



# Review of the harmful use of alcohol amongst Indigenous Australians

## Introduction

Drugs are chemical substances. Drugs that are taken recreationally are known as psychoactive drugs - they act on the brain to alter the way we think, feel or act [1]. Alcohol is the most widely used psychoactive drug in Australia [2]. The 2007 National Drug Strategy Household Survey (NDSHS) found that just over 80% of Australians aged over 14 years, had drunk alcohol in the previous 12 months. The NDSHS also found that around 20% of Australians drank alcohol at risky or high risk levels (with more males than females drinking at risky or high risk levels) [2, 3].

The health and social costs of alcohol use are high. In 2004-5, the total cost of drug use in Australia was around \$55 billion, with alcohol use alone accounting for around \$15 billion, and alcohol use combined with the use of illicit drugs adding a further \$1 billion [4].

In 2003, it was estimated that alcohol was responsible for around 3% of ill-health and early death (the burden of disease) [5]. It has been estimated that the burden of disease associated with alcohol use by Indigenous Australians is almost double that of the general Australian population (around 6%) [6].

Indigenous Australians are aware of the costs of alcohol and have been actively involved in dealing with harmful alcohol use in their communities.

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More detailed information about alcohol in Indigenous people can be found at:

[http://www.healthinonet.ecu.edu.au/alcoholuse\\_review](http://www.healthinonet.ecu.edu.au/alcoholuse_review)

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## What is the problem?

Alcohol use can cause harm to the user and to others. Harms resulting from alcohol use are experienced by people diagnosed with a drinking problem and by people without a diagnosis [7].

### SOURCES OF INFORMATION - HOW MUCH IS DRUNK AND WHO IS DRINKING IT?

Alcohol sales figures tell us how much alcohol is drunk in Australia, but they do not tell us how much alcohol individuals and different population groups (such as women or Indigenous Australians) are drinking [8-11]. Surveys are our best way of getting this information.

Since 1985, when the National Drug Strategy was introduced, a 3 yearly National Drug Strategy Household Survey (NDSHS) or similar survey has been conducted [2, 12, 13]. These surveys can tell us how many people in Australia drink alcohol and how much alcohol they drink [2, 8]. These surveys do identify Indigenous Australians but the number of Indigenous people is too small to provide information on differences between regions and localities [8].

In 1994, the NDSHS carried out a special survey of Indigenous Australians residing in urban areas with populations of more than 1000 people [14]. This is the most comprehensive alcohol and other drug-specific survey undertaken among Indigenous Australians.

Information on alcohol use among Indigenous Australians is also available from the National Aboriginal and Torres Strait Islander Social Survey (NATSISS) and the National Aboriginal and Torres Strait Islander Health Survey (NATSIHS) [15, 16].

### LEVELS OF ALCOHOL USE

The National Health and Medical Research Council (NHMRC) have issued drinking guidelines aimed at reducing alcohol-related harm [3, 17, 18]. Risky use, as identified by the NHMRC, has been used to evaluate survey information to estimate levels of harmful alcohol use in the community.

Table 1 shows the percentage of recent substance use, by Indigenous status, for persons aged over 14 years in 2004 [19, 20]. The percentage of the Indigenous population drinking alcohol in a way that it is harmful to their health is about twice the percentage of the non-Indigenous population.

In most surveys, the percentage of 'recent' abstainers (those who have not used alcohol in the past 12 months) is higher among the Indigenous population than the non-Indigenous population [2, 14, 15, 19, 21]. The higher percentage of

abstainers in the Indigenous population is due to the higher percentage of people who used to drink but have given up - often because of the harmful effects of alcohol use [21, 22].

*Table 1. Current substance use (previous 12 months), percentage of persons aged >14 years, by Aboriginal status, 2004*

Substance	Aboriginal	Non-Aboriginal
Tobacco	52.0	22.5
Alcohol		
Abstainer	21.3	16.1
Short-term high risk	52.0	35.5
Long-term high risk	22.7	9.7
Cannabis	23.0	11.3
Meth/amphetamines	7.0	3.2
Pain killers/analgesics (non-medical use)	6.0	3.1
Inhalants (including petrol)	≈ 1.0	0.4
Heroin	≈ 0.5	0.2
Injected drugs	≈ 3.0	0.4

Source: AIHW 2005, 2006. [19, 20]

Note: \*Data for NSW, Vic, Qld, WA, SA and NT combined

### PATTERNS OF ALCOHOL-RELATED HARM

Indigenous Australians experience harms associated with alcohol use, including deaths and hospitalisations, much more often than other Australians [2].

The harmful use of alcohol is also a contributing factor in a wide range of social problems including:

- violence
- social disorder
- family breakdown
- child neglect
- loss of income including the loss of income due to the purchase of alcohol and other drugs
- high levels of imprisonment [2, 23]

### Alcohol-related deaths (mortality)

Indigenous Australians die earlier than non-Indigenous Australians as a consequence of harmful alcohol use and alcohol-related conditions. Approximately 7% of Indigenous Australian deaths are alcohol-related [2, 24]. The percentage of Indigenous Australians dying from alcohol-related causes is between five and 19 times higher than for non-Indigenous Australians in Qld, SA, WA and the NT [23].

Intentional harm causing injury or death to self also occurs at higher rates among Indigenous Australians. Alcohol plays an important role in this difference and it has been estimated that alcohol is associated with 40% of Indigenous male and 30% of Indigenous female suicides [23, 25]. Between 2000 and 2004, there were similar numbers of Indigenous and non-Indigenous suicides where alcohol was a key factor. When you consider that Indigenous Australians only make up about 3% of the total Australian population there is a clear over representation of Indigenous people in these numbers [25].

### **Alcohol-related sickness (morbidity)**

The higher percentage of Indigenous Australians drinking at risky and high-risk levels is also seen in the higher percentage of alcohol-related hospital admissions for this population.

In 2005-06, hospital admissions in NSW, Vic, Qld, WA and the NT, showed admissions for alcohol-related injury from traffic accidents among Indigenous Australians were 20% and 30% higher for males and females than those experienced by non-Indigenous Australians [2]. In the case of assault, 50% were alcohol-related and Indigenous Australian men and women were hospitalised around 6 and 33 times more than non-Indigenous Australians [2, 26].

Additionally, Indigenous Australians visit their general practitioner for 'alcohol abuse' nearly 3 times more than non-Indigenous Australian patients, further evidence of the burden on health of harmful alcohol use [27].

### **Social and emotional wellbeing**

Excessive alcohol use has been involved in a wide range of social and emotional harms. For example, of those people in the general Australian population with an alcohol use problem (4% of females and 9% of males) just under half of the females and just over one third of the males also experienced another mental health problem (comorbidity) [28]. It is likely that more Indigenous Australians with an alcohol use problem would also have another mental health problem [29].

After accounting for the difference in the age structure of the Indigenous population compared with the non-Indigenous population, the evidence shows that in NSW, Vic, Qld, WA, SA and the NT combined, Indigenous Australian men and women were hospitalised for mental health problems related to psychoactive substance use 4.5 and 3.3 times more than non-Indigenous males and females [30]. The burden of ill-health due to alcohol dependence and harmful use is also 4.5 times greater than that experienced by non-Indigenous Australians [6].

Harmful alcohol use has also been associated with social disruption [31], family violence and breakdown [32-34], child abuse and neglect [35-37], income being used to fund alcohol, and very high levels of imprisonment [33, 38-41].

## **What are the causes of the problem?**

### **SOCIAL DETERMINANTS OF HEALTH AND HARMFUL ALCOHOL USE**

Differences in the health status of individuals exist because of inequalities in society [42]. The 'lifestyle' choices of individuals influence their health status (such as activity levels and diet), but it is the broader influences of society that are often outside of an individual's control that either cause or protect against ill-health [9, 43-45]. These broader influences are known as the social determinants of health and include education, employment, income, and social forces of inclusion and exclusion. These social determinants exist at the family, local, regional, national and international level – and they influence an individual's health throughout life [46].

Addressing the social determinants of health, that is, promoting those factors known to protect against ill-health and reducing those factors that contribute to ill-health, is the best way to improve the health of individuals [47].

Inquiries since the late 1970s have emphasised a link between the social determinants of health and the poor health status experienced by Indigenous Australians [33, 48, 49]. These inquiries have recommended the creation of strategies that target the poor environmental, social and economic conditions under which most Indigenous Australians live [23, 50]. There has been some improvement in a number of social determinants, but Indigenous Australians continue to be disadvantaged compared with non-Indigenous Australians [23, 50, 51]. Many Australian reports have identified a relationship between alcohol and other drug use with socioeconomic factors such as education, employment and low income [47, 52]. Within the Indigenous Australian population lower levels of alcohol use have been shown to be related to higher levels of income [30, 53].

### **WHAT IS THE HISTORICAL BACKGROUND?**

Current patterns of alcohol use among Indigenous Australians – and the factors that decide those patterns – need to be placed in the historical context that they have



come from to be understood. Indigenous Australians had some exposure to alcohol prior to European contact [54, 55], but the amount and availability of alcohol increased significantly following the arrival of the 'First Fleet' [56]. White settlers used alcohol in exchange for sex and labour with Indigenous Australians and the harmful effects of alcohol on the lives of Indigenous Australians soon became obvious [57]. Alcohol became a 'cure-all' for Indigenous people's pain, with many using it to cope [55] with the devastation of being ruled by white settlers, including the loss of country [58], and illness and death resulting from disease and confrontation [59, 60].

### Restricting access to alcohol

Laws restricting Indigenous Australians access to alcohol first came into force in the late 19th century, and had been passed in all states and territories by the early 20th century [55]. These laws placed Indigenous Australians under strict watch and excluded them from hotels (which were important centres of social activity) but did little to reduce access to alcohol. Non-Indigenous people profited from the illegal sale of alcohol to Indigenous Australians, and Indigenous Australians developed riskier drinking patterns for fear of being caught [61-63].

Indigenous access to alcohol became a civil rights matter, and from the 1960s states and territories put an end to the laws [64]. Unfortunately, the risky drinking patterns established under the restrictions continued and still have a major impact on the health of Indigenous Australians today [65].

### DISPOSSESSION AND THE STOLEN GENERATIONS

The social determinants underlying the past and current health status of Indigenous Australians include a history of removal from country, racism, social exclusion and a legal framework supporting removal of children from families. While white rule and loss of country are not the cause of all alcohol-related harm among Indigenous Australians, drinking patterns are a response to this history, as found among other indigenous peoples [66].

In 1788, when the British arrived in Australia they declared it to be terra nullius or 'empty land' [67]. As settlement spread throughout Australia, widespread displacement of Indigenous peoples from the lands they had occupied for at least 60,000 years occurred. As a result of both introduced disease and violence the numbers of Indigenous Australians fell sharply and it was believed that they were doomed to

die out. A policy of 'protecting' the remaining population was introduced. Under this policy, many were placed in missions or taken to government settlements where they lost all independence because of laws that controlled where and how they could live [68].

By the 1920s the Indigenous population was increasing and, following World War II, the Commonwealth Government introduced a policy under which Indigenous Australians were to become as one ('assimilated') with the white population and its way of life [69]. The policy talked about including Indigenous people in the Australian population, but really it was still believed that Aboriginality would meet a timely end [69, 70]. Part of the policy involved the forced removal of children from their families - now known as the Stolen Generations [71]. The policy of assimilation had a devastating impact on Aboriginal families and ways of life, and the effects of this are still felt today. This includes the high level of mental health problems experienced by Indigenous Australians, and the lack of parenting models resulting in unacceptably high levels of child abuse and neglect [71, 72].

### MORE RECENT POLICIES

From the early 1970s through to the mid-1990s, government policies moved away from assimilation to self-determination (self-management). The Indigenous rights movement and the self-determination policies saw the rise of national Indigenous representative groups and community-controlled health and substance use services [73, 74]. During the 1990s, the Council for Aboriginal Reconciliation was established and the Aboriginal Reconciliation Act passed (1991).

The Liberal-National Government of 1996-2007, moved away from the principle of self-determination to an emphasis on national unity and a concept of togetherness [75]. The focus was on 'practical' measures for addressing disadvantage [76].

In 1997, the Bringing Them Home report detailed the suffering of the Stolen Generations and the terrible impact previous policies had had on the health and well-being of Indigenous Australians [71]. However, in 2007, the NT 'Intervention' [77] (the Liberal Government's response to the Little Children are Sacred report [36] on child abuse in Indigenous communities) was introduced without enough discussion with, and involvement of, Aboriginal people. The NT 'Intervention' required sections of the Racial Discrimination Act to be over-ridden in order to make it legal [78-80].

In 2007, the Labor Government came to power and committed itself to 'Closing the Gap' between Indigenous and non-Indigenous Australians (essentially the policy of all Australian governments since the 1970s) [81]. In February 2008, the Prime Minister gave a formal apology to Indigenous Australians for the past wrongs committed against them through the policies of former governments [82]. The apology intended to mark a new era of understanding and partnership between Government and Indigenous Australians in which practical goals could be achieved.

## What is being done?

### INTERVENTIONS AND THEIR EFFECTIVENESS

The current policy for targeting harmful alcohol use in Australia - The National Alcohol Strategy 2006-2009 - aims to 'prevent and minimise alcohol-related harm to individuals, families and communities by developing safer and healthy drinking cultures in Australia' [83].

Prevention strategies include primary, secondary and tertiary strategies, and a combination of all three is likely to be the most successful in minimising harm from alcohol use. There is a lot of knowledge about how to prevent harmful alcohol use among the general population [47]. When general programs are changed to ensure that they are culturally appropriate, in discussion with local communities and Indigenous organisations, they are likely to be helpful for Indigenous Australians [45, 84, 85].

#### PRIMARY PREVENTION

Primary prevention strategies aim to stop people from drinking in the first place. Primary prevention strategies begin with care before and after birth, and include programs that educate parents-to-be on the risks of alcohol to the unborn child (such as Fetal Alcohol Syndrome and Fetal Alcohol Spectrum Disorder), and provide support to parents with new babies [7]. They also include programs that support the child when starting school [47]. International evidence has shown the importance of the early years in the later health and social development of a child [86]. The best way to help children become healthy adults is to use strategies that focus on the key social determinants of positive family functioning and education [87]. However, while there are such strategies in place [88-90], few Australian studies - and even less Indigenous Australians studies - have been evaluated [47].

Primary prevention strategies also include school and parent education programs, and programs that provide alternative activities to alcohol use - such as sporting, recreational and cultural activities. Indigenous communities in Australia have identified the importance of these types of programs in encouraging positive family relationships, and in developing young people's self-worth and cultural connectedness - factors shown to protect against substance use [9, 91].

Limiting the supply of alcohol is another primary prevention strategy. International evidence has shown that restrictions of the supply of alcohol and other drugs are effective in reducing use and harms [47]. In addition to the various state and territory restrictions on the sale of alcohol (such as who can sell alcohol and at what times, at what age a person can purchase alcohol, and where it can and cannot be drunk) there are other local strategies that the state and territory liquor licensing authorities introduce - including restrictions on the sale of drinks that are low in cost but high in alcohol content (such as cask wine), restrictions on hours of trading, and bans on drinking alcohol in particular public places [24, 92]. These strategies are not Indigenous-specific but are often applied in areas where there are a high percentage of Indigenous people [9]. In addition, Indigenous people have declared their communities 'dry'. These strategies have resulted in less alcohol being drunk, young people being older when they first use alcohol and reductions in alcohol-related harms [93, 94].

#### SECONDARY PREVENTION

Secondary prevention strategies aim to prevent risky or problem drinking, and stop use developing into dependence (addiction) [95]. These strategies are normally provided through Aboriginal community controlled health and substance-use specific services, and through mainstream medical and substance-use specific services.

Brief interventions are an important part of secondary prevention. These strategies include education about alcohol-related harms and recommended drinking guidelines, and support and advice for those trying to reduce or stop use [7]. Australian evidence shows that brief interventions used with non-Indigenous Australians may be more effective than longer treatments for those who are not alcohol dependent [7]. The same may be true for Indigenous Australians if the brief interventions are delivered in a culturally sensitive, respectful, and non-judgemental manner [7, 85]. There is little evidence to show that screening for harmful alcohol use among Indigenous

Australians is useful, but a number of screening tools have been adapted so they can be used in Indigenous settings, including the IRIS and AUDIT-C, and they may help in the earlier detection of alcohol problems within this population [96, 97].

The evidence for the usefulness of education and health promotion strategies is uncertain for non-Indigenous and Indigenous Australians [47]. These approaches are popular - partly because they are low cost - but it is recommended that these strategies are delivered in combination with other strategies [7].

Alcohol-specific harm reduction strategies deal with the immediate harm caused by drunkenness and include night patrols and sobering-up shelters. In some cases a reduction of these harms is considered more important than the actual substance use [45]. A small number of reviews and reports of night patrols in the NT [98, 99] and WA [100] show night patrols can reduce alcohol-specific harm [45, 100].

## TERTIARY PREVENTION

The main focus of tertiary prevention is treatment for harmful alcohol use. In the general population, treatment can lead to positive outcomes such as reductions in criminal behaviour, reduced drug use and improved physical and psychological health [47, 101]. Research shows that any form of treatment is likely to lead to a reduction in alcohol use and related harm [102].

Indigenous Australians seek treatment for alcohol-related problems at a later stage than non-Indigenous Australians and often have other mental health problems. Planned treatment programs are common [47, 85]. Programs include:

- helping people remove alcohol from their system (withdrawal management)
- mental and physical strategies to help people stop using (cognitive behavioural therapies)
- brief support and advice about alcohol use (brief interventions)
- sobering-up in hospital (inpatient detoxification)
- preparation for life without alcohol (residential rehabilitation)
- help adjusting to life without alcohol (aftercare services) [7]

There is a lack of evidence about treatment strategies for Indigenous Australians [45, 103, 104] because few programs have been formally evaluated [45, 84]. However, guidelines now exist for the treatment of Indigenous people with

alcohol-related health issues and more is known about what contributes to effective treatment among Indigenous Australians [85, 99, 103, 105, 106].

## BARRIERS TO TREATMENT

Indigenous Australians are not accessing or do not have access to the full range of treatment services. In particular, the availability of early intervention strategies, drug therapies to reduce drinking setbacks and aftercare services are limited. Services (Indigenous and mainstream) are also lacking for clients who have mental health issues in addition to harmful alcohol use (comorbidities), and for women, young people, and families [9, 85].

Many mainstream services are not accessed by Indigenous Australians because they are considered inappropriate or are not available in particular areas [7, 9, 85]. However, some Indigenous Australians prefer the anonymity offered by mainstream services because of the 'shame' associated with harmful alcohol use [107]. Mainstream services need to be culturally suitable and accessible for Indigenous Australians [85]. This may include the employment of Indigenous staff in mainstream organisations and/or partnerships with Indigenous organisations [85, 107].

Aboriginal community-controlled organisations offering Indigenous-specific alcohol and other drug interventions are limited by a lack of resources, short-term funding, difficulty attracting qualified and trained staff, and trouble accessing training and workforce development for staff [9]. Community-control alone is not enough if an organisation is under-resourced and inadequately staffed, and these limitations need to be addressed [9].

## What works?

Indigenous Australians are well aware of the devastating impact alcohol is having on their communities and many strategies to address harmful alcohol use have come from Indigenous Australians. Indigenous Australians should be key players in the design and operation of strategies to address harmful alcohol use; and the effectiveness of Aboriginal community-controlled organisations needs to be a key focus [9, 47, 84]. As community-controlled organisations are not always accessible or preferred by Indigenous Australians, mainstream organisations need help to provide culturally sensitive services. These organisations should work in partnership with Indigenous organisations [85].

There is no single solution to the harms associated with alcohol use and given the lack of evaluations of Indigenous-specific alcohol use interventions [45, 108], decisions about the type of strategies to use may need to continue to come from observed assessments, or evidence from other populations and settings [96]. What the available evidence does show is that for interventions to be effective they should:

- have the support of and be controlled by local communities
- be designed specifically for the needs of a particular community and sub-groups within the community
- be culturally sensitive and appropriate
- have adequate funding and support
- provide aftercare
- meet the needs of difficult cases

Most importantly, a combination of harm minimisation strategies is most effective.

## What needs to be done?

Despite what is being done, a lot of harm remains. Past governments have acknowledged the influence of social factors on ill-health and substance use and have committed to Closing the Gap [81]. However, Australia's Indigenous health policy has not been developed alongside employment, education and housing strategies. As a result, improvements in health have been off-set by the continuing poor living and social conditions experienced by many Indigenous Australians. Recently, the Council of Australian Governments (COAG) identified seven essential 'building blocks' that must be in position to address Indigenous disadvantage. These include a focus on:

- healthy homes
- safe communities
- improved health
- early childhood
- schooling
- economic participation, and
- the creation of opportunities for leadership and governance

This represents a clear recognition of the connection between the underlying social determinants and health status.

The National Alcohol Strategy [83], Alcohol Treatment Guidelines [85, 104] and the National Drug Strategy Aboriginal and Torres Strait Islander Peoples Complementary Action Plan 2003-2009 (CAP) [106] provide an evidence-based framework for addressing harmful alcohol use among Indigenous Australians. The six key result areas identified in the CAP provide useful benchmarks for assessing current services and planning for future programs [106].

A recent report on organisations conducting Indigenous-specific alcohol and other drug services in Australia [9] found that several of the key result areas are not being met and recommended:

- all levels of government recommit to the principle of community-control
- the creation of services to meet the needs of sub-groups within the Indigenous Australian population
- improved access for Indigenous Australians to a wide range of Indigenous-specific interventions
- better access to workplace development and training, and
- incentives for Indigenous Australians to enter into education which will prepare them for work in the alcohol and other drug sphere [9]

There has been some reduction in the levels of harmful alcohol use among the non-Indigenous Australian population, but harmful alcohol use among Indigenous Australians remains high. A two-pronged strategy is needed to reduce alcohol-related harms among Indigenous Australians.

Firstly, a recommitment to the key result areas outlined in the CAP [9]. The policy framework shared by the National Alcohol Strategy, the National Drug Strategy and the CAP provides an evidence-based guide for Australia's response to the harmful level of alcohol use among Indigenous Australians and can guide Indigenous and mainstream organisations providing these services. Mainstream organisations need to be familiar with the above frameworks, and the design and delivery of services should be culturally sensitive and occur in consultation and partnership with Indigenous organisations.

Secondly, the role of the social determinants of health in the alcohol-related harms experienced by Indigenous Australians need to be addressed [42]. Wide-ranging strategies are needed that improve protective factors in addition to addressing the harms from substance use [9].

# References

1. Alcohol and other drugs: a handbook for professionals (2004) National Centre for Education and Training on Addiction (NCETA) Consortium
2. Australian Institute of Health and Welfare (2008) 2007 national drug strategy household survey: first results. Canberra: Australian Institute of Health and Welfare
3. National Health and Medical Research Council (2001) Australian alcohol guidelines. Health risks and benefits. Canberra: National Health and Medical Research Council
4. 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
5. Begg S, Vos T, Barker B, Stevenson C, Stanley L, Lopez A (2007) The burden of disease and injury in Australia 2003. Canberra: Australian Institute of Health and Welfare
6. Vos T, Barker B, Stanley L, Lopez A (2007) The burden of disease and injury in Aboriginal and Torres Strait Islander peoples 2003. Brisbane: Centre for Burden of Disease and Cost-Effectiveness, University of Queensland
7. 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
8. Chikritzhs T, Brady M (2006) Fact or fiction?: a critique of the National Aboriginal and Torres Strait Islander Social Survey 2002. *Drug and Alcohol Review*; 25(3): 277-287
9. Gray D, Stearne A, Wilson M, Doyle M (2010) Indigenous-specific alcohol and other drug interventions: continuities, changes and areas of greatest need. Canberra: Australian National Council on Drugs
10. Knibbe RA, Bloomfield K (2001) Alcohol consumption estimates in surveys in Europe: comparability and sensitivity for gender differences. *Substance Abuse*; 22(1): 23-38
11. Dawson DA (2000) Alcohol consumption, alcohol dependence, and all-cause mortality. *Alcoholism: Clinical and Experimental Research*; 24(1): 72-81
12. Williams P (1999) National Drug Strategy Household Survey, 1998: user's guide for the machine-readable data file. Canberra: Australian National University Social Science Data Archives
13. Australian Social Science Data Archive (1986) Social issues in Australia, 1985. Canberra: Australian National University Social Science Data Archive
14. Commonwealth Department of Human Services and Health (1996) National Drug Strategy Household Survey: urban Aboriginal and Torres Strait Islander peoples supplement 1994. Canberra: Commonwealth Department of Human Services and Health
15. Australian Bureau of Statistics (2004) National Aboriginal and Torres Strait Islander Social Survey, 2002. Canberra: Australian Bureau of Statistics
16. Australian Bureau of Statistics (2006) National Aboriginal and Torres Strait Islander Health Survey: Australia, 2004-05. Canberra: Australian Bureau of Statistics
17. Pols RG, Hawks DV (1992) Is there a safe level of daily consumption of alcohol for men and women? Recommendations regarding responsible drinking behaviour. Canberra: National Health and Medical Research Council
18. National Health and Medical Research Council (2009) Australian guidelines to reduce health risks from drinking alcohol. Canberra: National Health and Medical Research Council
19. Australian Institute of Health and Welfare (2005) 2004 National Drug Strategy Household Survey: detailed findings. Canberra: Australian Institute of Health and Welfare
20. Australian Institute of Health and Welfare (2007) Statistics on drug use in Australia 2006. Canberra: Australian Institute of Health and Welfare
21. Commonwealth Department of Health, Housing, Local Government and Community Services (1993) 1993 National Drug Household Survey. Canberra: Australian Government Publishing Service
22. Brady M, ed. (1995) Giving away the grog: Aboriginal accounts of drinking and not drinking. Canberra: Drugs of Dependence Branch, Department of Human Services and Health
23. Steering Committee for the Review of Government Service Provision (2009) Overcoming Indigenous disadvantage: key indicators 2009. Canberra: Productivity Commission, Australia
24. Chikritzhs T, Pascal R, Gray D, Stearne A, Siggers S, Jones P (2007) Trends in alcohol-attributable deaths among Indigenous Australians, 1998-2004. Perth: National Drug Research Institute
25. 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
26. Ridolfo B, Stevenson C (2001) The quantification of drug-caused mortality and morbidity in Australia, 1998. Canberra: Australian Institute of Health and Welfare
27. Australian Institute of Health and Welfare (2008) Aboriginal and Torres Strait Islander health performance framework, 2008 report: detailed analyses. Canberra: Australian Institute of Health and Welfare
28. Teesson M, Hall W, Lynskey M, Degenhardt L (2000) Alcohol- and drug-use disorders in Australia: implications of the National Survey of Mental Health and Wellbeing. *Australian and New Zealand Journal of Psychiatry*; 34(2): 206-213
29. Hunter E (2003) Mental health. In: Thomson N, ed. The health of Indigenous Australians. South Melbourne: Oxford University Press: 127-157
30. Australian Bureau of Statistics, Australian Institute of Health and Welfare (2008) The health and welfare of Australia's Aboriginal and Torres Strait Islander Peoples 2008. Canberra: Australian Bureau of Statistics and Australian Institute of Health and Welfare
31. Shore JH, Spicer P (2004) A model for alcohol-mediated violence in an Australian Aboriginal community. *Social Science & Medicine*; 58: 2509-2521

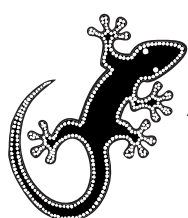


32. Brady M (1986) A social analysis of drinking and its aftermath in a remote Aboriginal community. In: Bush RA, ed. *Exploring the Alcohol and Drug Crime link: society's response*. Canberra: Australian Institute of Criminology;
33. Johnston E (1991) *Royal Commission into Aboriginal Deaths in Custody: national report: overview and recommendations*. Canberra: Australian Government Publishing Service
34. Meuleners LB, Lee AH, Hendrie D, Fraser M (2010) A population study on Indigenous hospitalisations for interpersonal violence. *Australian Health Review*; 34(1): 123-126
35. Frances K, Hutchins T, Saggars S, Gray D (2008) Group analysis of Aboriginal child death review cases in which chronic neglect is present. Perth: National Drug Research Institute
36. Northern Territory Board of Inquiry into the Protection of Aboriginal Children from Sexual Abuse (2007) *Ampe akelyernemane meke mekarle: little children are sacred*. Darwin: Northern Territory Government
37. Zubrick SR, Silburn SR, Lawrence DM, Mitrou FG, Dalby RB, Blair EM, Griffin J, Milroy H, De Majo JA, Cox A, JL (2005) *The social and emotional wellbeing of Aboriginal children and young people: summary booklet*. Perth: Telethon Institute for Child Health Research and Curtin University of Technology
38. Australian Institute of Criminology (2009) *Indigenous imprisonment rates*. Crime Facts Info; (195):
39. Joudo J (2008) *Responding to substance abuse and offending in Indigenous communities: review of diversion programs*. Canberra: Australian Institute of Criminology
40. National Indigenous Drug and Alcohol Committee (2009) *Bridges and barriers: addressing Indigenous incarceration and health*. Canberra: Australian National Council on Drugs
41. Putt J, Payne J, Milner L (2005) *Indigenous male offending and substance abuse*. Canberra: Australian Institute of Criminology
42. Marmot M (2005) Social determinants of health inequalities. *The Lancet*; 365(9464): 1099-1104
43. World Health Organization (2000) *International guide for monitoring alcohol consumption and related harm*. Geneva: Department of Mental Health and Substance Dependence, Noncommunicable Diseases and Mental Health Cluster, World Health Organization.
44. Saggars S, Gray D (2007) Defining what we mean. In: Carson B, Dunbar T, Chenhall RD, Bailie R, eds. *Social determinants of Indigenous health*. Crows Nest, NSW: Allen and Unwin: 1-20
45. Gray D, Saggars S (2005) The evidence base for responding to substance misuse in Indigenous minority populations. In: Stockwell T, Gruenewald P, Toumbourou J, Loxley W, eds. *Preventing harmful substance use: the evidence base for policy and practice*. West Sussex: John Wiley & Sons Ltd: 381-393
46. Lynch J (2000) Social epidemiology: some observations about the past, present and future. *Australasian Epidemiologist*; 7(3): 7-15
47. Loxley W, Toumbourou JW, Stockwell T, Haines B, Scott K, Godfrey C, Waters E, Patton G, Fordham R, Gray D, Marshall J, Ryder D, Saggars S, Sancil 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
48. House of Representatives Standing Committee on Aboriginal Affairs, Ruddock PM (1979) *Aboriginal Health: report from the House of Representatives Standing Committee on Aboriginal Affairs*. Canberra: The Parliament of the Commonwealth of Australia
49. National Aboriginal Health Strategy Working Party (1989) *A national Aboriginal health strategy*. Canberra: Department of Aboriginal Affairs
50. Australian Bureau of Statistics (2009) *National Aboriginal and Torres Strait Islander social survey, 2008*. Retrieved 11 April 2011 from <http://www.abs.gov.au/ausstats/abs@.nsf/mf/4714.0?OpenDocument>
51. Australian Bureau of Statistics (2006) *Education of Aboriginal and Torres Strait Islander children and young people*. In: *Australian Social Trends, 2006*. Canberra: Australian Bureau of Statistics:
52. Stockwell T, Gruenewald P, Toumbourou J, Loxley W, eds. (2005) *Preventing harmful substance use : the evidence base for policy and practice*. Chichester: John Wiley & Sons
53. Thomas DP, Briggs V, Anderson IPS, Cunningham J (2008) Social determinants of being an Indigenous non-smoker. *Australian and New Zealand Journal of Public Health*; 32(2): 110-116
54. Brady M (1991) Drug and alcohol use among Aboriginal people. In: Reid J, Trompf P, eds. *The health of Aboriginal Australia*. Marrickville, NSW: Harcourt Brace Jovanovich Group [Australia] Pty Ltd: 173-217
55. Saggars S, Gray D (1998) *Dealing with alcohol: Indigenous usage in Australia, New Zealand and Canada*. Melbourne: Cambridge University Press
56. Lewis M (1992) *A rum state: alcohol and state policy in Australia 1788-1988*. Canberra: Australian Government Publishing Service
57. Langton M (1993) Rum, seduction and death: 'Aboriginality and alcohol'. *Oceania*; 3(1): 195-207
58. Reynolds H (1982) *The other side of the frontier: Aboriginal resistance to the European invasion of Australia*. Ringwood, Victoria: Penguin Books
59. Kunitz S (1994) *Disease and social diversity: the European impact on the health of non-Europeans*. New York: Oxford University Press
60. Saggars S, Gray D (1991) *Aboriginal health and society: the traditional and contemporary Aboriginal struggle for better health*. North Sydney: Allen and Unwin
61. Beckett J (1964) *Aborigines, alcohol and assimilation*. In: Reay M, ed. *Aborigines now*. Sydney: Angus & Robertson:
62. 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:
63. 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
64. Martin D, Brady M (2004) Human rights, drinking rights?: alcohol policy and Indigenous Australians. *Lancet*; 364(9441): 1282-3
65. Brady M (2004) *Indigenous Australia and alcohol policy: meeting difference with indifference*. Sydney: University of New South Wales Press

66. 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
67. Reynolds H (1992) *The law of the land*. 2nd ed. Ringwood, Vic: Penguin
68. Haebich A (1988) *For their own good : Aborigines and government in the southwest of Western Australia, 1900-1940*. Nedlands, WA: University of Western Australia Press
69. Moran A (2005) White Australia, settler nationalism and Aboriginal assimilation. *Australian Journal of Politics & History*; 51(2): 168-193
70. Rowley CD (1970) *The destruction of Aboriginal society*. Canberra: Australian National University Press
71. National Inquiry into the Separation of Aboriginal and Torres Strait Islander Children from their Families (1997) *Bringing them home: report of the National Inquiry into the Separation of Aboriginal and Torres Strait Islander Children from their Families*. Retrieved 17 November 2011 from [http://www.humanrights.gov.au/pdf/social\\_justice/bringing\\_them\\_home\\_report.pdf](http://www.humanrights.gov.au/pdf/social_justice/bringing_them_home_report.pdf)
72. Brady M, Sibthorpe B, Bailie R, Ball S, Sumnerdodd P (2002) The feasibility and acceptability of introducing brief intervention for alcohol misuse in an urban Aboriginal medical service. *Drug and Alcohol Review*; 21(4): 375-380
73. Chenhall RD (2007) *Benelong's Haven: recovery from alcohol and drug abuse within an Aboriginal Australian residential treatment centre*. Carlton, VIC: Melbourne University Press
74. Augoustinos M, Lecouteur A, Soyland J (2002) Self-sufficient arguments in political rhetoric: constructing reconciliation and apologizing to the stolen generations. *Discourse & Society*; 13(1): 105-142
75. Sanders W (2002) *Towards an Indigenous order of Australian government: rethinking self-determination as Indigenous affairs policy*. Canberra: Centre for Aboriginal Economic Policy Research
76. Northern Territory National Emergency Response Act 2007 (2008) Commonwealth of Australia
77. Brown A, Brown NJ (2007) Northern Territory intervention: voices from the centre of the fringe. *Medical Journal of Australia*; 187(11/12): 621-623
78. Central Land Council (2008) *Reviewing the Northern Territory Emergency Response: perspectives from six communities*. Alice Springs: Central Land Council
79. Combined Aboriginal Organisations of the Northern Territory (2007) *A proposed Emergency Response and Development Plan to protect Aboriginal children in the Northern Territory: a preliminary response to the Australian Government's proposals*. Darwin: Combined Aboriginal Organisations of the Northern Territory
80. Altman J (2009) *Beyond closing the gap: valuing diversity in Indigenous Australia*. Paper presented at the Values and Public Policy: Fairness, Diversity and Social Change. 26-27 February 2009, Melbourne
81. Rudd KM (2008) *Apology to Australia's Indigenous peoples*. Paper presented at the House of Representatives. 13 February 2008, Parliament House, Canberra
82. Ministerial Council on Drug Strategy (2006) *National Alcohol Strategy 2006-2009: towards safer drinking cultures*. Canberra: Ministerial Council on Drug Strategy
83. Gray D, Saggers S, Sputore B, Bourbon D (2000) What works? A review of evaluated alcohol misuse interventions among Aboriginal Australians. *Addiction*; 95(1): 11-22
84. Haber P, Lintzeris N, Proude E, Lopatko O (2009) *Guidelines for the treatment of alcohol problems*. Canberra: Department of Health and Ageing, Australia
85. Schonkoff J, Phillips D, eds. (2000) *From neurons to neighborhoods : the science of early childhood development*. Washington: National Academy Press
86. Stockwell T, Gruenewald P, Toumbourou J, Loxley W (2005) Preventing risky drug use and related harms: the need for a synthesis of new knowledge. In: Stockwell T, Gruenewald P, Toumbourou J, Loxley W, eds. *Preventing harmful substance use : the evidence base for policy and practice*. Chichester: John Wiley & Sons
87. Campbell S, Brown S (2004) Maternity care with the Women's Business Service at the Mildura Aboriginal Health Service. *Australian and New Zealand Journal of Public Health*; 28(4): 376-382
88. Mackerras D (2001) Birthweight changes in the pilot phase of the Strong Women Strong Babies Strong Culture Program in the Northern Territory. *Australian and New Zealand Journal of Public Health*; 25(1): 34-40
89. Panaretto KS, Lee HM, Mitchell MR, Larkins SL, Manassis V, Buettner PG, Watson D (2005) Impact of a collaborative shared antenatal care program for urban Indigenous women: a prospective cohort study. *Medical Journal of Australia*; 182(10): 514-519
90. 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
91. 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
92. d'Abbs P, Togni S (2000) Liquor licensing and community action in regional and remote Australia: a review of recent initiatives. *Australian and New Zealand Journal of Public Health*; 24(1): 45-53
93. Margolis SA, Ypinazar VA, Muller R (2008) The impact of supply reduction through alcohol management plans on serious injury in remote Indigenous communities in remote Australia: a ten-year analysis using data from the Royal Flying Doctor Service. *Alcohol and Alcoholism*; 43(1): 104-110
94. Rowland B, Toumbourou JW (2004) *Preventing drug-related harm in Indigenous Australian communities: prevention research evaluation report; prevention research summaries: reading and resource list*. Melbourne: DrugInfo Clearinghouse
95. 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

- 
96. 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
  97. Mosey A (1994) Central Australian night patrols: a review. Alice Springs: Drug and Alcohol Services Association
  98. Strempe P, Saggars S, Gray D, Stearne A (2003) Indigenous drug and alcohol projects: elements of best practice. Canberra: Australian National Council on Drugs
  99. Sputmore B, Gray D, Bourbon D, Baird K (1988) Evaluation of Kununurra-Waringarri Aboriginal Corporation and Ngnowar-Aerwah Aboriginal Corporation's alcohol projects. Perth: National Centre for Research into the Prevention of Drug Abuse, Curtin University of Technology
  100. Teesson M, Mills K, Ross J, Darke S, Williamson A, Harvard A (2008) The impact of treatment on 3 years' outcome for heroin dependence: findings from the Australian Treatment Outcome Study (ATOS). *Addiction*; 103(1): 80-88
  101. Babor T, Caetano R, Casswell S, Edwards G, et al (2003) *Alcohol : no ordinary commodity : research and public policy*. Oxford: Oxford University Press
  102. *Alcohol treatment guidelines for Indigenous Australians* (2007) Department of Health and Ageing
  103. Shand F, Gates J, Fawcett J, Mattick R (2003) *The treatment of alcohol problems: a review of the evidence*. Canberra: Commonwealth Department of Health and Ageing
  104. Hunter E, Brady M, Hall W (2000) *National recommendations for the clinical management of alcohol-related problems in Indigenous primary care settings*. Canberra: Commonwealth Department of Health and Aged Care
  105. Ministerial Council on Drug Strategy (2003) *National Drug Strategy: Aboriginal and Torres Strait Islander Peoples Complementary Action Plan 2003-2006: action plan*. Canberra: Ministerial Council on Drug Strategy
  106. Teasdale KE, Conigrave KM, Kiel KA, Freeburn B, Long G, Becker K (2008) Improving services for prevention and treatment of substance misuse for Aboriginal communities in a Sydney Area Health Service. *Drug and Alcohol Review*; 27(2): 152-159
  107. Clifford A, Jackson Pulver L, Richmond R, Shakeshaft A, Ivers R (2009) Disseminating best-evidence health-care to Indigenous health-care settings and programs in Australia: identifying the gaps. *Health Promotion International*; 24(4): 404-415
  108. Steering Committee for the Review of Government Service Provision (2010) *Report on government services 2010: Indigenous compendium*. Canberra: Productivity Commission





## Australian Indigenous HealthInfoNet

The Australian Indigenous HealthInfoNet is an innovative Internet resource that contributes to 'closing the gap' in health between Indigenous and other Australians by informing practice and policy in Indigenous health.

Two concepts underpin the HealthInfoNet's work. The first is evidence-informed decision-making, whereby practitioners and policy-makers have access to the best available research and other information. This concept is linked with that of translational research (TR), which involves making research and other information available in a form that has immediate, practical utility. Implementation of these two concepts involves synthesis, exchange and ethical application of knowledge through ongoing interaction with key stakeholders.

The HealthInfoNet's work in TR at a population-health level, in which it is at the forefront internationally, addresses the knowledge needs of a wide range of potential users, including policy-makers, health service providers, program managers, clinicians, Indigenous health workers, and other health professionals. The HealthInfoNet also provides easy-to-read and summarised material for students and the general community.

The HealthInfoNet encourages and supports information-sharing among practitioners, policy-makers and others working to improve Indigenous health – its free on line yarning places enable people across the country to share information, knowledge and experience. The HealthInfoNet is funded mainly by the Australian Department of Health and Ageing. Its award-winning web resource ([www.healthinfo.net.ecu.edu.au](http://www.healthinfo.net.ecu.edu.au)) is free and available to everyone.

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