

Alcohol use has also been described as a 'cycle', where mental illness and social issues can lead to alcohol dependence, and dependence can then lead to greater levels of mental illness and social inequality.

There is evidence that a 'two-pronged' strategy works best to reduce the harms from alcohol:

1. by addressing the underlying social issues, such as social inequality that are causing social and emotional distress
2. by directly addressing the issue of harmful drinking and its results.

Aboriginal and Torres Strait Islander people who experience alcohol-related harm in their communities will have the best understanding of what is needed to fix these issues, as well as what will and will not work. There is evidence that if a solution does not come from within the community it will be less likely to work. This is why the past policies of self-determination and self-management are important. These two policies are central to the idea of Aboriginal and Torres Strait Islander community control of services.

While there may be individual Aboriginal and Torres Strait Islander people who do well for themselves, for the whole Aboriginal and Torres Strait Islander population to overcome the disadvantage they face, they require government support.

Progress has been slow in addressing alcohol-related harm and its causes. So what is the way forward? Some suggestions are:

- use the evidence that is already available on what works to address alcohol harm
- combine alcohol treatment services with other related services like health services and social and emotional services
- provide AOD services in areas that currently do not have any
- create more services for specific population groups like Aboriginal and Torres Strait Islander women and young people
- ensure that there are enough adequately trained people to provide the necessary services
- provide more culturally safe care
- enable Aboriginal and Torres Strait Islander communities to control services for their own people.

One of the major factors affecting whether or not these recommendations are followed is funding. Australia is one of the richest countries in the world but there are many Aboriginal and Torres Strait Islander people who live in poverty. Australia has the resources to fix this issue but doing this requires both commitment and leadership.

The evidence has shown us how to reduce alcohol-related harm among Aboriginal and Torres Strait Islander people. 'What is needed is the commitment to do it – 'with' not 'for' Aboriginal and Torres Strait Islander people' [94].

Concluding comments

The choices that people make about alcohol use are partly affected by the social conditions they live in. This is especially the case for Aboriginal and Torres Strait Islander people whose social conditions can make it hard to make healthy lifestyle choices. However, healthy public policies (which deal with early childhood, education, employment and social support), as well as some alcohol and other drug interventions, can make a big difference. The real challenge is for politicians to persuade the public that these policies are important for everyone, not just disadvantaged people, because of the potential cost to the health, welfare and justice systems.

Appendix 1

Australian guidelines to reduce health risks from drinking alcohol (2009)

Guideline 1: For healthy men and women, drinking no more than two standard drinks on any day reduces the lifetime risk of harm from alcohol-related disease or injury.

Guideline 2: For healthy men and women, drinking no more than four standard drinks on a single occasion reduces the risk of alcohol related injury arising from that occasion.

Guideline 3:

3A: Parents and carers should be advised that children under 15 years of age are at the greatest risk of harm from drinking and that for this age group, not drinking alcohol is especially important.

3B: For young people aged 15–17 years the safest option is to delay the initiation of drinking for as long as possible.

Guideline 4:

4A: For women who are pregnant or planning a pregnancy, not drinking is the safest option. 4B: For women who are breastfeeding, not drinking is the safest option.

Source: National Health and Medical Research Council (2009)[4]

References

1. Australian Bureau of Statistics (2017) *Apparent consumption of alcohol, Australia*. Retrieved 31 July 2017 from <http://stat.data.abs.gov.au/Index.aspx?DataSetCode=ALC>
2. Symons M, Gray D, Chikritzhs T, Skov S, Siggers S, Boffa J, Low J (2012) *A longitudinal study of influences on alcohol consumption and related harm in Central Australia: with a particular emphasis on the role of price*. Perth, WA: National Drug Research Institute
3. Australian Institute of Health and Welfare (2014) *National Drug Strategy Household Survey detailed report: 2013*. (AIHW Catalogue no PHE 183, drug statistics series no 28) Canberra: Australian Institute of Health and Welfare
4. National Health and Medical Research Council (2009) *Australian guidelines to reduce health risks from drinking alcohol*. Canberra: National Health and Medical Research Council
5. Gao C, Ogeil R, Lloyd B (2014) *Alcohol's burden of disease in Australia*. Canberra: Foundation for Alcohol Research and Education
6. Australian Institute of Health and Welfare (2016) *Australian Burden of Disease Study: impact and causes of illness and death in Australia 2011*. Canberra: Australian Institute of Health and Welfare
7. Collins DJ, Lapsley HM (2008) *The costs of tobacco, alcohol and illicit drug abuse to Australian society in 2004/05*. Canberra: Department of Health and Ageing
8. Laslett A-M, Catalano P, Chikritzhs Y, Dale C, Doran C, Ferris J, Jainullabudeen T, Livingston M, Matthews S, Mugavin J, Room R, Schlotterlein M, Wilkinson C (2010) *The range and magnitude of alcohol's harm to others*. Fitzroy, Vic: AER Centre for Alcohol Policy Research, Turning Point Alcohol and Drug Centre, Eastern Health
9. Rowley CD (1971) *Outcasts in white Australia: Aboriginal policy and practice*. Canberra: Australian National University Press
10. Rowley CD (1970) *The destruction of Aboriginal society*. Canberra: Australian National University Press
11. Rowley CD (1978) *A matter of justice*. Canberra: Australian National University Press
12. Human Rights and Equal Opportunity Commission (1997) *Bringing them home: report of the National Inquiry into the Separation of Aboriginal and Torres Strait Islander Children from their Families*. Sydney: Human Rights and Equal Opportunity Commission
13. Swan P, Raphael B (1995) *Ways forward: national Aboriginal and Torres Strait Islander mental health policy national consultancy report*. Canberra: Department of Health and Ageing, Australia
14. Australian Government Department of the Prime Minister and Cabinet (2017) *Indigenous Advancement Strategy*. Retrieved 2017 from <https://www.pmc.gov.au/indigenous-affairs/indigenous-advancement-strategy>
15. Fitzpatrick S (2016) Two causes collide as Tony Abbott rides into Cootamundra.5
16. Lewis M (1992) *A rum state: alcohol and state policy in Australia 1788-1988*. Canberra: Australian Government Publishing Service
17. Langton M (1993) Rum, seduction and death: 'Aboriginality and alcohol'. *Oceania*;3(1):195-207
18. Siggers S, Gray D (1998) *Dealing with alcohol: Indigenous usage in Australia, New Zealand and Canada*. Melbourne: Cambridge University Press
19. Kunitz S (1994) *Disease and social diversity: the European impact on the health of non-Europeans*. New York: Oxford University Press
20. Reynolds H (1992) *The law of the land*. 2nd ed. Ringwood, Vic: Penguin
21. Brady M (2008) *First taste: how Indigenous Australians learned about grog*. Deakin West, ACT: Alcohol Education & Rehabilitation Foundation (AER)
22. Beckett J (1964) Aborigines, alcohol and assimilation. In: Reay M, ed. *Aborigines now*. Sydney: Angus & Robertson
23. Brady M (2007) Equality and difference: persisting historical themes in health and alcohol policies affecting Indigenous Australians. *Journal of Epidemiology and Community Health*;61(9):759-763
24. Eggleston E (1974) Legal controls on alcohol. In: Hetzel BS, Dobbin L, Lippmann L, Eggleston E, eds. *Better health for Aborigines?* St Lucia, Qld: University of Queensland Press
25. Martin D, Brady M (2004) Human rights, drinking rights?: alcohol policy and Indigenous Australians. *The Lancet*;364(9441):1282-3
26. Hunter E (1993) *Aboriginal health and history: power and prejudice in remote Australia*. Cambridge: Cambridge University Press
27. Brady M (2004) *Indigenous Australia and alcohol policy: meeting difference with indifference*. Sydney: University of New South Wales Press
28. House of Representatives Standing Committee on Aboriginal Affairs (1977) *Alcohol problems of Aborigines: final report*. Canberra: House of Representatives Standing Committee on Aboriginal Affairs

29. National Aboriginal Health Strategy Working Party (1989) *A national Aboriginal health strategy*. Canberra: Department of Aboriginal Affairs
30. Royal Commission into Aboriginal Deaths in Custody (1991) *Royal Commission into Aboriginal Deaths in Custody: National reports [Vol 1-5], and regional reports*. Canberra: Australian Government Publishing Service
31. Commonwealth of Australia (1995) *Alcohol report, race discrimination, human rights and the distribution of alcohol*. Canberra: Race Discrimination Commissioner
32. Kirmayer LJ, Brass GM, Tait CL (2000) The mental health of Aboriginal peoples: transformations of identity and community. *Canadian Journal of Psychiatry*;45:607-616
33. World Health Organization (1992) *The ICD-10 classification of mental and behavioural disorders*. Geneva: World Health Organization
34. American Psychiatric Association (2014) *Diagnostic and statistical manual of mental disorders*. Retrieved 2014 from <http://www.dsm5.org/Pages/Default.aspx>
35. Hoffmann NG, Kopak AM (2015) How well do the DSM-5 alcohol use disorder designations map to the ICD-10 disorders? *Alcoholism: Clinical and Experimental Research*;39(4):697-701
36. Australian Institute of Health and Welfare (2016) *Australian Burden of Disease Study: impact and causes of illness and death in Aboriginal and Torres Strait Islander people 2011*. (Australian Burden of Disease Study series no. 6, Cat no. BOD 7) Canberra: Australian Institute of Health and Welfare
37. Australian Institute of Health and Welfare (2011) *2010 National Drug Strategy Household Survey report*. (Drug statistics series no. 25. Cat. no. PHE 145) Canberra: Australian Institute of Health and Welfare
38. Australian Bureau of Statistics (2013) *Revised 2002 and 2008 NATSISS alcohol data by risk level, Aboriginal and Torres Strait Islander peoples, 2013*. Retrieved 15 March 2013 from <http://www.abs.gov.au/ausstats/abs@.nsf/Latestproducts/DF68811BEDC1217BCA257B2E000D8244?opendocument>
39. Australian Bureau of Statistics (2016) *National Aboriginal and Torres Strait Islander Social Survey, 2014-15: Aboriginal and Torres Strait Islander people with a mental health condition*. Retrieved 28 April 2016 from [http://www.abs.gov.au/ausstats/abs@.nsf/Lookup/by%20Subject/4714.0~2014-15~Feature%20Article~Aboriginal%20and%20Torres%20Strait%20Islander%20people%20with%20a%20mental%20health%20condition%20\(-Feature%20Article\)~10](http://www.abs.gov.au/ausstats/abs@.nsf/Lookup/by%20Subject/4714.0~2014-15~Feature%20Article~Aboriginal%20and%20Torres%20Strait%20Islander%20people%20with%20a%20mental%20health%20condition%20(-Feature%20Article)~10)
40. Ridolfo B, Stevenson C (2001) *The quantification of drug-caused mortality and morbidity in Australia, 1998*. (AIHW cat. no. PHE 29 (Drug Statistics Series no. 7)) Canberra: Australian Institute of Health and Welfare
41. Pascal R, Chikritzhs TN, Jones P (2009) *Trends in estimated alcohol attributable deaths and hospitalisations in Australia, 1996-2005*. (National Alcohol Indicators Project, Bulletin no.12) Perth: National Drug Research Institute
42. Steering Committee for the Review of Government Service Provision (2016) *Overcoming Indigenous disadvantage: key indicators 2016 report*. Canberra: Productivity Commission
43. Australian Bureau of Statistics (2016) *Causes of Death, Australia, 2015*. Retrieved 28 September 2016 from <http://www.abs.gov.au/ausstats/abs@.nsf/Lookup/by%20Subject/3303.0~2015~Main%20Features~Summary%20of%20findings~1>
44. Kuipers P, Appleton J, Pridmore S (2012) Thematic analysis of key factors associated with Indigenous and non-Indigenous suicide in the Northern Territory, Australia. *Rural and Remote Health* 12.
45. Chikritzhs T, Pascal R, Gray D, Stearne A, Siggers S, Jones P (2007) *Trends in alcohol-attributable deaths among Indigenous Australians, 1998-2004*. (Bulletin no.11) Perth: National Drug Research Institute
46. Pascal R, Chikritzhs T, Gray D (2009) Estimating alcohol-attributable mortality among Indigenous Australians: towards Indigenous-specific alcohol aetiological fractions. *Drug and Alcohol Review*;28(2):196-200
47. Australian Institute of Health and Welfare (2016) *Admitted patient care 2014-15: Australian hospital statistics*. Canberra: Australian Institute of Health and Welfare
48. Bower C, Elliott EJ (2016) *Australian guide to the diagnosis of FASD*. Perth, WA: Telethon Kids Institute
49. Clarke ME, Gibard WB (2003) Overview of fetal alcohol spectrum disorders for mental health professionals. *Journal of the Canadian Academy of Child and Adolescent Psychiatry*;12(3):57-63
50. Bonello MR, Hilder L, Sullivan EA (2014) *Fetal Alcohol Spectrum Disorders: strategies to address information gaps*. (AIHW Catalogue no PER 67) Canberra: Australian Institute of Health and Welfare
51. Passmore HM, Giglia R, Watkins RE, Mutch RC, Marriott R, Pestell C, Zubrick SR, Rainsford C, Walker N, Fitzpatrick JP, Freeman J, Kippin N, Safe B, Bower C (2016) Study protocol for screening and diagnosis of fetal alcohol spectrum disorders (FASD) among young people sentenced to detention in Western Australia. *BMJ Open* 6.
52. Burns L, Breen C, Bower C, O' Leary C, Elliott EJ (2013) Counting fetal alcohol spectrum disorder in Australia: the evidence and the challenges. *Drug and Alcohol Review*;32(5):461-467
53. Elliott EJ, Payne J, Morris A, Haan E, Bower C (2008) Fetal alcohol syndrome: a prospective national surveillance study. *Archives of Disease in Childhood*;93(9):732-737

54. Bower C, Rudy E, Callaghan A, Quick J, Cosgrove P, Nassar N (2009) *Report of the birth defects registry of Western Australia 1980-2008*. Perth, WA: Western Australian Birth Defects Registry, Women and Newborn Health Service
55. Mutch RC, Watkins R, Bower C (2015) Fetal alcohol spectrum disorders: notifications to the Western Australian Register of Developmental Anomalies. *Journal of Paediatrics and Child Health*;51(4):433-436
56. Harris KR, Bucens IK (2003) Prevalence of fetal alcohol syndrome in the Top End of the Northern Territory. *Journal of Paediatrics and Child Health*;39(5):528-533
57. Fitzpatrick JP, Latimer J, Carter M, Oscar J, Ferreira ML, Olson HC, Lucas BR, Doney R, Salter C, Try J, Hawkes G, Fitzpatrick E, Hand M, Watkins RE, Martiniuk ALC, Bower C, Boulton J, Elliott EJ (2015) Prevalence of fetal alcohol syndrome in a population-based sample of children living in remote Australia: the Lililwan Project. *Journal of Paediatrics and Child Health*;51(4):450-457
58. Fitzpatrick JP, Latimer J, Olson HC, Carter M, Oscar J, Lucas BR, Doney R, Salter C, Try J, Hawkes G, Fitzpatrick E, Hand M, Watkins RE, Tsang TW, Bower C, Ferreira ML, Boulton J, Elliott EJ (2017) Prevalence and profile of Neurodevelopment and Fetal Alcohol Spectrum Disorder (FASD) amongst Australian Aboriginal children living in remote communities. *Research in Developmental Disabilities*;65(June 2017):114-126
59. Teesson M, Slade T, Mills K (2009) Comorbidity in Australia: findings of the 2007 National Survey of Mental Health and Wellbeing. *Australian & New Zealand Journal of Psychiatry*;43(7):606-614
60. Australian Institute of Health and Welfare (2017) *Aboriginal and Torres Strait Islander Health Performance Framework*. Retrieved 30 May 2017 from <https://www.aihw.gov.au/reports/indigenous-health-welfare/health-performance-framework/contents/summary>
61. Dudgeon P, Wright M, Paradies Y, Garvey D, Walker I (2014) Aboriginal social, cultural and historical contexts. In: Dudgeon P, Milroy H, Walker R, eds. *Working together: Aboriginal and Torres Strait Islander mental health and wellbeing principles and practice*. 2nd ed. Canberra: Department of The Prime Minister and Cabinet:3-24
62. Grieves V (2009) *Aboriginal spirituality: Aboriginal philosophy, the basis of Aboriginal social and emotional wellbeing*. (Discussion Paper No. 9) Darwin: Cooperative Research Centre for Aboriginal Health
63. Lovett R (2017) *Aboriginal and Torres Strait Islander data sovereignty in Australia: principles and practice*. Presented at Department of Aboriginal Affairs & National Drug Research Institute Seminar Perth
64. Australian Health Ministers' Advisory Council (2017) *Aboriginal and Torres Strait Islander Health Performance Framework 2017 report*. Canberra: Department of the Prime Minister and Cabinet
65. Babor TF, Caetano R, Casswell S, Edwards G, Giesbrecht N, Graham K, Grube JW, Hill L, Holder H, Homel R, Livingston M, Österberg E, Rehm J, Room R, Rossow I (2010) *Alcohol: no ordinary commodity: research and public policy*. 2nd edition ed. Oxford: Oxford University Press
66. Zinberg NE (1984) *Drug, set and setting: the basis for controlled intoxicant use*. New Haven, CT: Yale University Press
67. Wilkinson R, Marmot M (2003) *Social determinants of health: the solid facts*. (2nd ed) Denmark: World Health Organization
68. McCusker Centre for Action on Alcohol and Youth (2014) *A guide to the alcohol industry*. Perth: McCusker Centre for Action on Alcohol and Youth
69. McCusker Centre for Action on Alcohol and Youth (2014) *Alcohol industry peak bodies and representative groups*. Perth: McCusker Centre for Action on Alcohol and Youth
70. Institute of Alcohol Studies (2016) *The alcohol industry: factsheet*. London: Institute of Alcohol Studies
71. Gilpin NW, Koob GF (2008) Neurobiology of alcohol dependence: focus on motivational mechanisms. *Alcohol Research and Health*;31(3):185-195
72. Young R, Feeney G (2002) Why do people use drugs? In: Hulse GK, White J, Cape G, eds. *Management of alcohol and drug problems*. Melbourne: Oxford University Press:17-31
73. MacDonald M, Aspin C, Wodak A, Kaldor J, Orcher H (2002) *Prevalence of HIV and hepatitis C and injecting behaviour among Aboriginal and Torres Strait Islanders in the Australian needle and syringe program survey, 1995-2001*. Sydney: Australasian Society of HIV Medicine
74. Marmot M (2005) Social determinants of health inequalities. *The Lancet*;365(9464):1099-1104
75. Commission on Social Determinants of Health (2008) *Closing the gap in a generation: health equity through action on the social determinants of health: final report*. Geneva: World Health Organization
76. Carson B, Dunbar T, Chenhall RD, Bailie R, eds. (2007) *Social determinants of Indigenous health*. Crows Nest, NSW: Allen and Unwin
77. Marmot MG, Shipley MJ, Rose G (1984) Inequalities in death - specific explanations of a general pattern? *The Lancet*;323(8384):1003-1006
78. Department of the Prime Minister and Cabinet (2015) *Closing the gap: Prime Minister's report 2015*. Canberra: Department of the Prime Minister and Cabinet, Australia
79. Saggars S, Walter M, Gray D (2011) Culture, history and health. In: Thackrah R, Scott K, Winch J, eds. *Indigenous Australian health and cultures: an introduction for health professionals*. Frenchs Forest, NSW: Pearson Australia:1-21
80. Marmot M (2015) *The health gap: the challenge of an unequal world*. London: Bloomsbury Publishing

81. Dudgeon P, Milroy H, Walker R, eds. (2014) *Working together: Aboriginal and Torres Strait Islander mental health and wellbeing principles and practice*. 2nd ed. Canberra: Department of The Prime Minister and Cabinet
82. Australian Bureau of Statistics (2016) *National Aboriginal and Torres Strait Islander Social Survey, 2014-15*. Canberra: Australian Bureau of Statistics
83. Ganesharajah C (2009) *Indigenous health and wellbeing: the importance of country*. (Native Title Research Report No. 1/2009) Canberra: Australian Institute for Aboriginal and Torres Strait Islander Studies
84. Australian Bureau of Statistics (2013) *Australian Aboriginal and Torres Strait Islander health survey: first results, Australia, 2012-13*. (ABS Catalogue no. 4727.0.55.001) Canberra: Australian Bureau of Statistics
85. Melhuish E (2014) The impact of early childhood education and care on improved wellbeing. In: Academy B, ed. *'If you could do one good thing ...' nine local actions to reduce health inequalities*. London: British Academy:32-43
86. Sims M, Siggers S, Hutchins T, Guilfoyle A, Targowska A, Jackiewicz S (2008) Indigenous child care - leading the way. *Australian Journal of Early Childhood*;33(1):56-60
87. Awofeso N (2011) Racism: a major impediment to optimal Indigenous health and health care in Australia. *Australian Indigenous Health Bulletin* 11.
88. Green M, Siggers S (2015) Race and reconciliation in Australia. In: Germov J, Poole M, eds. *Public sociology: an introduction to Australian society*. Crows Nest, NSW: Allen & Unwin:271-289
89. Rudd KM (2008) *Apology to Australia's Indigenous peoples*. Presented at House of Representatives 13 February 2008, Parliament House, Canberra
90. Pearson N (2009) Radical hope: education and equality in Australia. *Quarterly Essay*; (35)
91. Baird S, Ferreira F.H.G., Özler B, Woolcock M (2013) Relative effectiveness of conditional and unconditional cash transfers for schooling outcomes in developing countries: a systematic review. *Campbell Systematic Reviews*;9(8)
92. Rosier K (2011) *Food insecurity in Australia: what is it, who experiences it and how can child and family services support families experiencing it?* (CAFCA practice sheet series) Melbourne: Australian Institute of Family Studies
93. Australian Institute of Health and Welfare (2011) *Life expectancy and mortality of Aboriginal and Torres Strait Islander people*. Canberra: Australian Institute of Health and Welfare
94. Gray D, Wilkes E (2010) *Reducing alcohol and other drug related harm*. (Resource sheet no. 3) Canberra: Closing the Gap Clearinghouse
95. Chenhall RD (2007) *Benelong's Haven: recovery from alcohol and drug abuse within an Aboriginal Australian residential treatment centre*. Carlton, VIC: Melbourne University Press
96. Brady M (2012) *The grog book: strengthening Indigenous community action on alcohol (revised edition)*. Revised ed. Canberra: Department of Health and Ageing
97. Gray D, Stearne A, Wilson M, Doyle M (2010) *Indigenous-specific alcohol and other drug interventions: continuities, changes and areas of greatest need*. (ANCD research paper 20) Canberra: Australian National Council on Drugs
98. Gray D, Stearne A, Bonson M, Wilkes ET, Butt J, Wilson M (2014) *Review of the Aboriginal and Torres Strait Islander alcohol, tobacco and other drugs treatment service sector: harnessing good intentions*. Perth: National Drug Research Institute
99. Australian Government Department of Health (2017) *National drug strategy 2017-2026*. Canberra: Australian Government Department of Health
100. Ministerial Council on Drug Strategy (2006) *National drug strategy: Aboriginal and Torres Strait Islander peoples complementary action plan 2003-2009*. Canberra: Ministerial Council on Drug Strategy
101. Chalmers J, Ritter A, Berends L (2014) *Alcohol and other drug treatment financing in Australia: funding flows*. (Working Paper no. 3, Drug Policy Modelling Program) Sydney: National Drug and Alcohol Research Centre
102. Urbis (2009) *Evaluation of the National Drug Strategy Aboriginal and Torres Strait Islander Peoples Complementary Action Plan 2003 - 2009: final report*. Canberra: National Drug Strategy
103. Intergovernmental Committee on Drugs (2015) *National Aboriginal and Torres Strait Islander peoples' drug strategy 2014-2019*. Canberra: National Drug Strategy
104. Doran CM, Byrnes JM, Cobiack LJ, Vandenberg B, Vos T (2013) Estimated impacts of alternative Australian alcohol taxation structures on consumption, public health and government revenues. *Medical Journal of Australia*;199(9):619-622
105. Trifonoff A, Andrew R, Steenson T, Nicholas R, Roche AM (2011) *Liquor licensing legislation in Australia: an overview*. Adelaide: National Centre for Education and Training on Addiction, Flinders University
106. Lander F, Gray D, Wilkes E (2015) The Alcohol Mandatory Treatment Act: evidence, ethics and the law. *Medical Journal of Australia*;203(1):47-49
107. d'Abbs P (2012) Problematizing alcohol through the eyes of the other: alcohol policy and Aboriginal drinking in the Northern Territory, Australia. *Contemporary Drug Problems*;39(3):371-396

108. d'Abbs P (2015) Widening the gap: the gulf between policy rhetoric and implementation reality in addressing alcohol problems among Indigenous Australians. *Drug and Alcohol Review*; Early view (<http://dx.doi.org/10.1111/dar.12299>)
109. Paradies Y (2007) Racism. In: Carson B, Dunbar T, Chenhall RD, Bailie R, eds. *Social determinants of Indigenous health*. Crows Nest, NSW: Allen & Unwin:65-86
110. Alford K (2014) *Economic value of Aboriginal community controlled health services*. Canberra: National Aboriginal Community Controlled Health Organisation
111. Australian Department of Health and Ageing (2013) *National Aboriginal and Torres Strait Islander Health Plan 2013-2023*. Canberra: Australian Department of Health and Ageing
112. Ministerial Council on Drug Strategy (2011) *National drug strategy 2010-2015*. Canberra: Australian Government
113. Australian National Audit Office (2017) *Indigenous Advancement Strategy*. (ANAO Report no.35 of 2016-17) Canberra: Department of the Prime Minister and Cabinet
114. Lee KS, Conigrave KM, Clough AR, Wallace C, Silins E, Rawles J (2008) Evaluation of a community-driven preventive youth initiative in Arnhem Land, Northern Territory, Australia. *Drug and Alcohol Review*;27(1):75-82
115. Gray D, Siggers S, Atkinson D, Wilkes E (2008) Substance misuse. In: Couzos S, Murray R, eds. *Aboriginal primary health care: an evidence-based approach*. 3rd ed. South Melbourne: Oxford University Press:755-787
116. Loxley W, Toumbourou JW, Stockwell T, Haines B, Scott K, Godfrey C, Waters E, Patton G, Fordham R, Gray D, Marshall J, Ryder D, Siggers S, Sanci L, Williams J (2004) *The prevention of substance use, risk and harm in Australia: a review of the evidence*. Canberra: Department of Health and Ageing
117. Australian Government Department of Health (2016) *Medicare health assessment for Aboriginal and Torres Strait Islander people (MBS item 715)*. Canberra: Australian Government Department of Health
118. Department of Health and Ageing (2007) *Alcohol treatment guidelines for Indigenous Australians*. Canberra: Department of Health and Ageing
119. Haber P, Lintzeris N, Proude E, Lopatko O (2009) *Guidelines for the treatment of alcohol problems*. Canberra: Department of Health and Ageing, Australia
120. Sibthorpe BM, Bailie RS, Brady MA, Ball SA, Sumner-Dodd P, Hall WD (2002) The demise of a planned randomised controlled trial in an urban Aboriginal medical service. *Medical Journal of Australia*;176(6):273-276
121. Panaretto K, Coutts J, Johnson L, Morgan A, Dallas Leon D, Hayman N (2010) Evaluating performance of and organisational capacity to deliver brief interventions in Aboriginal and Torres Strait Islander medical services. *Australian and New Zealand Journal of Public Health*;34(1):38-44
122. Lee K, Freeburn B, Ella S, Miller W, Perry J, Conigrave K (2012) *Handbook for Aboriginal alcohol and drug work*. Sydney: University of Sydney
123. Brett J, Lawrence L, Ivers R, Conigrave K (2014) Outpatient alcohol withdrawal management for Aboriginal and Torres Strait Islander peoples. *Australian Family Physician*;43(8):563-566
124. d'Abbs P, Togni S, Rosewarne C, Boffa J (2013) The Grog Mob: lessons from an evaluation of a multi-disciplinary alcohol intervention for Aboriginal clients. *Australian and New Zealand Journal of Public Health*;37(5):450-456
125. McLellan AT, Lewis DC, O'Brien CP, Kleber HD (2000) Drug dependence, a chronic medical illness: implications for treatment, insurance, and outcomes evaluation. *Journal of the American Medical Association*;284(13):1689-1695
126. Gray D, Wilson M, Allsop S, Siggers S, Wilkes E, Ober C (2014) Barriers and enablers to the provision of alcohol treatment among Aboriginal Australians: a thematic review of five research projects. *Drug and Alcohol Review*;33(5):482-490
127. Gomez M, Ritter A, Gray D, Gilchrist D, Harrison K, Freeburn B, Wilson S (2014) *Adapting DA-CCP for Aboriginal and Torres Strait Islander people receiving alcohol, tobacco and other drug services: components of care and a resource estimation tool*. Sydney: National Drug and Alcohol Research Centre
128. Guthrie J, Lovett R, Dance P, Ritchie C, Tongs J (2010) 'Where's your country?': new approaches for working with problematic alcohol use among Indigenous Australians in an urban setting. *Australian Aboriginal Studies*;2010(1):100-107
129. Brady M (1995) Culture in treatment, culture as treatment: a critical appraisal of developments in addictions programs for Indigenous North Americans and Australians. *Social Science & Medicine*;41(11):1487-1498
130. Coffin J (2007) Rising to the challenge in Aboriginal health by creating cultural security. *Aboriginal and Islander Health Worker Journal*;31(3):22-24
131. McLellan AT (2002) Have we evaluated addiction treatment correctly? Implications from a chronic care perspective [Editorial]. *Addiction*;97(3):249-252
132. Parliamentary Budget Office (2015) *Alcohol taxation in Australia*. (Report no. 03/2015) Canberra: Parliament of Australia
133. Byrnes J, Petrie DJ, Doran CM, Shakeshaft A (2012) The efficiency of a volumetric alcohol tax in Australia. *Applied Health Economics and Health Policy*;10(1):37-49
134. Chikritzhs T, Stockwell T, Pascal R (2005) The impact of the Northern Territory's Living With Alcohol program, 1992-2002: revisiting the evaluation. *Addiction*;100(11):1625-1636

135. Gray D, Chikritzhs T, Stockwell TR (1999) The Northern Territory cask wine levy: health and taxation policy implications. *Australian and New Zealand Journal of Public Health*;23(6):651-653
136. National Drug Research Institute (2007) *Restrictions on the sale and supply of alcohol: evidence and outcomes*. Perth: National Drug Research Institute, Curtin University of Technology
137. Gray D, Saggars S, Atkinson D, Sputore B, Bourbon D (2000) Beating the grog: an evaluation of the Tennant Creek liquor licensing restrictions. *Australian and New Zealand Journal of Public Health*;24(1):39-44
138. Kinnane S, Farrington F, Henderson-Yates L, Parker H (2010) *Fitzroy Valley alcohol restriction report: an evaluation of the effects of alcohol restrictions in Fitzroy Crossing relating to measurable health and social outcomes, community perceptions and alcohol related behaviours after two years*. Perth: Drug and Alcohol Office
139. Gray D (2012) Is the demand for alcohol in Indigenous Australian communities 'price inelastic'? *Drug and Alcohol Review*;31(6):818-822
140. d'Abbs P (1990) *Dry areas, alcohol and Aboriginal communities: a review of the Northern Territory Restricted Areas Legislation*. Darwin: Drug and Alcohol Bureau; Racing, Gaming and Liquor Commission
141. Northern Territory Department of Business (2015) *List of restricted areas*. Retrieved 7 December 2015 from <https://web.archive.org/web/20151207084037/http://www.dob.nt.gov.au/gambling-licensing/liquor/liquor-restrictions/restricted-areas/Pages/restricted-areas.aspx>
142. Department of Families Housing Community Services and Indigenous Affairs (2011) *Northern Territory Emergency Response evaluation report 2011*. Canberra: Department of Families, Housing, Community Services and Indigenous Affairs
143. Commonwealth of Australia (2008) *Northern Territory National Emergency Response Act 2007*. Canberra: Commonwealth of Australia
144. Commonwealth of Australia (1975) *Racial Discrimination Act 1975*. Canberra: Commonwealth of Australia
145. Commonwealth of Australia (2012) *Stronger futures in the Northern Territory Act 2012 - C2012A00100*. Retrieved from http://www.comlaw.gov.au/Details/C2012A00100/Html/Text#_Toc329244469
146. d'Abbs P (1993) *Alcohol consumption in the Northern Territory, 1992-1993: an analysis of trends revealed by two surveys*. Darwin: Menzies School of Health Research
147. O'Connor R (1984) *A report on the effects of one year's enforcement of the 'Two Kilometre Law' on the Aboriginal town campers of Alice Springs*. Darwin: Northern Territory Drug and Alcohol Bureau
148. O'Connor R (1984) A case of might-have-been: some reflections on the new 'two kilometre law' in the Northern Territory. *Anthropological Forum*;5(2):201-207
149. Smith K, Langton M, d'Abbs P, Room R, Chenhall R, Brown A (2013) *Alcohol management plans and related alcohol reforms*. (Brief 16) Sydney: Indigenous justice clearinghouse
150. Saffer H, Chaloupka FJ (1999) Demographic differentials in the demand for alcohol and illicit drugs. In: Chaloupka FJ, Grossman M, Bickel WK, Saffer H, eds. *The economic analysis of substance use and abuse: an integration of econometric and behavioral economic research*. Chicago: University of Chicago Press:187-212
151. Gray DA (2010) The Northern Territory Emergency Response and cannabis use in remote Indigenous communities: after the intervention — letter. *Medical Journal of Australia*;192(10):555
152. Clough A, d'Abbs P, Cairney S, Gray D, Maruff P, Parker R, O'reilly B (2004) Emerging patterns of cannabis and other substance use in Aboriginal communities in Arnhem Land, Northern Territory: a study of two communities. *Drug and Alcohol Review*;23(4):381-390
153. Putt J, Delahunty B (2006) *Illicit drug use in rural and remote Indigenous communities*. (Trends and issues in crime and criminal justice, no. 322) Canberra: Australian Institute of Criminology
154. Gray DA, Wilkes ET (2011) Alcohol restrictions in Indigenous communities: an effective strategy if Indigenous-led. *Medical Journal of Australia*;194(10):508
155. Wilkes E (2015) Aboriginal autonomy and the reduction of alcohol-related harm. *Drug and Alcohol Review*; Early view(<http://dx.doi.org/10.1111/dar.12297>)
156. Aboriginal Peak Organisations of the Northern Territory (2013) *Principles for a partnership-centred approach for NGOs working with Aboriginal Organisations and communities in the Northern Territory*. Darwin: Aboriginal Peak Organisations of the Northern Territory
157. Ritter A, Cameron J (2006) A review of the efficacy and effectiveness of harm reduction strategies for alcohol, tobacco and illicit drugs. *Drug and Alcohol Review*;25(6):611-624
158. Johnston E (1991) Coping with alcohol and other drugs: strategies for change. In: *Royal Commission into Aboriginal Deaths in Custody, ed. Royal Commission into Aboriginal Deaths in Custody: National Report, Vol 4*. Canberra:273-298
159. Blagg H (2003) *An overview of night patrol services in Australia*. Barton, ACT: Crime Prevention Branch, Attorney General's Department

160. Australian Institute of Health and Welfare, Australian Institute of Family Studies (2013) *The role of community patrols in improving safety in Indigenous communities*. (Resource sheet no. 20) Canberra: Closing the Gap Clearinghouse
161. Australian National Audit Office (2011) *Northern Territory night patrols*. (Audit Report No.32 2010-11) Canberra: Australian National Audit Office
162. Brady M, Nicholls R, Henderson G, Byrne J (2006) The role of a rural sobering-up centre in managing alcohol-related harm to Aboriginal people in South Australia. *Drug and Alcohol Review*;25(3):201-206
163. McDonald DN (1985) *Sobering-up shelters for people found intoxicated in public places: the Northern Territory experience*. Darwin: Northern Territory Department of Health
164. Johnston E (1991) The harmful use of alcohol and other drugs. In: Custody RCiADi, ed. *Royal Commission into Aboriginal Deaths in Custody: National Report, Vol 2*. Canberra:297-334
165. Dodson P (1991) Alcohol and substance use. In: Custody RCiADi, ed. *Royal Commission into Aboriginal Deaths in Custody: regional report of inquiry into underlying issues in Western Australia*:731-760
166. Stearne A (2007) *Drug and Alcohol Services Association of Alice Springs community-based outreach program final evaluation report*. Perth, WA: National Drug Research Institute



The Australian Indigenous Health*Bulletin* (ISSN 1445-7253) is the electronic journal of the Australian Indigenous Health*InfoNet*.

The purpose of the Australian Indigenous Health*Bulletin* is to facilitate access to information of relevance to Australian Indigenous health. Reflecting the wide range of users – policy makers, service providers, researchers, students and the general community – the Health*Bulletin* aims to keep people informed of current events of relevance, as well as recent research. Research information is provided in two ways – the publication of original research and the presentation of abstracts of research published or presented elsewhere.

The Australian Indigenous Health*Bulletin* is published online as a Health*Bulletin* 'in progress', to allow readers to have access to new original articles, brief reports and other sources of information as soon as they come to hand. At the end of three months, the edition is closed and the next edition commences.

Professor Neil Drew

Director

Executive Editor

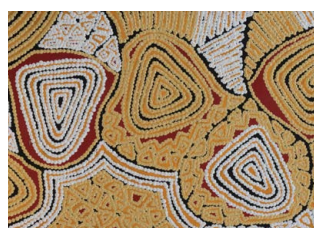
Address Australian Indigenous Health*InfoNet*
Edith Cowan University
2 Bradford Street
Mount Lawley, WA 6050

Telephone (08) 9370 6336

Facsimile (08) 9370 6022

Email healthbulletin@ecu.edu.au

Web www.healthbulletin.org.au



FEATURED ARTWORK

Ngapa Jukurrpa
(Water Dreaming)

by Juliette Nampijinpa Brown

ISBN 978-0-6485071-3-0

Core funding
is provided by the
Australian Government
Department of Health

