

Evaluation of the National Drug  
Strategy Aboriginal and Torres Strait  
Islander Peoples Complementary  
Action Plan 2003-2009

Prepared for the Department of Health and Ageing

Background Paper

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National Drug Strategy  
Aboriginal and Torres Strait  
Islander Peoples  
Complementary Action Plan  
Background Paper

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**Rationale for using the term Indigenous Australians**

Aboriginal and Torres Strait Islander peoples have diverse languages, cultures and communities, and live in urban, rural and remote settings.

Many of these groups seek to maintain their particular cultural identity and preferred names as distinct from others. For the purposes of this resource, and in recognition of this diversity we have chosen the term Indigenous Australians as a way of acknowledging all Australian Aboriginal and Torres Strait Islander groups.

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## List of acronyms

ABS	Australian Bureau of Statistics
ADAC	Aboriginal Drug and Alcohol Council
AHW	Aboriginal Health Workers
AIHW	Australian Institute of Health and Welfare
AMS	Aboriginal Medical Service
ANCD	Australian National Council on Drugs
APCA	Aboriginal Protective Custody Apprehensions
CAAC	Central Australia Aboriginal Congress
CAAPS	Council for Aboriginal Alcohol Program Services
CAAPU	Central Australian Aboriginal Alcohol Programs Unit
CACC	Central Australian Aboriginal Congress
CAP	Aboriginal and Torres Strait Islander Peoples Complementary Action Plan
CIAG	Cairns Inhalant Action Group
DASSA	Drug and Alcohol Services South Australia
DHAC	Department of Health and Aged Care (now DoHA)
DAOS	Drugs, Alcohol and Other Substances
DoHA	Department of Health and Ageing
FaHCSIA	Department of Families, Housing, Community Services and Indigenous Affairs
HALT	Healthy Aboriginal Life Team
IRIS	Indigenous Risk Impact Screen
LWA	Living With Alcohol Program
MCDS	Ministerial Council on Drug Strategy
NACCHO	National Aboriginal Community Controlled Health Organisation
NASAS	Noongar Alcohol and Substance Abuse Service
NATSIHS	National Aboriginal and Torres Strait Islander Health Survey
NRHPF	National Rural Health Policy Forum
NSP	Needle and Syringe Programs
OATSIH	Office for Aboriginal and Torres Strait Islander Health
PSPP	Petrol Sniffing Prevention Program

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# 1 Introduction

## 1.1 Objectives of the review

This background paper outlines the patterns of drug and alcohol use of Australian Aboriginal and Torres Strait Islander peoples; as well as strategies in place to address drug and alcohol misuse.

This review supplements the Aboriginal and Torres Strait Islander Peoples Complementary Action Plan (CAP), under the National Drug Strategy 2003-2009. It is an updated version of the Complementary Action Plan Background Paper 2003-09.

### Scope

In developing this review, the following have been examined:

- Census data from the Australian Bureau of Statistics (ABS); demographic data from the Australian Institute of Health and Welfare (AIHW) surveys, the National Aboriginal and Torres Strait Islander Health Survey (NATSIHS) and the National Aboriginal and Torres Strait Islander Social Survey (NATSISS).
- Literature reporting evidence from trials, studies, evaluations, effective strategies and interventions in minimising harm from use of alcohol, tobacco and other drugs among Aboriginal and Torres Strait Islander peoples.
- Relevant national, state/territory, and regional plans about Aboriginal and Torres Strait Islander peoples' health and substance use to identify common principles and strategies for addressing the use of alcohol, tobacco and other drugs in these populations.

Whilst we cite literature from 1994 onwards, wherever possible, literature from 2003 onwards has been included to ensure the reporting of accurate and up-to-date information.

## 1.2 Background

### 1.2.1 The National Drug Strategy 2003-2009

The National Drug Strategy 2003-2009 (NDS) is an integrated policy framework designed to guide the efforts of national and state/territory governments and non-government organisations in preventing the uptake of harmful drug use and reducing the harmful effects of licit and illicit drugs in Australia. The strategy is the umbrella document for national action plans on tobacco, alcohol, illicit drugs and school-based drug education. It is the successor to the National Drug Strategic Framework 2003-2004 and preceding national strategies.

The National Drug Strategy Framework was developed under the direction of the Ministerial Council on Drug Strategy (MCDS). Membership of the Council includes Commonwealth, state and territory ministers responsible for health and law enforcement. Its collective aim is to decide on national policies and programs to reduce the harm caused by drugs to individuals, families and communities in Australia. The National Drug Strategy Framework is a comprehensive document examining drug strategies in Australia, and highlights the contribution of drug use to illness and disease, accident and injury, violence and crime, family and social disruption, and workplace problems.

Under the National Drug Strategy Framework, a series of action plans address the harm caused by tobacco, alcohol and illicit drugs in Australia. They include: the *Aboriginal and Torres Strait Islander Peoples' Complementary Action Plan (CAP)*, the *National School Drug Education Strategy*, the *National Tobacco Strategy*, the *National Action Plan on Illicit Drugs*, and the *National Alcohol Strategy*. The *National Amphetamine-Type Stimulant Strategy 2008-2011* was endorsed in May 2008 and follows the model used for the National Alcohol and Cannabis Strategies. Each plan identifies key areas, strategies and actions for reducing harm arising from the use of licit and illicit drugs.

The principle of harm minimisation has formed the basis of Australia's drug strategy since 1985. 'Harm minimisation' refers to policies and programs designed to reduce drug-related harm. The aim of this approach is to improve health, social, and economic outcomes for both the community and the individual. It encompasses a wide range of strategies, including:

- supply-reduction strategies designed to disrupt the production and supply of illicit drugs
- demand-reduction strategies designed to prevent the uptake of harmful drug use, including abstinence-oriented strategies to reduce drug use
- strategies to provide effective treatment, follow-up and rehabilitation services to people affected by use of alcohol, tobacco and other drugs
- a range of targeted harm-reduction strategies designed to reduce drug-related harm for individuals and communities (MCDS 1998).

### 1.2.2 The Complementary Action Plan (CAP)

In recognition of the particular challenges faced by Aboriginal and Torres Strait Islander peoples, the CAP focuses on identifying strategies for reducing harm arising from the use of all substances, including licit and illicit drugs, inhalants, and kava among Aboriginal and Torres Strait Islander peoples. It provides examples of actions and identifies key action areas that are relevant to specific geographic areas; and proposes performance measures to measure the outcomes of the CAP over its life.

Like the other National Drug Strategy action plans, the CAP is not intended to be prescriptive or to define detailed implementation strategies. Rather, it sets a national direction for reducing harm associated with use of alcohol, tobacco and other drugs among Aboriginal and Torres Strait Islander peoples. It provides an opportunity for communities, non-government organisations, Aboriginal and Torres Strait Islander community-controlled organisations and all levels of government to pursue strategies that are specifically relevant to Aboriginal and Torres Strait Islander peoples and appropriate to their circumstances, needs and aspirations.

This background paper is intended to be read in conjunction with the action plan. It outlines the epidemiological data and expert opinion that has informed the strategies and actions; provides detailed references to sources current to mid-2009; and expands the brief introductory discussions contained in the plan.

The National Drug Strategy Framework suggests that a comprehensive harm minimisation approach must take account of three interacting components—the individuals and communities involved; their social, cultural, physical and economic environment; and the drug itself (MCDS 1998). The Framework recognises that harm minimisation involves a balance between demand reduction, supply reduction and harm reduction strategies (MCDS 2004).

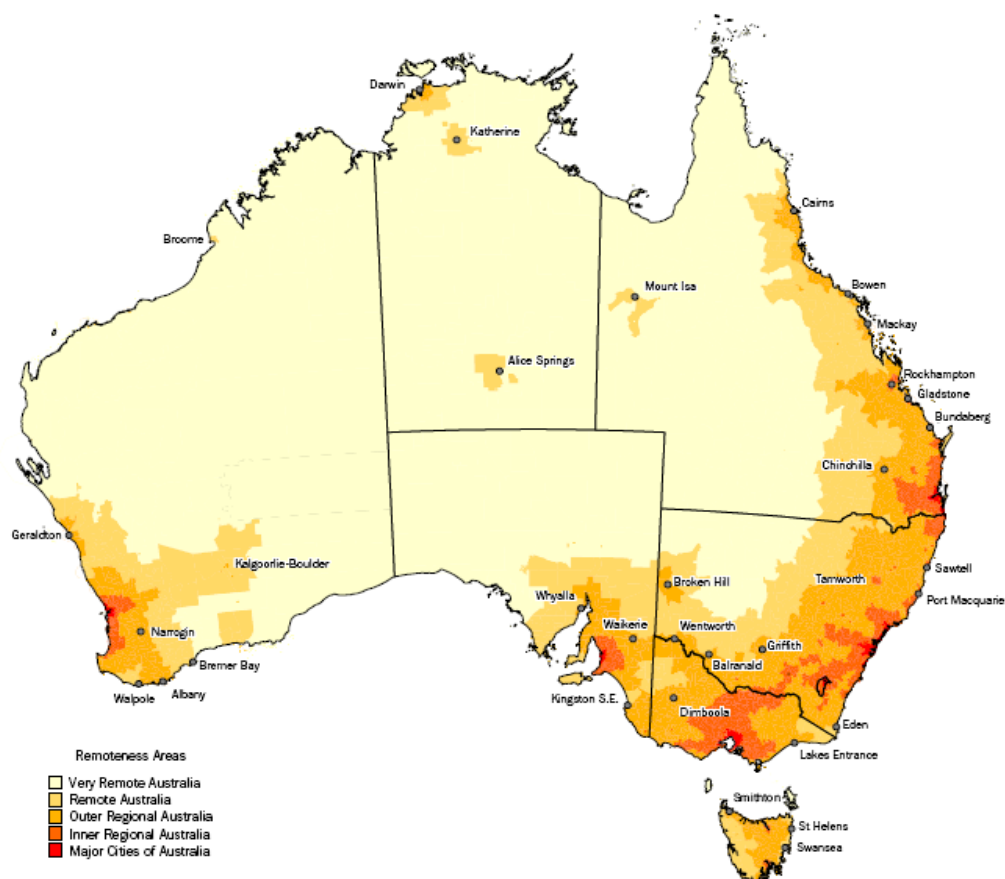
Throughout the background paper and the complementary action plan efforts have been made to draw out relevant differences between urban, rural and regional centres, and remote and isolated communities, including:

- The range of services available in remote and isolated locations, including health services, which fall short of those available in less isolated localities.
- The fact that rural and remote communities are often poorer, with more unemployed people, higher suicide rates and higher domestic violence rates than urban areas (Sheil 1997).
- The health of people living in rural and remote communities which is generally poorer than that of their city counterparts (Mathers 1994).

In 2006, 43% of Indigenous Australians were living in regional areas and 25% were living in remote or very remote areas (compared with 2% of the non-Indigenous population) (ABS and AIHW 2008). It is reported that looking after one's own health can be difficult in rural, regional and remote communities where higher levels of smoking and alcohol consumption and associated risk-taking behaviour are in greater evidence. Seeking help about some health concerns can be difficult when confidentiality can be

compromised because the services are highly visible or only available from people who have become family friends (NRHPF 1999).

Figure 1 – Map of Australia with remoteness classifications



Patterns of substance use also differ according to location and availability. The use of petrol as an inhalant is more likely to be found in remote areas than in urban communities and is a cause for concern especially for young Indigenous people in these locations (DHAC 2000, Loxley et al 2004). In developing interventions, it is essential to take into account differing patterns of consumption and barriers to accessing services.

Nevertheless, the National Aboriginal Community Controlled Health Organisation (NACCHO) (2001) points out that morbidity and mortality rates experienced by Aboriginal people living in urban areas are far closer to those for Aboriginal people living in rural or remote areas than they are for non-Aboriginal people in any part of Australia. Even though there are more doctors, pharmacies, hospitals and other health care services in urban areas, urban Aboriginal people still face barriers to health care. Mainstream services in urban areas are not necessarily accessible or appropriate for Aboriginal and Torres Strait Islander people. Also, whilst urban Aboriginal and Torres Strait Islander peoples report accessing health care at similar rates to other Australians, there are differences in the types of health care accessed, such that they are twice as likely to visit casualty but half as likely to see a dentist (AIHW 2007).

An overriding principle in the development of the CAP is acknowledgement of the social, cultural and economic factors affecting the health and wellbeing of Aboriginal and Torres Strait Islander peoples. In recent years a large body of research has emerged that demonstrates how social and economic relations within society, the psychosocial impact of these relations, and experiences during sensitive

periods in human development influence population health (Hertzman 1999). In its submission to the House of Representatives' *Inquiry into Indigenous Health*, the Royal Australian and New Zealand College of Psychiatrists said:

*Alienation, despair, depression, anxiety and psychosis all contribute to the use of substances in an attempt to escape or temporarily relieve symptoms. A social milieu of unemployment and mainstream hostility makes the abuse of substances in a community worse and there is a powerful feedback loop through which the abuse of substances creates more misery for the abuser and for family and friends.*

(Royal Australian and New Zealand College of Psychiatrists 2000)

Disadvantage and poor health in childhood have been linked particularly to mental health problems, use of alcohol, tobacco and other drugs, and development of chronic health problems in later life. Such problems need to be addressed by interventions that focus on the interactions between individuals, as well as on the individuals themselves.

The CAP recognises the importance of addressing social, cultural and economic factors in developing responses to Aboriginal and Torres Strait Islander peoples' use of alcohol, tobacco and other drugs.

### 1.3 Aboriginal and Torres Strait Islander peoples' health in Australia

Despite some barriers to accurate measurement of Aboriginal and Torres Strait Islander peoples' health in Australia, available evidence indicates that Aboriginal and Torres Strait Islander peoples continue to suffer a greater burden of ill health than the rest of the population. Siggers and Gray (2007) argue that the standards of health of Indigenous people are far lower than that of the majority of Australians and would not be tolerated if representative of the Australian community as a whole.

Life expectancy at birth remains substantially lower among Aboriginal and Torres Strait Islander peoples than the general population, and death rates are higher than in the general population for almost all causes of death and for every age group. In 2006, the ABS estimated that Indigenous males born between 1996-2001 could expect to live to 59.4 years, more than 17 years less than the 76.6 years expected for all males in 1998-2000; the life expectancy of Indigenous women born between 1996-2001 was 64.8, more than 17 years less than the expectation of 82 years for all Australian females in 1998-2000. Thomson et al (2008) report, that after adjusting for the differences in the age structures of the Indigenous and non-Indigenous populations and for the incomplete identification of Indigenous status in death registrations, the numbers of deaths of Indigenous people in 2000-2004 were around four times higher than the numbers expected from the age-sex-specific death rates for the total Australian population. (Note that this figure should be interpreted with caution, as there are major impediments to producing a complete picture of Indigenous mortality).

Indigenous women tend to have more babies and at a younger age; in 2006 the median age of Indigenous mothers was 24.6 years compared with 30.8 years for all women (Thomson et al 2008). Thomson et al (2008) also report babies born to Indigenous mothers were more than 200 grams less than the average for babies born to non-Indigenous mothers. They note that tobacco has a major impact on birth weight, reporting that in 2001-2004 the mean birth weight of live babies born to Indigenous women who smoked was more than 250 grams lighter than those born to Indigenous women who did not smoke.

Data from the most recent 2004-05 National Aboriginal and Torres Strait Islander Health Survey (NATSIHS) indicated that:

- half of the Indigenous population aged over 18 years smoked, with the level being slightly higher for people living in remote areas (52%) than those living in non-remote areas (49%)
- one in six (16%) consumed alcohol at high risk levels;
- 28% aged over 15 years had used illicit drugs in the last twelve months; and
- more than half (57%) were obese.

Whilst data available on Indigenous drug and alcohol use is limited, these rates are higher than non-Aboriginal Australians, and all are also significant health risk factors (ABS and AIHW 2008).

## Indigenous health and wellbeing strategies and frameworks

Increasing attention has been paid to the need to take direct action for improving Indigenous health and welfare, as is evident by the following national strategies and frameworks:

- The Close the Gap campaign implemented in 2007, with a target of 'closing the gap' on, among other targets: Indigenous disadvantage; the 17-year gap in life expectancy; and the mortality rate of Indigenous children.
- The National Strategic Framework for Aboriginal and Torres Strait Islander Health 2003-2013 (NSFATSIH) which has eight priority areas including: smoking, nutrition, alcohol, physical activity, overweight and obesity, and social and emotional wellbeing, including substance use and mental health.
- The National Strategic Framework for Aboriginal and Torres Strait Islander Peoples' Mental and Social and Emotional Well Being 2004-2009.
- The National Preventative Health Strategy which aims to reach the following targets by 2020: halt and reverse the rise in overweight and obesity; reduce the prevalence of daily smoking to 9% or less; reduce the prevalence of harmful drinking for all Australians by 30%; contribute to the 'Close the Gap' target for Indigenous people, reducing the 17-year life expectancy gap between Indigenous and non-Indigenous people.

## 1.4 Strategies to address alcohol, tobacco and other drug use

The CAP follows the harm minimisation principle which has been the centerpiece of Australia's approach to drug use since the 1980s. The principle focuses on: supply reduction measures; demand management measures; harm reduction strategies; early intervention; and measures to provide effective treatment. Each of these strategies are defined below within the context of Indigenous drug and alcohol use, and discussed (in the following chapters) in relation to alcohol, tobacco, petrol and inhalant use, illicit drugs and kava.

### Control of supply

Supply reduction initiatives primarily aim to prevent or reduce the availability of drugs (MCDS 2004). Action taken to reduce supply is identified in the National Drug Strategy 2004-09 as:

- disruption to the manufacture and supply of illicit drugs
- controlling the inappropriate supply and diversion of pharmaceutical drugs and pre-cursor chemicals
- dismantling organised crime
- implementing effective legislation and regulatory regimes, and education programs for key justice and health professionals
- implementing effective legislation and regulation of alcohol, tobacco and other substances to reduce associated harms to the community
- examining mechanisms to ensure that all relevant stakeholders participate in implementing law enforcement strategies in all jurisdictions (MCDS 2004).

The available evidence suggests that reduced use of alcohol, tobacco and other drugs and related harms are associated most strongly with socioeconomic initiatives and supply reduction measures. For instance, Indigenous drug and alcohol abuse is arguably the leading current cause of Indigenous contact with the justice system, and as a result greater emphasis should be placed on supply control policy in order to address associated alcohol and drug issues within the community and judicial system (Weatherburn 2008).

## Demand management

Demand management operates on the basis that by curbing demand for alcohol and illicit drugs, control is established over the supply of these substances to Indigenous Australians.

Research suggests that multimodal strategies that addresses multiple risk factors in a comprehensive, consistent and coordinated manner are most likely to prevent drug use. Drug use should not be seen in isolation or as an individual behaviour, but as one of a range of problems shaped by economic, social and physical environmental factors affecting human development.

## Harm reduction

A harm reduction approach to drug and alcohol abuse takes into account the individuals and communities involved; their social, cultural, physical, legal and economic environment; and the drug itself. Whilst a harm reduction approach does not condone drug and alcohol use, it addresses the immediate dangers associated with its use.

## Early intervention

Early intervention of drug and alcohol use is a means of preventing or curtailing further damage associated with abuse. Research shows that among Aboriginal and Torres Strait Islander people this happens most effectively at a community level through education and training sessions. It is hoped that individuals are less likely to engage in harmful behaviour if they know the associated effects and understand the damage of drug and alcohol use not only to their physical and mental wellbeing, but their families and social networks, productivity and employment, and to their community as a whole. In order for early intervention to be successful, shared responsibility needs to be taken by all, including health care workers, educators, policy makers, employers and community leaders.

Teasdale et al (2008) notes that an optimal service structure and delivery mode has yet to be developed; and that few interventions for alcohol and drug problems have been evaluated within Indigenous populations.

## Treatment

A holistic approach to drug and alcohol abuse has been shown in the literature to be essential to the success of treatments. Family and community support play an essential part of treatment, particularly within the kinship group context of Aboriginal and Torres Strait Islander culture, and the corresponding communal environment in which people often drink and take drugs. Education, health promotion activities, counselling and support services all play a valuable part in drug and alcohol treatment.

Although historically treatment programs are the most common (and costly) form of intervention in Aboriginal and Torres Strait Islander use of alcohol, tobacco and other drugs, there is limited research on their effectiveness (Gray et al. 2000; Teasdale et al 2008).

In 2008, one in ten (10%) closed treatment episodes (who reported to the Alcohol and Other Drug Treatment Services National Minimum Data Set (AODTS-NMDS in 2006-07), involved clients that identified as being of Aboriginal and/or Torres Strait Islander origin (AIHW 2008a). This figure is consistent with that of the 2003-04 report, and continues the trend whereby the proportion of treatment episodes provided to Aboriginal and Torres Strait Islander peoples exceeds the proportion of Indigenous people aged over 10 years in the national population (ABS and AIHW 2008) .

According to AIHW (2008), closed treatment episodes with Indigenous clients were most likely to involve counselling (38%), followed by assessment only (18%), withdrawal management/detoxification (12%) and information and education only (11%).

## 1.5 Review of literature on the nature and extent of alcohol, tobacco and other drug use, and strategies to address these

The following chapters provides statistical data on the use and effects of alcohol, tobacco, petrol and other inhalants, illicit drugs and kava by Aboriginal and Torres Strait Islander peoples; and where relevant, discusses the application of harm minimisation strategies detailed above, to address these.

In considering the literature, the view of Teasdale et al (2008) should be taken into account, that there is a dearth of quality data on the prevalence of substance use among Indigenous Australians, and that caution should be given to coverage of household surveys, cultural appropriateness of interview design and the resulting accuracy of self-report. Putt and Delahunty (2006) agree that national surveys are not well suited to detecting differences between urban and rural Australia and cannot map drug use across diverse communities. Current data from 2008 *The Health and Welfare of Australia's Aboriginal and Torres Strait Islander Peoples* reported by the Australian Bureau and Statistics and the Australian Institute of Health and Welfare, is largely based on the 2004-05 National Aboriginal and Torres Strait Islander Health Survey (NATSIHS) which is conducted every six years, and the 2002 National Aboriginal and Torres Strait Islander Social Survey (NATSISS).

In 2007-08 there were 93 Aboriginal and Torres Strait Islander substance use services across Australia funded by the Office for Aboriginal and Torres Strait Islander Health (OATSIH) (AIHW 2008b). While there are a limited number of intervention evaluations that have been conducted, a number of introductory comments can be made.

The value of community support and involvement is featured throughout the literature. Research has found that community empowerment and consultation are vital to successful health promotion strategies in Indigenous communities and locally or regionally focused programs that are well coordinated and targeted to groups within local communities work best (AIHW 2008b). The most successful projects firstly enjoy widespread support from both the community and families, and secondly involve the active participation of their members (d'Abbs and MacLean 2000). This suggests the importance of work that focuses on developing cohesion within communities, and strengthens motivation and capacity for action as well as establishing mechanisms for exchanging information between and within communities so that people are aware of what has been successful in the past. Giesbrecht and Haydon (2006) also acknowledge a number of challenges involved in community interventions (for instance in relation to alcohol), in particular:

- the dangers of a top-down or outsider perspective in undertaking community action to reduce the substance use
- involvement of local members in all aspects of a programme, including planning interventions, implementing them and assessing their impact
- building the intervention on a sound basis which includes a conceptual framework, and insider knowledge of local traditions and cultures
- resolving resource issues, structural changes and local commitment in order to carry out the program and sustain its impact.

## 2 Alcohol

### Summary

Alcohol is the primary drug problem faced by Aboriginal and Torres Strait Islander peoples, and rates of binge drinking are higher for Indigenous than non-Indigenous people in every age group. Alcohol misuse is the most significant risk factor in terms of potential years of life lost before the age of 65 among Indigenous people. Alcohol is the cause of physiological (such as liver disease, high blood pressure, stroke, cancer) and social problems (such as criminal behaviour, violence against women) for Indigenous peoples.

Strategies to address alcohol problems include:

- Control of supply – Alcohol restrictions are effective but need support from the community. Alcohol Management Plans and the Northern Territory Emergency Response are current attempts to control supply.
- Demand management –The literature suggests that demand management needs to be introduced through population level prevention within individual communities. It is recognised that current marketing of alcohol undermines public health strategies encouraging the choice not to drink.
- Harm reduction – Successful strategies include sobering-up shelters and night patrols. Other strategies include: the provision of women’s refuges, safe houses and legal advice centres, the establishment of safe drinking camps and violence management counselling for men.
- Early intervention – A best practice approach (as highlighted by CAAPs in Darwin) should include an emphasis on raising awareness of traditional cultural and social norms, with efforts to address individual problems as well as social and emotional issues.
- Treatment – Rehabilitation programs have been shown to be successful.

### Use and effects

Alcohol remains the primary drug problem faced by Indigenous Australians (Nicholas 2007; AIHW 2008a). Findings continue to show that, although the proportion of Aboriginal and Torres Strait Islander people who drink alcohol is lower among non-Indigenous people, those who do consume alcohol are more likely to do so at hazardous levels (ABS and AIHW 2008, Nicholas 2007).

Age Group	Percentage of Indigenous population	Percentage of non-Indigenous population
18-24 years	23%	15%
25-34 years	21%	10%
35-44 years	22%	9%
45-54 years	16%	7%
55 years and over	10%	4%

In 2004-05 rates of binge drinking (as reported in ABS and AIHW 2008) were higher for Indigenous than non-Indigenous people in every age group.

One in five Aboriginal and Torres Strait Islander surveyed respondents (19%) reported drinking at short-term high-risk levels on at least one occasion at least once a week. After adjusting for age differences, this was double the number of non-Indigenous Australians reporting the same level of drinking. In non-remote areas, the proportion of Indigenous adults who drank at chronic high-risk levels increased from 12% in 2001 to 17% in 2004-05. Excessive alcohol consumption accounted for the greatest proportion of the burden of disease and injury for young Indigenous males (aged 15-34 years) and the second highest (after intimate partner violence) for young Indigenous females (ABS and AIHW 2008).

In all age groups, regular binge drinking was more common among Indigenous males than females; overall 24% of males drank at short-term high risk levels compared with 15% of females (ABS and AIHW 2008). The heaviest drinking occurs among Aboriginal people from 18-44 years, whereas in the general population hazardous drinking is most common among only young people aged 18-24 years, (ABS and AIHW 2008). Regular binge drinking is associated with poorer health and wellbeing among Indigenous young people. Those aged 18-34 years who reported binge drinking at least once a week (43%) were less likely to say their health was 'excellent' or 'very good' than those who didn't (58%) (ABS and AIHW 2008).

In his paper to the Australasian Centre for Policing Research, Nicholas (2007) reports that there is evidence that Indigenous Australians are subject to disproportionately high levels of irresponsible service of alcohol, in particular through the serving of alcohol to intoxicated people, supply of alcohol in unhygienic containers and illegal sales of liquor. However, Keel (2004) notes that alcohol is but one part of a complex picture of disadvantage and abuse, where its historical use for payment in lieu of money has resulted in a situation of entrenched malnutrition, alcoholism and poverty.

## Physical and social impacts

Alcohol is related to a number of conditions such as alcohol dependence syndrome, alcoholic liver disease, high blood pressure, stroke and some cancers. It is also often a contributing factor to a range of social issues at both the individual and community level.

Intoxication of alcohol brings with it a number of risks and long term effects for all Australians including death and premature death. Across Australia, alcohol is responsible for:

- 30% of road accidents
- 44% of fire injuries
- 34% of falls and drownings
- 16% of child abuse cases
- 12% of suicides
- 10% of industrial accidents (DASSA 2008).

Alcohol has also been shown to contribute to criminal behaviour, accounting for 70% of co-morbid violent assault cases, and 40% of domestic violence incidents (DASSA 2008). Family violence and in particular, violence against women, is highly prevalent in some Aboriginal and Torres Strait Islander communities. Alcohol has been recognised as a major contributor to this violence within Indigenous communities (Keel 2004). A 2006 national survey of Indigenous Australians aged 13 years and over revealed that 59% identified alcohol as 'one of the main health problems' faced by their communities (Health Infonet 2006).

Other statistics highlight the toll that alcohol consumption imposes on Aboriginal and Torres Strait Islander communities.

- In 2003, 28% of all Indigenous prisoners in New South Wales were intoxicated at the time of the offence that led to their imprisonment (Butler et al 2003).

- Among Aboriginal and Torres Strait Islander people who had been a victim of violence, 44% of the most commonly reported neighbourhood/community problems were due to alcohol (ABS 2007).
- Indigenous Australians account for a disproportionately high number of both homicide victims and offenders, accounting for 15.7% of homicide offenders in 1989-2000 (Mouzos 2001). In addition, both Aboriginal offenders and victims are more likely than the general population to have been affected by alcohol (DHAC 2000).
- Among Indigenous people who had been incarcerated, almost one-third (30%) reported high risk levels of long-term alcohol consumption in the last 12 months, compared with 14% who had not been incarcerated (ABS 2007).
- Alcohol dominates police concerns with 80% of all police ranking it as a serious problem for local Indigenous communities (Putt and Delahunty 2006).
- Among urban Aboriginal and Torres Strait Islander people, 65% regard either alcohol abuse or alcohol-related violence as the most serious issue facing Aboriginal and Torres Strait Islander communities (AIHW 1995).

### Potential years of life lost

Each year approximately 3,000 Australians die as a result of excessive alcohol consumption and around 65,000 are hospitalised (DASSA 2008). Indigenous males died from alcohol-related causes at 7 times the rate of non-Indigenous males over the period 2002-2006 in Queensland, Western Australia, South Australia and the Northern Territory and females died from causes related to alcohol use at 12 times the rate as non-Indigenous females (AIHW 2008b).

The Central Australia Aboriginal Congress (CAAC) has noted that alcohol is the most significant risk factor in terms of potential years of life lost before age 65 among Aboriginal people. Many Aboriginal people view this as the central tragedy of contemporary life: that young to middle-aged adults are dying when they have potentially so many years ahead of them (CAAC 1998).

## 2.1 Control of supply

One of the ways of controlling harmful alcohol use among Indigenous Australians is to regulate and control the physical availability of alcohol (Loxley et al 2005). Loxley et al (2005) report that increased hours of sale are associated with increased harms. Gray et al (2000b) also report that of interventions available, restrictions on the supply of alcohol have proven to be most successful.

Saggers and Gray (1997) argue that a focus on alcohol supply is useful because it directs attention beyond demand for alcohol and towards a wider examination of the ways in which demand is generated and supply promoted. In doing so, it also spreads the responsibility for alcohol-related harm in a more equitable manner throughout the whole community. Limits on the availability of alcohol are a practical measure that communities can achieve in the short term, while developing and implementing longer-term strategies to address demand for alcohol at individual and community levels.

### *Barriers to effective implementing of licensing*

Gray (2000) recognises that barriers can exist in the effective implementing of licensing, including:

- the belief that alcohol problems are issues for the individuals concerned rather than the licensees
- contradictions in current legislation which concurrently seek to reduce harm associated with alcohol consumption whilst removing legislative and administrative restrictions on the supply of alcohol
- resistance to the imposition of restrictions from the alcohol industry
- the view that restrictions are a quick fix solution that replaces the need for consultation with relevant communities.

Consideration needs to be given to the broader, coherent strategy of addressing alcohol problems, and any restrictions must have the support of the communities concerned (Nicholas 2007). In addition, Nicholas (2007) argues that there must be clearly defined responsibilities for controlling liquor consumption on a day to day basis, and that there must be adequate resources applied to enforce these restrictions – ensuring that these enforcements do not unduly focus on consumers rather than suppliers of alcohol.

From a policing perspective, strategies stemming from community-supported restrictions on the supply of alcohol have generally led to reductions in per-capita consumption and key indicators of harm such as hospital admissions and police accidents (Nicholas 2007). Flick (1998) argues that ‘changes in the alcohol and drug status of Aboriginal people will only occur when the drug trade is directly challenged, particularly alcohol and tobacco’. Communities, she argues, must also examine the ways in which they have become commercially implicated, for example through a dependence on alcohol sales for council revenue. This approach is supported by Nicholas (2007) who concurs that restrictions must be part of a broader, coherent strategy, and must have the support of the community/ies with clearly defined responsibilities for controlling liquor consumption and adequate resources to enforce these restrictions. In addition, police need to work closely with Aboriginal communities to ensure that there is an agreed approach to the enforcement of restricted access laws (Weatherburn 2008).

Weatherburn (2008) believes that controls are much easier to implement in isolated rural communities than urban environments. However, the extent to which individual communities can regulate the sale of alcohol in order to reduce harm is of particular concern to some rural and remote communities, as discussed below (Loxley et al 2005).

## Alcohol Management Plans

There are a number of examples of community responses to alcohol misuse such as the Katherine Alcohol Management Plan, Tiwi Islands Alcohol Management Plan, and Palmerston Alcohol Management Plan, as detailed below:

*The vision for the Katherine Alcohol Management Plan is to reduce the level of alcohol-related harm for both individuals and the Katherine community... The Plan was developed by the Katherine Harmony Group, in consultation with the community, and responds to community concerns about antisocial behaviour and violence. The Plan builds on previous efforts to minimise the harm caused by alcohol.*

(Katherine Alcohol Management Plan, November 2007).

*The Tiwi Islands Alcohol Management Plan is based on the following objective: to promote safe and responsible consumption of alcohol whilst putting in place proactive measures to minimise the harmful effects of irresponsible use and abuse of alcohol.*

(Tiwi Islands Alcohol Management Plan, April 2003)

*City of Palmerston Safe Communities program, recognising that alcohol is a significant contributing factor to injury in our community, sought to undertake community consultation with the aim of identifying issues specific to Palmerston that could be addressed in an Alcohol Management Plan... The Plan has 3 key strategies aimed at reducing alcohol consumption and related harms: reducing supply...reducing harm...reducing demand.*

(Palmerston Alcohol Management Plan, 2007)

## Northern Territory

The Northern Territory has for many years had the highest rates of alcohol-related problems in Australia (Chikritzhs et al 2004). In 2007, the Northern Territory Emergency Response (NTER) introduced a general ban on the possession, transportation, sale and consumption of alcohol in prescribed areas, and modified Northern Territory legislation relating to restrictions and police powers regarding the apprehension of intoxicated people. Prior to the Emergency Response, Aboriginal groups in the

Northern Territory and Western Australia used liquor licensing legislation to extend the range of restrictions on the availability of alcohol.

Whilst the NTER is a response to concerns for the safety of Indigenous children and communities, the NTER Review Board reported in 2008 that the implementation of the ban had brought about confusion and other complications in some communities. They report that large numbers of people have continued to drink outside the prescribed areas, many travelling from remote communities to regional towns to escape the restrictions on drinks and bringing their families with them. This has resulted in increased demands on shelters and community organisations to care for women and children when money ran out. In other instances it was reported that parents were moving further away to drink and leaving their children for longer periods. There had also been a rise in illicit drug use, particularly cannabis, in some communities with restrictions on alcohol supply. Overall, it was recognised that while the restrictions remain in place, simultaneous demand and harm reduction strategies should be incorporated.

Despite the current flux of the implementation of new restrictions under the NTER, research on prior supply control initiatives in the territory have shown some success.

An evaluation of a strategy in the Northern Territory, where communities could apply for restricted area status under the *Liquor Act 1980*, found that the introduction of prohibition was associated with reduction in alcohol-related harms such as hospital admissions and police arrests in several of the communities studied (d'Abbs 1990, Loxley et al 2005). However (as suggested by the findings above), it was noted that this kind of measure does not alone guarantee community control over alcohol, as restrictions are most effective when they have been initiated by Aboriginal people themselves and conducted as part of broader strategies to address alcohol-related harm, together with community-wide support (Loxley et al 2005).

Results from a trial of alcohol restrictions undertaken in Alice Springs, which included a ban on alcohol in containers greater than 2 litres, as well as a reduction in take-away trading hours, found that the price control of alcohol had some success. The trial was implemented from April 2002 to June 2003 in response to calls from community groups and organisations (Hogan et al 2006). Hogan et al (2006) believe that despite the fact that there may always be new forms of cheap bulk alcohol on the market which will inevitably undermine restrictions (as occurred in Alice Springs with the sale of port in response to a rise in alcohol prices), this can be overcome through better designed restrictions specifically with restricted sales below a certain price per ml of pure alcohol. However to make this possible, government policy makers and the NT Licensing Commission would need to take a firmer stance on reducing per capita alcohol consumption within the region (Hogan et al 2006).

### *Western Australia*

A recent evaluation conducted by Henderson-Yates et al (2008) of the effects of a restriction on take-away alcohol found there to be a number of benefits. The restriction was put in place in 2007 for a period of six months, and resulted in the following:

- reduced intake figures at the Fitzroy Women's Refuge
- a 48% reduction in the number of Fitzroy residents presenting to the Fitzroy Emergency Department with alcohol related presentations from October 2007 to February 2008 (compared to the same period in 2006/07), with no significant increases in the emergency departments of adjacent towns in Broome, Derby and Halls Creek
- increases in school attendances from 4.2% in 2006/07 to 14.4% in 2007/08
- a reduction in the littering of empty beer cans around the town, as well as groups of intoxicated people drinking in public throughout the day ('sly grogging' had however been reported since the introduction of the restriction, with some travelling to other local towns to purchase alcohol and selling it at inflated prices)
- an 88% reduction in the amount of pure alcohol purchased in packaged form from Fitzroy Crossing Inn in 2007, with over the counter sales increasing ten-fold to Aboriginal patrons.

Henderson-Yates et al (2008) report that despite this evidence of significant health and social benefits of the restrictions, there have been negative impacts including: loss of effective business livelihood; loss of civil liberties enjoyed by surrounding towns; increased youth vandalism; regular sly-grogging; reduction in financial gain from tourism; and difficulty in securing outside business contacts. They acknowledge that these factors need to be considered when making future decisions and plans for liquor control in the community.

## 2.2 Demand management

The literature suggests that demand management of alcohol should be introduced through population level prevention within individual communities. Work by CAAPU on the development of effective and appropriate health promotion suggests that the most effective health promotion messages are those that come from the community itself (Maher and Tilton 1994). This is also stressed by Loxley et al (2005) who believe that once behaviour change has been achieved it is likely to be self-sustaining because a new community norm has been established. However, communities need to be supported in this task as lasting change is most likely when people who are affected are part of the change process (Loxley et al 2005). Holder's systems perspective views the community as an enduring system of interacting components, providing the context for drinking behaviour and alcohol problems, and that therefore change needs to operate at the level of the whole community system (Holder as cited by Loxley et al 2005).

It could be argued that the regulation of alcohol promotion could also play a significant role in the demand for alcohol. Loxley et al (2005) recognise that marketing of alcohol undermines public health strategies encouraging the choice not to drink, and that the alcohol and tobacco industries in particular target the young. As such, the authors support the view that the Ministerial Council on Drug Strategy (MCDS) should continue to work with the alcohol and tobacco industries to enhance the existing self-regulatory system, and if this does not work regulation by government should be considered (Loxley et al 2005).

## 2.3 Harm reduction

For many years Aboriginal and Torres Strait Islander communities have pursued a range of strategies designed to reduce the harm associated with alcohol use. These include sobering-up shelters, night patrols and provision of women's refuges.

### Sobering-up shelters

Sobering-up shelters are reported to sit within a broad policy context which includes decriminalisation of public intoxication, homelessness and prevention of deaths in custody (ACU 2006). Encouraged by the findings of the Royal Commission into Aboriginal Deaths in Custody and the decriminalisation of public drunkenness in many jurisdictions, shelters have now been established in a variety of remote, rural and urban settings throughout Australia. They provide a safe alternative environment for temporary supervision and care of intoxicated people at risk of harming themselves or others through the use of brief interventions by drug and alcohol workers (Gray et al. 2000, Brady 2002, Brady et al 2006). In 2006-07, it is estimated that around 10,100 episodes of care were provided to clients accessing sobering-up or residential respite services – double that in 2005-06 (AIHW 2008a). Around 61% of those receiving care were male (AIHW 2008a). Brady et al (2006) note that a sobering-up centre is intended to keep people out of police custody and to reduce alcohol-related harm with practical care in a safe environment; however it cannot be seen as a detoxification centre or a long-term means of rehabilitation.

Grey et al (2006b) note that whilst they are a popular form of intervention, there have been few evaluations of sobering-up shelters.

One evaluation, of a community-based outreach program in Alice Springs, was conducted by Stearne (2007) for the National Drug Research Institute at Curtin University of Technology. The program was developed to assist clients on release from the sobering-up shelter which operates under the Drug and Alcohol Services Association (DASA) of Alice Springs, with the aim of improving the quality of client's

lives and reducing the harm caused through alcohol to individuals, their family and community. Overall, the program was shown to have achieved all of its objectives. Particular strengths identified included the purposeful planning of the program which strengthened the ability of outreach workers to meet the needs of their clients; the 'grass-roots' nature of the program; and the work conducted with individuals in direct response to expressed client needs. The outreach program was found to add value to other DASA programs. The evaluation also indicated that the program had evolved to meet the needs of the clients - they employed experienced and dedicated staff who had extensive knowledge of the community and build rapport and trust with the client. Further to this the staff received strong support from the entire organisation. By reducing the harm caused from alcohol abuse and improving the life circumstances of their clients, the program also improved the lives of their clients' children and families.

The following other examples also highlight the success of sobering-up shelters:

- A best practice evaluation conducted by Strempel et al (2003) on the Walangari Sober-up Shelter (managed by the Milliya Rumurra) in 2003 found the shelter to be very successful. Since its establishment in 1999, the number of Indigenous people incarcerated fell from 173 in 2000 and 33 in 2001.
- Annual admissions at the Hedland Sobering-up Centre grew from 429 in 1992 to 1902 in 2000, with a corresponding decline in annual police detentions from 851 in 1996 to 114 in 2000 (Saggers and Gray 2001).
- A review of drug and alcohol services in the Pilbara region found that the Roebourne Sobering-up Shelter had an increase of annual admissions from 474 in 1993 to 2,043 in 2000, and there was a corresponding decrease in police detentions from 1,130 in 1992 to 19 in 2000. Staff at the centre also gave clients vitamin supplements, and bottled water and fruit when they left the shelter (Saggers and Gray 2001).
- Data from the Wiluna Sobering-up Shelter in Western Australia indicated a 33% reduction in alcohol-related injuries recorded at the local primary health care service, a 90% decline in arrests relating to damage of property and a 67% decline in arrests for assault during the time of its operation (DHAC 1997).

Brady and Martin (2006) note that each shelter admission represents the aversion of a potentially harmful drinking episode and saving of possibly significant costs of an emergency medical treatment or law enforcement incident. Shelters can also provide an important point of contact for alcohol workers. In addition, whilst sobering-up centres may evoke concerns about rewarding drunken behaviour whilst doing nothing to prevent drinking, Brady et al (2006) note that the message that public intoxication is socially unacceptable is reinforced when police intervene and refer people to shelters.

Overall, sobering-up centres have had widespread support from the communities they serve. Some are managed by Aboriginal people themselves and as such, community-based programs such as mobile pick up services, night patrols and health services should work collaboratively with them (Brady et al 2006).

## Night patrols

Night patrols are regarded as an effective means of reducing alcohol-related crime, violence and death.

A successful program currently operating in the Northern Territory include the Tangentyere Council Night Patrol in Alice Springs, which, has a social justice division made up of four acute intervention services – a night patrol, day patrol, remote area night patrol and wardens program; and a community development and well-being service which incorporates a number of accredited training programs in the area of spiritual, physical and emotional health (Strempel et al 2003). As well as winning the approval and respect from the community, the night patrol has developed collaborative relationships with a wide range of organisations within the community including the police, the Drug and Alcohol Services Association's sobering-up shelter, St Johns Ambulance and the Central Australian Aboriginal Congress (Strempel et al 2003). In addition to these relationships, Strempel et al (2003) report that the program can be seen to support best practice through culturally appropriate service (the night patrol is made up of Aboriginal workers who have family connections in the town camps and speak local Aboriginal

languages); effective service delivery (through ongoing weekly training); funding security; and a multi-service patrol program incorporating a day patrol, remote area night patrol and wardens scheme. These are all highlighted as effective community intervention techniques.

## Other strategies

Other harm-reduction strategies identified include:

- provision of women's refuges
- safe houses and legal advice centres
- establishment of safe drinking camps with basic facilities such as fresh water, toilets, telephone and meal programs
- violence management counselling for men (Brady 1998).

Keel (2004) reports that women's patrols and sobering-up shelters represent approaches to dealing with family violence that take into account historical, cultural and situational factors challenging Indigenous communities. Greater emphasis is placed on working with violent men and on strategies for intervention that maintain family relationships and focus on healing the offender. In this way, the impact of violence is shown as a stressor to the whole family or community, rather than solely on women and children. This is an effective approach because many Aboriginal women turn away from accessing non-Aboriginal services as these services are seen to play a role in the destruction of Aboriginal communities (such as imprisoning men, removing Indigenous children and alienating them from their lands and communities). Greater emphasis is placed by Aboriginal women in strategies that aim to change violent men's behaviour and maintain family and community relationships (Keel 2004).

## 2.4 Early intervention

An evaluation of the Council for Aboriginal Alcohol Program Services Inc (CAAPS) in Darwin is considered by Strempe et al (2003) to have become one of the country's leading Indigenous community-controlled alcohol and other drug intervention services. An important part of the program is its strong emphasis on raising awareness of traditional culture and social norms, whereby only families are accepted into the residential treatment program in an effort to address both the individual's problems as well as a range of social and emotional issues. The program also includes a range of hands-on cultural activities such as excursions to museums and art and craft sessions in an effort to deter participants from their habit of substance abuse. People are also referred to by their kinship names and greetings are spoken in traditional languages in an effort to build self-esteem and a sense of identity among both clients and staff (Strempe et al 2003).

In 2003 the Aboriginal Drug and Alcohol Council (ADAC) in South Australia was funded to adapt the *Australian Alcohol Guidelines* so that they could be presented in a way that was culturally appropriate and useful for Aboriginal and Torres Strait Islander people (Panton 2006). The Guidelines were to be published on the Office for Aboriginal and Torres Strait Islander Health website. Panton (2006) describes the strategies for the Guidelines as:

- designing it for Indigenous health workers such that information could be read out directly to clients
- re-ordering the guidelines in a way that reflected their relevance and priority for Indigenous communities
- putting greater emphasis on the situations that put people at risk, for instance mental health and social issues made worse by alcohol
- expanding the table of standard drinks to include more drinks and containers familiar to Indigenous people such as wine casks, cartons and mugs
- including a glossary to explain key terms
- providing a comprehensive list of support services.

In 2005, Drug and Alcohol Services South Australia was contracted by ADAC to evaluate the *Australian Association of Gerontology for Indigenous Communities* and the *Don't Gamble With Your Health* promotion playing cards, with regard to community awareness, use, intention to use and perceived value and usefulness (Panton 2006). Following interviews with 32 ACCHOs and other stakeholders, about both the cards and guidelines, it was found that in over half of the organisations contacted (54%) staff appeared to have limited to no awareness of the guidelines. However among these about half expressed a keen interest in obtaining copies of the guidelines. The researcher notes however that despite the lack of familiarity with the guidelines at the time, the results point to the 'untapped potential' for screening and brief intervention initiatives in Indigenous primary health settings. The guidelines are a step forward in providing Indigenous health workers with the tools to undertake these types of interventions (Panton 2006).

## 2.5 Treatment

Milliya Rumurra Alcohol and Drug Rehabilitation Centre, located in Broome provides a residential treatment program, sobering-up shelter and is also involved in a community development program and outreach service (Strempe et al 2003). The residential rehabilitation program operates according to the following objectives:

- to promote safe drinking practices
- to stop injuries and other harm caused by the misuse of alcohol
- to strengthen family relationships and social environments
- to raise the health and quality of life of people who abuse alcohol and their families.

Strempe et al (2003) note that the coordinator was also keen to extend these objectives to also address the increasing incidence of cannabis, other illicit drug use and the co-morbidity of substance misuse and mental health problems, at time of publication.

The program involves a three-month structured residential program to which clients have to commit themselves (Strempe et al 2003). Immediate family members can also be accommodated at the centre. Clients attend sessions on anger management (run by the Department of Justice), a health and education program outlining the health and social harms of alcohol and other substances, and a social learning program which encourages clients to address issues such as assertion. All of these are conducted in classroom-type situations and are accompanied by videos, information sheets and teacher guides (Strempe et al 2003). Weekly recreational activities are also scheduled such as bush outings and fishing trips and childcare is available to parents attending education and counselling sessions. Clients and their families also have access to one-on-one counselling and other support to help them re-establish their lives outside the centre (Strempe et al 2003).

Strempe et al (2003) note that evaluating the program is not easy, but that this can be done through monitoring the number of completions of the three-month program, as the issues clients are dealing with are not always solved in the one setting but rather need to be dealt with over a longer period of time. They report that of the 93 clients who commenced the three-month program in 2001-02, 27% completed 9-12 weeks, 18% completed 13-16 weeks and 3% remained for 17-20 weeks.

## 3 Tobacco

### Summary

Just over half (54%) of all Aboriginal and Torres Strait Islander people are current smokers, and latest statistics show that smoking was the leading cause of disease and death for Indigenous Australians in 2003. Smoking amongst Indigenous people is associated with social, health and psychological disadvantage, poor educational attainment, unemployment, social isolation, interpersonal conflicts and financial dependence.

Strategies to address tobacco use include:

- Control of supply – There is greater potential for store managers and community councils, and boards which manage these, to develop anti-tobacco policies. Prisons, which have high levels of Indigenous prisoners who smoke, also have the potential to lower the rates of smoking through banning cigarettes.
- Demand management – There is a need for Aboriginal community-controlled health centres to address tobacco dependence. The Centre for Excellence in Tobacco Control is responsible for developing leadership in Indigenous tobacco issues, and is a clearinghouse for tobacco control-related research and programs. Current responses include culturally appropriate resources for health workers.
- Harm reduction – Health promotion and educational programs and resources have proven to be effective means of reducing smoking-related harms.
- Early intervention – The literature recommends that tobacco control intervention programs should focus on health program delivery specifically for adolescents. Parents, older relatives and community elders are seen as important role models. There is a need for evidence-based approaches for future program delivery, further research and evaluation.
- Treatment – More research is needed into successful treatments for smoking. Nicotine patches have not been found to be overly successful, however nicotine replacement therapies have been effective.

Tobacco consumption is the single largest preventable cause of premature death and disease (United States Department of Health and Human Services 2006, National Tobacco Campaign 2008). Cigarette smoking reduces life expectancy as well as quality of life, causing harm to nearly every organ and system of the body, thus increasing the risk of death and or illness through cancer, heart disease, stroke, atherosclerosis, abdominal aortic aneurysm, emphysema and other respiratory diseases (National Tobacco Campaign 2008b). In addition, second-hand smoke exposure causes disease and premature death in children and adults who do not smoke, suggesting there is no risk-free level of exposure to secondhand smoke (United States Department of Health and Human Services 2006).

In recent years smoking has become an increasingly unpopular exercise within Australian society. Due to an increase in public awareness about the health problems associated with cancer through extensive advertising and the introduction of anti-smoking laws, smoking rates have decreased overall to around 17% of the total population (National Tobacco Campaign 2008, Baker et al. 2006). The 2007 National Drug Strategy Household Survey found that overall between 1991 and 2007, daily tobacco smoking rates declined by more than 30% to the lowest levels seen over a 16-year period (National Drug Strategy Household Survey 2007). However despite this, a high prevalence of smoking remains among some key marginalised sub-populations, including Aboriginal and Torres Strait Islander peoples where there has been no significant change in smoking rates (Baker et al. 2006, ABS and AIHW 2008).

Around 54% of Aboriginal and Torres Strait Islander people are current smokers; this includes 56% of males and 52% of females (Baker et al. 2006). Unlike the non-Indigenous population where the proportion of males who are smokers is one-third higher than for females, the proportion of Aboriginal and Torres Strait Islander females who smoke is similar to that of Indigenous males (AIHW 2008b). Reportedly, the prevalence of Aboriginal and Torres Strait Islander mothers smoking during pregnancy is similar to the prevalence of smoking in the total adult Indigenous population, suggesting the need for culturally appropriate and effective health promotion and primary care interventions for women of reproductive age (AIHW 2008b).

Tobacco smoking was the leading cause of the burden of disease and injury for Indigenous Australians in 2003, accounting for 12.1% of total burden and 20% of all deaths (Vos et al 2007 as cited in ABS and AIHW 2008).

- In 2004-05, around one in ten Indigenous adult smokers (or ex-smokers) had begun smoking before the age of 13 years; and nearly half (46%) of those aged 18-35 years and 90% of those aged over 25 years had been smoking for 10 years or more (ABS and AIHW 2008). The *2008 Aboriginal and Torres Strait Islander Health Performance Framework* reports that currently there is no reliable national data available on the smoking rates of young Aboriginal and Torres Strait Islander Australians aged under 18 years (AIHW 2008a).
- Current data shows that daily smokers reported higher rates of other substance use in 2004-05 with Aboriginal and Torres Strait Islander people who smoked regularly were more than twice as likely (23% compared with 9%) as non-smokers to report long-term risk levels of alcohol consumption. In remote areas, Indigenous smokers aged 18-34 were twice as likely to report illicit substance use, in particular marijuana (ABS and AIHW 2008).
- In 2004-05 there was little difference between the overall proportions of Indigenous people in remote and non-remote areas who smoked (ABS and AIHW 2008).

A number of historical and social factors are believed to be associated with tobacco use in Aboriginal and Torres Strait Islander populations:

*Up until the late 1960s cigarettes and more commonly loose tobacco, were used to coerce Aboriginal people living on missions and settlements. Elders from my community have spoken to me about tobacco being used to reward people for staying on missions and doing what they are told. If they left they would lose their tobacco ration. As a result, the Aboriginal community have a love/hate relationship with tobacco: the social enjoyment opposing the health and financial burdens associated with smoking.*

(Briggs 1996)

Similarly, Brady writes:

*Tobacco is highly addictive, but there are also social explanations for its entrenched use among Aboriginal people. It is a substance firmly grounded in an economic and cultural life that has long antecedents...Perhaps the most damning aspect of this account of Indigenous tobacco use in Australia is the extent to which Europeans are implicated in it. ...The unpalatable truth is that an addiction was intentionally manipulated by Europeans for a number of ends. It would be as well for those engaged in health promotion to have an appreciation of this context...because such knowledge may help professionals to free themselves from implicit assumptions about tobacco use.*

(Brady 2002)

Smoking among Indigenous people (as well as other marginalised sub-groups) is associated with severe social, health and psychological disadvantage and stigma as well as poor educational attainment, unemployment, social isolation, interpersonal conflicts and financial dependence (Baker et al. 2006). The *National Drug Strategy 2004-09* reports that tobacco causes the greatest burden of illness and costs in households that can least afford it, and that many of the factors which underlie social disadvantage are also strongly predictive of smoking uptake (MCDS 2004).

### 3.1 Control of supply

Ivers et al (2006) report that store managers and community councils or boards which manage community stores have the potential to greatly reduce the harm from tobacco in remote Indigenous communities through the promotion of compliance with legislation, and developing proactive anti-tobacco policies. They also note that price increases for tobacco products require further assessment (Ivers et al 2006).

The control and regulation of the supply of tobacco are addressed in the *National Tobacco Strategy 2004-09* (MCDS 2004). Whilst it is reported that the retail price of cigarettes has already increased in the last five years through government action, these strategies are largely mainstream measures, rather than measures specific to the Aboriginal and Torres Strait Islander community. Gray et al (2006) report that Indigenous people are twice as likely to smoke than the general population, but less likely to heed promotional campaigns to quit. Examples of tobacco control strategies discussed in NACCHOS's report of the National Aboriginal and Torres Strait Islander Tobacco Control Project include supply reduction strategies to limit the availability of tobacco, including laws that ban sales of tobacco to people under 18 years of age. It also recommends actions in community stores, and research into the impact of monetary expenditure on tobacco when developing tobacco policy on pricing and taxation (Lindorff 2002).

Butler et al (2007) also report that prisons, which comprise some of the most disadvantaged groups in the community (including Indigenous Australians) and have high levels of smoking, have the potential to lower the rates of smoking through banning cigarettes. However they argue that banning smoking is different from quitting smoking and that there is no evidence that banning smoking in certain areas is effective in reducing smoking rates over the long term. In the prison setting smoking bans appear to have little impact on whether prisoners in general continue to smoke during incarceration (due to a 'black economy') and the long term decision to quit smoking following their release, thereby bringing into question the health benefits of prohibition. It is suggested that if smoking bans are to be enforced, they need to be implemented in tandem with cessation programs that have proven to work for the population group, and which offer the prospect of long term cessation.

### 3.2 Demand management

The National Tobacco Strategy 2004-2009 reports that little progress has been made in institutionalising the treatment of tobacco dependence in community-controlled health centres or in making smoking cessation a focus of service for Indigenous people using mainstream health services. A Centre for Excellence in Tobacco Control has been funded by the Department of Health and Ageing (DoHA) in an effort to develop leadership in Indigenous tobacco issues and to act as a clearinghouse for research and programs related to tobacco control in Indigenous communities (National Tobacco Strategy 2004-2009). It is also noted that Queensland has recently developed a state-wide program to provide training and culturally appropriate resources to health workers undertaking brief interventions with Indigenous clients who want to quit smoking.

NACCHO's national Aboriginal and Torres Strait Islander tobacco control project, *Time for Action*, recommends that health workers need extra support and specialised programs to help them quit smoking, owing to the stressful nature of their work (Lindorff 2002).

### 3.3 Harm reduction

Tobacco harm reduction strategies that involve a reduction in exposure to environmental tobacco smoke, particularly for children, and education about passive smoking, are important. However, there is little evidence to support recommendations on harm-reduction interventions for tobacco (Fiore et al. 2000, Roche and Ober 2001). The *Time for Action* report says educational interventions regarding exposure to environmental smoke in the home are very appropriate for Aboriginal and Torres Strait Islander people as a harm-reduction measure, given the high prevalence of smoking in the home (Lindorff 2002).

A study conducted by Ivers et al (2006) assessed the potential for reducing harm resulting from tobacco use through health promotion programs run in community stores in remote Aboriginal communities. They found that there is still potential for proactive tobacco education campaigns run through community stores and for a trial assessing the effect of changes in tobacco prices and consumption. They suggest that this can be done, for instance, through encouraging proactive anti-tobacco health promotion campaigns and training store workers to deliver advice on cessation.

An Australian Indigenous Tobacco Control Resource Kit developed by the Centre for Excellence in Indigenous Tobacco Control in 2003 called 'Talkin' Up Good Air', is an example of a successful intervention program for Indigenous communities. The Kit assists health professionals, along with the community and education workers to become community leaders in the area of tobacco control; raises the priority of tobacco control in Indigenous communities; and builds community ownership in tobacco control by supporting community-initiated and controlled action (University of Melbourne Centre for Health and Society website 2008). The resource provides helpful information, ideas, activities, success stories and reference materials.

### 3.4 Early intervention

Baker et al (2006) argue that prevention strategies need to be universal in approach, continuing to occur at the broader population level, but also targeting Indigenous groups. However, more funding for prevention and intervention programs targeting Aboriginal and Torres Strait Islander people is needed, as are increased resources to examine the most appropriate education strategies to promote smoking cessation amongst this sub-population (Baker et al 2006). They believe that tobacco control programs should focus health program delivery (rather than just tobacco) specifically targeted to adolescents, as this is a life stage at which many begin engaging in risky smoking behaviour.

#### *Youth smoking factors*

The Victorian Aboriginal Health Service (1999) found a number of factors to play a role in smoking behaviour amongst young people.

- Encouragement to give up smoking should focus on health and fitness concerns and the cost of smokes—it is also worth appealing to young people's sense of responsibility for others, such as their friends, or their unborn baby.
- Encouragement to give up smoking should be linked with other more general health and fitness messages rather than just saying *don't smoke* which people will rebel against anyway.
- Young people need continued support from people familiar to them to help them to stop smoking rather than from a stranger on the end of a Quit telephone line.
- Adults and elders in the community who have successfully stopped smoking are very useful role models for young people who want to give up.

The *Time for Action* report states that parents, older relatives and community elders are seen as important role models for tobacco use. It confuses children to receive messages about the harm tobacco causes and then see so many older people smoking. Adults should be aware of their influence on children and strongly discourage children from taking up tobacco themselves. Ex-smokers can play an important role in educating the young people of the community about tobacco (Lindorff 2002).

In her review of *Tobacco Interventions for Indigenous Australians*, Ivers (2003) found that none of the studies she found assessed smoking cessation as an outcome. She argues that an evidence-based approach may ensure a starting point from which Indigenous organisations can make decisions on program delivery and plan further research and evaluation. However, it needs to be recognised that an evidence-based approach can have inadequacies in addressing Indigenous people as a special case and not taking into account generalisations from Australia's population as a whole. In addition, Indigenous people have been found to prefer programs that are community-based and directed and culturally appropriate (National Aboriginal Community Controlled Health Organisation as cited in Ivers 2003).

The literature does however suggest the possibility for intervention among Indigenous prisoners. Richmond et al (2006) report that, considering there is an overrepresentation of Indigenous inmates and that around 77 to 83% of inmates generally are reported to smoke, the prison setting should be seen as an intervention site. Their feasibility study revealed that it is possible to implement a successful multi-component intervention, which incorporates cognitive behavioural therapy, nicotine replacement therapy and non-nicotine pharmacotherapy for prison inmates generally.

### 3.5 Treatment

Despite the disproportionately high rates of tobacco use among Aboriginal and Torres Strait Islander peoples, and its long-term impact on mortality, there is a dearth of research into effective treatment interventions (eg subsidised nicotine replacement therapy).

Ivers et al (2003) assessed the use of free nicotine patches by Indigenous people when offered a brief intervention for smoking cessation, as well as changes in their smoking behaviour over 6 months in the Top End of the Northern Territory. Overall, they found that whilst the free nicotine patches were a potential benefit to a small number of Indigenous smokers, the cessation rates for the use of both nicotine patches and brief intervention alone were lower than those in other populations (Ivers et al 2003). In particular they found the uptake of free nicotine patches was lower than anticipated, possibly due to the fact that smoking was perceived as normal behaviour within the community. In addition some participants had borrowed or given away the patches (reflecting the strong culture of sharing) – which can have implications if used without seeking medical advice; and many failed to return to get more patches, so that no participant completed a full course of patches. Finally, it was thought that the low rates of smoking cessation were in part due to the intervention being of low intensity and being delivered in a primary care setting. Ivers et al (2003) suggest that more generalised health promotion programs might assist the small numbers of Indigenous people considering quitting and also normalise smoking cessation.

Despite this, the evidence for effectiveness of nicotine replacement therapy (NRT) in the general population is very strong. The use of NRT increases quit rates approximately 1.5 to 2 fold regardless of setting (Silagy and Stead 2001) Bupropion (Zyban), while not appropriate for all smokers, is an effective non-nicotine medication available only on prescription that approximately doubles the odds of a successful quit attempt and can be combined with NRT (Fiore et al 2000).

## 4 Petrol and other inhalants

### Summary

It is difficult to estimate the prevalence of petrol sniffing in Australia, however the long-term effects of petrol sniffing are enormous – affecting the brain, heart, lungs, immune system, liver and kidneys – resulting in long-term disability or death. Petrol is a major source of dysfunction in Aboriginal communities and is fuelled by poverty, boredom and unemployment.

Strategies to address petrol sniffing and other inhalant use include:

- Control of supply – Reduced supply, and the replacement of regular petrol with Opal fuel have been the primary responses to petrol sniffing. There are mixed findings on the success of the Opal fuel initiative, however more research is required in this area.
- Demand management – Effective long-term strategies are needed to improve the health and wellbeing of young people, families and communities, with participation of Aboriginal elders and other community members being crucial to program success. At present more needs to be done to coordinate local community responses and relevant service systems more effectively.
- Harm reduction – Harm reduction measures include: discouraging sniffing in small, enclosed spaces; avoiding sniffing from a rag or bag; and taking care not to ignite petrol. Police play an important role in protecting the safety of the broader community, dealing with offences related to volatile substance misuse, and preventing such offences. The Retailers' Responsible Sale of Solvents Project provides an example of harm reduction principles in action.
- Early intervention – Intervention is most successful early, when sniffing is still sporadic. The 'Sniffing and the brain' flipchart is an example of an anti-sniffing initiative. There is a need however for further initiatives, as well as training for Indigenous health care workers, night patrols and outstations (such as the Mount Theo Project).
- Treatment – Petrol sniffing rehabilitation and treatment services are currently state and territory responsibilities. A number of treatment programs are currently in operation. Employment programs have been found to be successful deterrents once sniffing stops.

The sniffing of petrol is reported to be largely concentrated in small communities in Arnhem Land, Central Australia and the Goldfields region of WA (Loxley et al 2004). The 2008 *Review of the First Phase of the Petrol Sniffing Strategy* conducted for the Commonwealth Department of Families, Housing, Community Services and Indigenous Affairs (FaHCSIA), reported that petrol sniffing was difficult to determine due to the inadequacy of data collection mechanisms; however, the National Aboriginal Community Controlled Health Organisation (NACCHO) indicated that approximately 2,000 Aboriginal children (or 10%) in the central reserves area of the Northern Territory were sniffing petrol (Urbis 2008). The review also reports other estimates from the Department of Health and Ageing's *8 Point Plan to Address Petrol Sniffing Communication Strategy* to range from 2,000 to 6,000.

Also classed as inhalant misuse, the sniffing of petrol is thought to commence with experimentation during adolescence. Petrol is inhaled through the mouth or nose and directly affects the brain through the lungs, slowing down brain activity and depressing the central nervous system, causing feelings of euphoria, relaxation, dizziness, numbness and light headedness (Cairney 2005). The long-term effects of sniffing petrol are enormous - affecting the brain, heart, lungs, immune system, liver and kidneys - resulting in long-term disability or death (Cairney 2005).

It is difficult to estimate the prevalence of petrol sniffing in Australia owing to fluctuations in the practice and variations among communities, but prevalence has increased since the 1970s with more users sniffing over longer periods of time. In addition, Lubman et al (2006) report that much of the data on inhalant misuse has been undocumented, and that limited analysis of correlates and consequences of use over short- and long-term periods of time, as well as the exclusion of high-risk young people from surveys (for instance those not attending school), means that the actual rate of inhalant misuse among young people is likely to be much higher than previously documented. Most Aboriginal and Torres Strait Islander petrol sniffers are males in their teenage years though the age of users ranges from 8 to 30 years. Whilst inhalant use among young people is often experimental, there are reportedly a growing number of long-term chronic sniffers in some Indigenous communities (Lubman et al 2006, d'Abbs 2006). Whilst those who try petrol sniffing do not necessarily become regular or chronic sniffers, the practice is regarded as a very serious problem because it mainly affects the young and it carries a high potential for permanent physical damage (CAAC 1998).

Petrol sniffing is a major source of dysfunction within Indigenous communities, and is fuelled by poverty, boredom and unemployment (Cairney 2005). Senior and Chenhall (2008) report that peer pressure is acknowledged by both youth and their families as an important factor in taking up petrol sniffing and other drug use, as those with close family who sniff or smoke are likely to feel pressure to join. Petrol sniffing can cause problems for families and communities through social alienation of sniffers, social disruption, vandalism and violence, inter-family conflict and reduced morale (d'Abbs and MacLean 2000). Brady and Torzillo (1994) note that the social disruption caused by sniffing is often more severe when adults are involved rather than children. D'Abbs and MacLean (2000) observe that petrol sniffing appears to offer young people 'some kind of identity, albeit a negative one, amidst the massive change experienced by Aboriginal communities'. Community members tend to view petrol sniffers to be unpredictable and marginalised. Whilst petrol sniffers acknowledge the act to be a response to boredom, it is also seen as a fun and exciting activity (Senior et al. 2006).

## 4.1 Control of supply

Legislative action undertaken to address the issue of petrol sniffing has primarily focused on reducing supply (for instance, instructing retailers not to sell inhalants to young people) and replacing petrol in regional areas with aviation fuel or Opal fuel (Lubman et al 2006).

The Petrol Sniffing Prevention Program (PSPP) grew out of the Comgas Scheme, which operated from 1998 to 2005. Under the latter scheme, the provision of Avgas (non-sniffable aviation fuel) was subsidised to registered communities to replace regular petrol. Opal fuel was introduced in 2005, replacing the supply of Avgas previously supported under the Comgas Scheme (DoHA 2007). The PSPP now comprises the following elements (DoHA 2007):

- the provision of subsidised Opal fuel to Indigenous communities, roadhouses, petrol stations and other relevant fuel outlets
- communication activities, including specific projects identified to support the promotion and implementation of the program and the whole of government approach to petrol sniffing
- information resources related to petrol sniffing and Opal fuel
- monitoring treatment and respite services, provided in conjunction with the relevant states and territories
- a data collection system
- an evaluation of the program.

The Department of Families, Housing, Community Services and Indigenous Affairs (FaHCSIA) (2006) reported in their Indigenous Affairs Annual Report 2006-07 that Opal fuel is having a positive impact in remote communities. In 2006-08 reports estimated that petrol sniffing had been reduced by up to 95% across central Australia.

Senior et al (2006) conducted an ethnographic analysis of the effects of the introduction of Opal fuel on Ngukurr, a remote Aboriginal community in Arnhem Land, Northern Territory. Whilst sniffing ceased in the community abruptly with the introduction of Opal fuel at the end of 2005, Senior et al (2006) report that this was also due to a number of circumstances within the community at the time, including:

- the increased prevalence of marijuana smoking among sniffers (thought to be due to the reduction in fuel supply)
- widespread publicity at the time of a number of petrol sniffing deaths among youths
- a general unwillingness for people to go out at on 'walkabout' at night due to increased fears of sorcery.

An evaluation of the Comgas Scheme conducted by the Department of Health and Ageing, also noted other supply reduction strategies which had had a mixed rate of success including (DoHA 2004):

- Adding deterrents to petrol – reportedly limited success as petrol sniffers learned to leave the petrol out in the sun until the additive broke down.
- Use of diesel only – this can be an effective strategy but needs community patience and determination to wait while old petrol vehicles are replaced with new or second-hand diesel vehicles. Whilst it has potential with smaller communities, it may be less effective for large communities that have more visitors or communities that are closer to petrol outlets.

Therefore, whilst progress has been made at examining the issue of inhalant misuse and in particular petrol sniffing (in several states police are now able to confiscate inhalant products as well as temporarily detain young people), further analysis needs to be given to extenuating factors. Lubman et al (2006) also report that direct funding for specific targeted interventions or comprehensive community responses have been lacking, and very few initiatives have been rigorously evaluated.

#### *Suggestions for addressing control of supply*

d'Abbs and Brady (2004) note that policies are needed at all levels of government, as well as further research about the nature and causes of petrol sniffing and the efficacy and effectiveness of interventions. They suggest the following:

- Agreement between relevant departments at one level of government and between levels of government on a series of steps to reduce risk factors.
- Increasing the evidence base relevant to petrol sniffing by using one or more of the existing national drug research centres.
- Longer-term interventions that address multiple risk and protective factors present and that build upon programs that have shown to be effective (rather than short-term pilot and project funding).
- Greater ownership of the problem by governments together with communities.

The greater range and availability of volatile substances in urban areas makes it far more difficult to target supply in the same way as remote communities (d'Abbs and MacLean 2000). A project in the Midland area of Western Australia assisted a hardware store concerned that young people were stealing or attempting to buy volatile substances for the purpose of inhalation (Helfgott and Rose 1994). Strategies such as the use of dummy display cans, staff education, signs and liaison with relevant services were successful in a substantial reduction in the problem. The authors note however, that this kind of targeted strategy does not stop people from trying to access volatile substances elsewhere. d'Abbs and MacLean (2000) also conclude that legal sanctions against the possession or supply of volatile substances for the purpose of inhalations as well as other supply control measures such as locking up petrol supplies or the introduction of chemical deterrents, have not proven to be generally effective.

## 4.2 Demand management

In their review of interventions in petrol sniffing in Aboriginal communities, d'Abbs and MacLean (2000) conclude that the most effective long-term strategies are likely to be ones capable of improving the health and wellbeing of young people, their families and communities. Rather than developing long-term prevention measures, they found that community, agency and government responses to petrol sniffing have often been reactive and inconsistent, in response to a sudden increase in prevalence and media attention, and that they lack ongoing support or effectiveness (Garrow 1997, Mosey 1997). They caution that although an important part of any intervention strategy, prevention projects should not be judged against unrealistic criteria. They should not be expected to meet the needs of chronic sniffers nor can they always prevent some young people from taking up sniffing. The review also found that the participation of Aboriginal elders and other community members proved critical to the success of many programs.

This view is further supported by Lubman et al (2006) who maintain that more work needs to be conducted to ensure better coordination between local communities and relevant service systems to ensure that the complex biopsychosocial needs of those misusing inhalants are appropriately identified and addressed.

Other demand reduction strategies suggested in the Department of Health and Ageing's (2004) evaluation of the Comgas scheme include the use of sports programs, which build self-esteem and are a distraction to partaking in petrol sniffing. However, these programs are highly dependent on the personality and preferences of the youth worker, and the availability of facilities and resources. Other recreation activities such as music, video making, bands, concerts and murals are also given as examples of strategies (DoHA 2004). However, this again is dependent on facilities and resources.

## 4.3 Harm reduction

The introduction and use of unleaded petrol is associated with significant reductions in morbidity and mortality from petrol sniffing (d'Abbs and MacLean 2000). However, the evidence does suggest that the hydrocarbons present in both leaded and unleaded petrol are neurotoxic.

### *Recommended harm-reduction measures*

- discouraging people from sniffing in small enclosed spaces such as cupboards where a lack of oxygen and greater concentration of petrol fumes can increase the risk of losing consciousness
- not surprising or chasing sniffers, as this may lead to sudden death
- avoiding sniffing from a rag or bag
- taking care not to ignite petrol (d'Abbs and MacLean 2000).

Although evidence is lacking about the relative safety of different volatile substances, spraying gases such as lighter fluids directly into the mouth is known to be particularly dangerous and should also be discouraged (d'Abbs and MacLean 2000).

Research with incarcerated Aboriginal volatile substance users found they used some minor harm-reduction strategies, including their choice of inhalant, rejecting petrol where possible for other substances such as glue that are perceived to be less dangerous. Young people in urban and regional areas prefer more readily accessible toluene and glues over petrol, in contrast with those in remote communities where other volatile substances are hard to obtain. The same study also found that people alternate between sniffing through the nose and mouth as a means of minimising harm and prefer to sniff in public places or in company so that help can be more easily accessed if necessary (Sandover, Houghton and O'Donoghue 1997).

Gray et al (2006) recognise that police play a significant role in responding to intoxication in Indigenous communities. The responsibility of police is three-fold: to protect the safety of the broader community and its individual members; to deal with offences that are indirectly or directly associated with volatile substance misuse; and to prevent crime that might be associated with or arise from, volatile substance

misuse. They found that decisions about whether to intervene and the extent of intervention depend on a number of factors including: the legislative and administrative frameworks within which officers work; threats to safety and distance officers must travel to incidents; the ranking of the seriousness of incidents in relation to other policing priorities; local police culture; perceived community expectations; and perceived consequences of intervention.

#### *Key principles to guide interventions*

Gray et al (2006) report that key principles that should guide interventions include:

- careful assessment and monitoring of any encounter or incident, including monitoring Indigenous peoples' own behaviour
- putting first their own safety and that of their colleagues, users and members of the general public
- treating users with empathy and respect
- keeping users calm
- maintaining effective communication
- formulating a clear plan of action
- maintaining control and not acting in a manner that might exacerbate any incident.

They report that police intervention in incidents of intoxication is not a solution to the problem of inhalant misuse, but a necessary part of harm reduction.

An evaluation of the Comgas Scheme conducted by the Department of Health and Ageing in 2004, suggested the use of night patrols, which can be effective but require a pre-arranged procedure for dealing with sniffers (for instance agreeing with the families of sniffers on a place to which they can be removed). In addition the Department of Health and Ageing (2004) note that these strategies also need to be designed differently from those which abuse alcohol misuse. They report that night patrol/police activity seems to reduce petrol sniffing in communities that have well-functioning night patrols or effective policing, where sniffing outbreaks are handled rapidly, and where sniffer numbers are kept low through interventions such as removal and close monitoring.

The Retailers' Responsible Sale of Solvents Project was a pilot project developed by Amity Community Services in 2006 to address the harmful use of solvents in the Darwin/Palmerston area. The aims of the Project were to:

- Reduce the number of people using solvents in the Palmerston Indigenous Village (PIV) and the Darwin and Palmerston area.
- Reduce the instance of family violence, theft, vandalism and public disorder.
- Support greater community engagement at the PIV, by working with other stakeholders to build the capacity of residents, promote awareness and ownership of problems and encourage community members to participate in planning strategies that result in positive change.
- Work with retailers to develop a coordinated response to customers who they suspect are buying solvents for the purpose of sniffing or providing to someone else to sniff.
- Deliver training and education to retailers to assist them to take voluntary measures to reduce the theft of solvents.
- Provide education to retailers about the physical and psychological harms associated with solvent misuse.

The project used a public health model and harm minimisation approach in working with retailers and those who use volatile substances as inhalants; focusing on retailer education and capacity building through reduction of supply and demand and reducing harm. This was done through the development of the "Retailers' Responsible Sale of Solvents Kit" – which consisted of a twelve-page booklet outlining

the issues of solvent misuse, an explanation of the Northern Territory Volatile Substance Abuse Prevention Act and education on enacting responsible sale practice, a poster and stickers notifying customers that the store is part of the responsible retailers' network, and a 25-slide Powerpoint presentation to complement the kit that is delivered by a trainer to consenting retail outlets.

The Centre for Remote Health and Australian Rural Health Education Network (2007) conducted an evaluation of the project and found the building of relationships between stakeholders (Amity, alcohol and other drugs services, police and retailers) to be one of the most important outcomes of the project. Suggestions were made, however, for improvements to the kit, including making it easier to read for retailers.

## 4.4 Early intervention

Research shows that it is critical to intervene early when people are still only sniffing petrol sporadically, as they are much less likely to stop sniffing after long periods of intense use. d'Abbs and MacLean (2000) identify a range of early or secondary intervention measures designed to halt sniffing before chronic use leads to serious illness and permanent disability. As with other kinds of intervention, there is a lack of research that examines other forms of inhalant abuse or has an urban focus.

Lubman et al (2006) believe that direct funding is needed for specific targeted interventions. They report that whilst several programs for Indigenous communities have reported positive results, very few initiatives have been rigorously evaluated. More research is also needed on the bio-psychosocial characteristics of those who regularly use inhalants, so that interventions can be more specifically targeted (Lubman et al 2006). The lack of a sufficient evidence base limits the ability of current services to meet the complex needs of people using inhalants and impedes the development of appropriate cost-effective early intervention and prevention programs (Lubman et al 2006).

An evaluation of the Department of Health and Ageing's (DoHA) 'Sniffing and the brain' flipchart resource by the Cultural and Indigenous Research Centre Australia (2006) was conducted to assess the perceived appropriateness, effectiveness, future need and opportunities to improve the flipchart for future anti-sniffing initiatives. The resource was developed for use by health professionals, community workers, drug and alcohol counsellors and related stakeholders Australia-wide, to talk in a culturally appropriate way to a range of audiences about the effects of sniffing on one's body, with a particular focus on the brain. The flipchart was found to have been greatly successful in providing stakeholders with valuable and detailed information. The evaluation team suggested that further education opportunities could be provided through: promoting the flipchart further; incorporating Indigenous language text; producing 'leave behind' pamphlets and information sheets; increase discussion of 'women's issues'; and incorporating the use of tangible props.

### Training

Stempel et al (2003) report that the Aboriginal Drug and Alcohol Council (ADAC) in South Australia is well known for its production of a Petrol Sniffing Kit, which serves as an information tool for Aboriginal health workers and communities. The kit grew from ADAC's Makin' Tracks project which includes a mobile team of workers who visit communities in an effort to support community workers and groups to develop and sustain local substance misuse strategies (Stempel et al 2003). Stempel (2003) notes that the kit has been a great success, winning a Ted Noffs Award in 2001, and was nominated for an International Federation of Non-Government Organisations award. Due to great demand, ADAC developed video-based workshops to help organisations train health workers on information contained in the kit (launched at the South Australian Drug Summit in 2002).

### Counselling and education

Recently, an evaluation conducted by Stempel et al (2003) found the Drugs, Alcohol and Other Substances (DAOS) Program to be extremely successful in addressing volatile substance misuse, developing culturally-appropriate health education resources and utilising integrated case management, including the introduction of a home-based detoxification program for substance-dependent clients.

Strempel et al (2003) note that petrol sniffing by Indigenous young people in Cairns was a growing concern to local communities and DAOS responded with a number of related actions including:

- A pamphlet called *Sniffing: Risky Business* which provided practical information about sniffing and its consequences; and
- Organisation of the Cairns Inhalant Action Group (CIAG) – a local community group who together with service providers developed locally-appropriate strategies to tackle sniffing.

## Night patrols

d'Abbs and MacLean (2000) note a lack of evidence on the effectiveness of night patrols and warden schemes as secondary response to sniffing, but conclude that they can play a limited but useful role, especially when they are part of a broader strategy. Communities describe them as critical to dealing with substance use issues. Night patrols can help reduce the numbers of sniffers and related vandalism in the short term, and also give the community a valuable sense that something can be done (d'Abbs and MacLean 2000).

This is also noted by Preuss and Brown (2006), who found from their research that night patrols enjoyed varying degrees of short-term success; however, underlying problems still remained.

## Outstations

Communities that have outstations often use them as a means of diverting young people from the practice of sniffing, and sometimes as a form of rehabilitation for chronic sniffers. They are often a community's preferred strategy for dealing with the problem.

A study conducted by Preuss and Brown (2006) evaluated the Mt Theo Project, which is termed 'the success story' of petrol sniffing. After attempts at stopping petrol sniffing through the use of night patrols, visits to other communities, public 'floggings' and youth activities, it was decided in a community meeting that the best way forward was to send the young people to an outstation at Mt Theo (Preuss and Brown 2006). The program's success rests on a multifaceted approach involving the use of an outstation which has basic facilities (food is cooked on a campfire, everyone sleeps outside and water comes from outside taps), and the provision of youth activities (including sports, discos, a film night and cultural activities). The outstation is entirely Aboriginal run and elders talk with young people about their lives. Preuss and Brown (2006) report that after one month's respite at Mt Theo, young people are allowed back to Yuendumu (a remote Aboriginal community 300 km northwest of Alice Springs). If they are found sniffing petrol again, they are sent straight back to the outstation. By sending the sniffers to Mt Theo, the community has been able to erode the sniffing culture (Preuss and Brown 2006). Other crucial factors of success include:

- Community support - the program was community-initiated, supported and operated. Whilst the program now receives outside support, decisions are still made by the program's Aboriginal management committee.
- Cross-cultural partnerships - there has been development of strong cross-cultural partnerships between co-workers. Non-Aboriginal team members can assist in gaining and managing necessary resources, liaising between government agencies and communities beyond the point which most remote Aboriginal people are willing or able to do, and are able to relate to all Aboriginal family groups equally allowing for every sniffing action to be dealt with promptly, regardless of family affiliations.

Preuss and Brown (2006) acknowledge that today Mt Theo's challenge is to help young people in the area address their underlying substance misuse behaviour. They argue however, that whilst this case study is a success story, it cannot be seen as a 'blueprint' for addressing sniffing in general, as programs need to be developed within a specific context, based around particular people and particular communities (Preuss and Brown 2006).

The use of outstations has resulted in reductions in the numbers of people sniffing petrol in a number of different communities and success of the programs is attributable to a number of factors, including

community confidence from past success in dealing with sniffing, initiation and ongoing control of the program by families of sniffers, appropriate support from non- Aboriginal and Torres Strait Islander people, whole community backing and attainment of quick results.

## 4.5 Treatment

Currently, petrol sniffing rehabilitation and treatment services are state and territory responsibilities. The *Review of the First Phase of the Petrol Sniffing Strategy* conducted for the Department of Health and Ageing (Urbis 2008) reports that there have been some recent developments in the Northern Territory and South Australia.

In 2007 the Drug and Alcohol Services Association (DASA) in Alice Springs opened 10 new beds as part of the Territory's *Volatile Substance Abuse Prevention Act 2005*, offering rehabilitation and case management for adult sniffers of petrol and other inhalants. The facility has since been taken over by Bush Mob, a non-government organisation which over the past 10 years has offered support, respite and rehabilitation services for young people with substance abuse problems, including petrol sniffing. This new service targets young people aged 12 to 18 with sniffing and other drug problems. The residential and non-residential services are funded by the Northern Territory government.

A new residential facility at Amata in South Australia was opened in 2008, catering for 8 clients with family members nearby. The facility is funded by both Commonwealth and state government sources. The review reports that after assessment, the facility will offer rehabilitation services over a period of up to eight weeks or so for those with substance abuse problems including petrol sniffing. Activities are planned to include educational programs around health issues such as nutrition, hygiene and drugs and alcohol, together with a range of diversional activities and (with TAFE support) skills development.

DoHA (2004) note that whilst employment programs do not affect sniffing on their own, they can be extremely effective when sniffing stops. They report that the introduction of employment and training opportunities such as grassing and fencing the oval and starting a mud-brick factory implemented in a Top End community, proved to be an effective means of deterring ex-sniffers after the introduction of Avgas.

Education opportunities reportedly can also be used as both prevention and diversion strategies (DoHA 2004). In addition, whilst health education programs may not stop sniffers, they are effective in informing communities about how to reduce sniffing levels (DoHA 2004).

## 5 Illicit drugs

### Summary box

Aboriginal and Torres Strait Islander people are almost twice as likely to use illicit drugs as other Australians. Cannabis is the second most prevalent drug (after alcohol) reported by Indigenous clients receiving closed treatment services. Overall there is a lack of evidence for successful programs in this area of drug use.

Strategies to address illicit drug use include:

- Control of supply – Attention to date has primarily been focused on urban drug markets, however increased focus also needs to be placed on isolated communities. Involvement of community members is crucial in implementing sustainable change.
- Demand management – There is limited research in the area of demand management for Indigenous people's illicit drug use; however uptake particularly among young people is attributed to boredom, lack of recreation activities, peer group issues, experimentation and lack of positive role models.
- Harm reduction – There has been a mixed response to current harm minimisation approaches. The Council of Australian Government's (COAG) Illicit Drug Diversion Initiative (IDDI) currently funds 36 programs in rural and remote Australia.
- Treatment – Presently, Indigenous drug users are dependent on mainstream services for the supply of clean needles and syringes, as well as treatment and diversion options. Current gaps to treatment include: clinical services that are culturally appropriate, development of culturally appropriate prevention initiatives and further building of partnerships between Aboriginal communities and community services.

The 2007 National Drug Strategy Household Survey found that Indigenous people were almost twice as likely to be recent users of illicit drugs as other Australians (24% compared with 13%). After alcohol and cannabis, Indigenous clients were most likely to report opioids (11%) (with heroin accounting for 8%) and amphetamines (11%) as drugs of concern. These were the same four drugs of concern reported by the population overall (AIHW 2008a).

Teasdale et al (2008) note that whilst data is limited, there is evidence of higher rates of illicit drug use among urban Aboriginal Australians than in the general population. In 2001, the lifetime prevalence for urban Aboriginal people was 50% compared with 38% for the general population, and the proportion of urban Aboriginal people who had used illicit drugs in the past 12 months was 24% compared with 15% in the general population (MCDS 2001). However it is also noted that a greater proportion of Indigenous people from remote and very remote areas used illicit drugs in the previous 12 months (21%) than people from other regions (AIHW 2008a).

Meyerhoff (2000) notes the lack of research about illicit drug use by Aboriginal and Torres Strait Islander Australians and suggests that the issue has been largely neglected. Results from the 2005 National Drug Strategy Household Survey reported a slight increase in Indigenous drug use in the past 12 months (27% compared to 24% in the 1994 Survey), compared with 15% in the general population (AIHW 2005). Again, these results should be interpreted with caution as they suggest far higher illicit drug use among Indigenous Australians (Putt and Delahunty 2006). It should also be noted that much of the literature available on substance use is urban-based and about alcohol abuse and (Putt and Delahunty 2006).

### Injecting drug use

Research shows that statistical information currently available is not adequate to provide reliable information on the incidence or prevalence of drug injecting among Aboriginal and Torres Strait Islander

people. Evidence does suggest however that the prevalence of injecting drug use among Aboriginal and Torres Strait Islander people continues to be higher than among non-Aboriginal and Torres Strait Islander people in Australia. The most recent figures (from the 1994 National Drug Strategy Urban Aboriginal and Torres Strait Islander Peoples Supplement) found that 3% of Aboriginal and Torres Strait Islander respondents had injected illegal drugs in their lifetime compared with 2% of the general population. In addition, 2% of respondents indicated that they currently injected compared with 0.5% of the general population (Correll, MacDonald and Dore 2000).

Cao and Treloar (2006) report that little is known about the profile of Indigenous drug users who do not attend needle and syringe programs (NSP), as the illicit nature of drug injecting poses challenges for accessing this group for the purpose of research or surveillance. Data from annual surveys of injecting drug users attending selected NSPs conducted between 1995 and 1998 indicated higher proportions of Aboriginal and Torres Strait Islander participation in these programs (5.4%) than would be expected given their proportions in the general population (2.1%). A 2006 study conducted with NSP attendees in a high drug-using area in Sydney found that NSP attendees again were more likely to report higher levels of injecting than non-attendees – consistent with results from recent North American studies (Cao and Treloar 2006). In a paper funded by the Department of Health and Ageing, it has been noted that whilst most NSP services do not routinely collect data to identify clients as Indigenous, feedback from a number of studies has indicated that they are encountering increasing numbers of Indigenous people (Urbis 2008). This could reflect a pattern of increased use of services, but also an increase of Indigenous drug injecting use (Urbis 2008).

NSP surveys conducted between 1995 and 1998 found that significantly more Aboriginal and Torres Strait Islander participants reported sharing injecting equipment in the previous month than non-Aboriginal and Torres Strait Islander participants and were more likely to report injecting more than one drug. In 2001, the Australian National Drug Strategy Household survey found that around 30% of respondents usually obtained needles and syringes from 'friends' (AIHW 2001 as cited in Cao and Treloar 2006). These practices are of particular concern in the risk of transmitting hepatitis C, HIV/AIDS and other blood-borne diseases. Data released by the National Centre in HIV Epidemiology and Clinical Research in 2005 demonstrated that the percentage of blood-borne infections attributable to injecting drug use had risen from 7.5% in 1995-1999 to 20.6% in 2000-2004 (National Centre in HIV Epidemiology and Clinical Research 2005). Between 2004 and 2006, there were 58 notifications of HIV and 22 notifications of AIDS recorded for Indigenous people. Of these, 80% were for Indigenous males, a similar figure to non-Indigenous males (AIHW 2008a). The notification rate for AIDS and HIV for Indigenous females was 60% higher than that for other females (AIHW 2008a). It has become increasingly apparent that there are a growing number of Indigenous Australians who are living with hepatitis C, whilst the rate of infection amongst non-Indigenous Australians has decreased. A 2001-2005 Australian NSP survey found that around 90% of all new hepatitis C transmissions were attributable to the sharing of injecting equipment (Urbis 2008).

Previous findings estimate that between 3% and 4% of Aboriginal people aged 15 years and over who live in towns or cities in Western Australia have injected drugs since 1994 – a probable increase of 50% (Curtin 2002). Research shows that there is little difference in age of first injecting between Indigenous and non-Indigenous injecting drug users, with a median age of around 18 to 19 years. Currently there are roughly equal numbers of male and female Indigenous injecting drug users, compared to a predominance of non-Indigenous male injecting drug users. With regards to education, there is a fairly consistent trend of low educational attainment among Indigenous injecting drug users by mainstream standards, however this is also true of Indigenous Australians overall (Urbis 2008). A 2001 study conducted in Western Australia found that 48% of respondents had not completed Year 10 at school (Gray et al. 2001).

A number of factors have been noted to contribute to the commencement of drug injecting. Exposure through social networks is significant, as friends and acquaintances are often the first individuals to provide exposure to injecting drugs (Urbis 2008). In addition an association between illicit drug use and the criminal justice system has also been recognised. Whilst many people's drug use begins in jail where drugs are easy to obtain, Putt and Delahunty (2006) also report that many are incarcerated because of possession or dealing with illicit drugs. In addition, the disproportionately high rate of incarceration of Aboriginal Australians may also contribute to higher prevalence of injecting (Teasdale et al 2008). Arguably, future efforts to reduce Indigenous imprisonment should place more emphasis on

reducing drug and alcohol abuse than Indigenous cultural, economic and social disadvantage (Weatherburn 2008).

## Cannabis

In 2006-07 cannabis was the second most prevalent drug (after alcohol) reported by Indigenous clients receiving closed treatment services (reported to the Alcohol and Other Drug Treatment Services National Minimum Data Set) (AIHW 2008a). Overall, cannabis is reported to be the most widely used illicit drug in Australia, where around 10% of people become regular heavy users and risk long-term health consequences and dependence (Loxely et al 2004). Senior and Chenhall (2008) report that withdrawal, anxiety and violence have been found to be associated with cannabis use; however that it is important to note that whilst cannabis use is neither necessary nor sufficient in predicting violent behaviour, acute intoxication might alter psychological, physiological and interpersonal variables that increase the likelihood of violence in social contexts.

The research has conveyed concerns over the increasingly widespread use of cannabis amongst Indigenous peoples. In 2001-02, 62-76% of men and 9-35% of women aged 13-34 years used marijuana regularly (Clough et al 2004). Putt and Delahunty (2006) also found that cannabis was the most common illicit drug encountered (reported by 88% of rural and remote police), followed by amphetamines (25%); and that heavy use of cannabis tended to occur in remote settlements, and amphetamines in regional areas. Lee et al (2008) report that in Arnhem Land in the Northern Territory, very high cannabis prevalence (72% of males, 23% of females, aged 13-36 years) has been reported. Clough et al (2005) found that cannabis use was strongly associated with alcohol and petrol sniffing among Aboriginal communities in the Northern Territory.

Senior and Chenhall (2008) believe that the recent rise in cannabis use of young people in the Northern Territory has been fuelled by more extreme restrictions on alcohol. They note that this has resulted in an increase of cannabis supply and thus greater availability for adults and youths to use cannabis as a replacement. This suggests that often studies of the 'cost' of alcohol abuse have not considered the effects of particular interventions on the use of other substances. It is also thought that the introduction of 'unsniffable fuel' combined with the fact that many Indigenous drug users are greatly influenced by their peer group, has also meant that many people have turned to marijuana use (Senior and Chenhall 2008).

This recent increase in cannabis use has created a new set of problems, many of which have arisen in the domestic setting, such as domestic and familial violence (76%) and mental illness (74%) (Senior and Chenhall 2008, Putt and Delahunty 2006). It is also reported that heavy cannabis use affects isolated Indigenous settlements, and in some instances is blamed for compounding harms associated with excessive drinking, kava or inhalant abuse, as well as triggering suicide and psychosis (Putt and Delahunty 2006).

## Prescription drugs, tranquillisers and analgesics

There is currently a lack of data around the use of non-prescribed prescription drugs by Indigenous people. Consultations with rural Aboriginal communities by the Aboriginal Drug and Alcohol Council (ADAC) identified concern over the misuse of prescription drugs. A number of communities expressed concern at the easy access people have to prescription drugs such as serapax, codeine and panadeine forte and the number of doctors who prescribe them freely (ADAC 1997). In the 2004-05 National Aboriginal and Torres Strait Islander Health Survey (NATSIHS), analgesics/sedatives were the third most reported substance used by Indigenous peoples in the last 12 months (ABS 2006b). The combination of prescribed medications with other substance use (e.g. over the counter medicines, illicit drugs or alcohol) can compound the physiological, psychological and social problems of people with a mental illness (AIHW 1995, Siggins Miller Consultants, Centre for Primary Health Care, and Queensland Alcohol and Drug Research and Education Centre 2003).

According to self-report data from the 2004-05 NATSIHS and the 2004 NDSHS survey, 3.6% of Indigenous Australians were using tranquillisers and analgesics for non-medical purposes at the time—a decrease from 9% reported in 1998 (AIHW 1999, MCDS 1998, AIHW 2006). As in previous years,

women were more likely to use tranquilisers and analgesics than men – in 2004-05 (4.4%) were twice as likely to report using these substances than men (2.6%) (AIHW 2006).

## 5.1 Control of supply

Like tobacco, the supply of illicit drugs affects everyone, but the literature identifies a number of issues relevant to supply control issues for Aboriginal and Torres Strait Islander communities. Whilst attention has primarily been given to big urban drug markets in the past, focus needs to be placed on isolated communities (Weatherburn 2008). This is currently being done in a number of states and territories through the use of detailed strategies tackling illicit drug trafficking in Aboriginal communities (Weatherburn 2008). Weatherburn (2008) notes that supply control policy has a critical role to play in reducing illicit drug consumption and drug-related harm. However, as with alcohol it is crucial to involve Aboriginal community members in developing these strategies in order to implement sustainable change. However, Nicholas cautions that restrictions do not necessarily guarantee community control over substance abuse or community support, or even adequate resources to enforce these restrictions (Nicholas 2007).

## 5.2 Demand management

There is a current lack of literature on demand management activities for Aboriginal and Torres Strait Islander peoples' illicit drug use. Research conducted in 1997 by the Aboriginal Drug and Alcohol Council (ADAC) of South Australia on rural communities found a need for community awareness campaigns to inform communities about the risks and harms associated with illicit and other drug use. They suggested this could be done through the use of: 'shock' tactics, television and other electronic media as part of an ongoing campaign targeting the whole community, radio to target health promotion messages for youth, and the implementation of regular health promotion days in collaboration with community health services. Unemployment, boredom and lack of recreational activities in rural communities were also thought to contribute to drug use. In response, employment opportunities, youth activities and sporting events and weekend activities were suggested. The need for a counselling service that could provide grief and loss counselling, crisis intervention, and coping and life skills was also suggested through their consultations.

### *Findings from Indigenous injecting drug users*

Meyerhoff (2000) reviewed injecting drug use in Aboriginal and Torres Strait Islander urban communities, and found the following themes concerning the causes of alcohol, tobacco and other drug misuse amongst young Aboriginal and Torres Strait Islander people:

- experimentation, which appears to be one of the major risk factors for injecting drug use among young Aboriginal and Torres Strait Islander Australians
- boredom and/or a lack of relevant and affordable recreation facilities or activities, particularly in remote, rural and regional areas
- peer group issues
- a lack of positive role models within Aboriginal and Torres Strait Islander communities.

## 5.3 Harm reduction

The literature on illicit drug use interventions in Aboriginal and Torres Strait Islander communities is limited.

Within Victorian Aboriginal Communities, van der Sterren et al (2006) believe that harm minimisation is a contested approach.

### *Factors for program development*

Programs such as needle-syringe and methadone prescription programs receive a mixture of support and rejection according to social context. van der Sterren et al (2006) propose a model in which program development is aimed at:

- promoting drug-free lifestyles and encouraging people not to inject
- protecting the health of those who inject, their families and the community
- providing support and choices to people who inject and want to stop.

Central also, are the roles of family and community to wellbeing and identity, and as such drug interventions must also be aimed at reducing drug-related harms for families and the entire community (van der Sterren et al 2006).

A recent study of injecting drug use among Aboriginal people in Western Australia found that 43% of those interviewed normally shared needles, syringes and other injecting equipment (Curtin University 2001). The study argues that there is an urgent need for harm reduction measures to avoid a significant rise in infections from blood borne viruses such as hepatitis C. There is a significant lack of services that can provide culturally appropriate, technically competent, and non-judgemental advice to Aboriginal users. The authors recommend improving access to clean injecting equipment, and providing better education and training on injecting drug use for users, providers and the community. For instance, recent findings report that needle and syringe programs have been critical in limiting the prevalence of HIV among Indigenous drug users to a very low level of less than 2%, as well as limiting the spread of hepatitis (Cao and Treloar 2006).

An evaluation conducted by the Australian Institute of Health and Welfare (AIHW) (2008c) to assessed the effectiveness of the COAG Illicit Drug Diversion Initiative (IDDI) in rural and remote areas in Australia. The IDDI provides a nationally consistent approach to diversion, spanning health, policing and justice sectors and is funded at both the Australian Government and state/territory government levels. There are three key stages to the diversion framework:

- Apprehension by the police or consideration by the court for diversion.
- Compulsory assessment to gain a sufficient understanding of the offender's needs and circumstances to develop a plan for action including, where appropriate, a treatment plan.
- Drug education or treatment services, including appropriate drug education and/or a range of clinically acceptable drug treatment services including counselling, withdrawal, residential rehabilitation and pharmacotherapies.

The IDDI directs funding towards programs located at the pre-arrest, pre-trial and pre-sentence phases of the criminal justice process (AIHW 2008c). These programs have become increasingly popular in recent years due to: increasing numbers of incarceration for drug-related offences; growing evidence that punitive responses alone have been unsuccessful in preventing the use of illicit drugs and criminal activity associated with their use; and increasing awareness that custodial sentences further compound the harms associated with drug use (Bull cited in AIHW 2008c). Furthermore it has been recognised that there are a range of socioeconomic, cultural and health factors involved.

As at June 2006, 22 of the 36 IDDI-funded programs were operating in rural and remote Australia (AIHW 2008c). Best practice examples included the NSW MERIT Health Outcomes Study conducted by NSW Health in 2007 (AIHW 2008c). MERIT is a program that targets adult offenders with demonstrable illicit drug problems, providing voluntary treatment to participants over a period of three months. The aims of the program are to improve health and social functioning, and to decrease participants' drug use and drug-related crime. Tools for measuring outcomes were used both at commencement and completion of the program. The study was conducted from 2004 to 2006 and produced the following key findings:

- a significant reduction in the levels and types of illicit drug use and associated risk behaviours among participants

- there was a significant improvement in the physical and psychological health measures among participants.

## 5.4 Treatment

There is a lack of evidence about the efficacy or otherwise of current treatment approaches to illicit drug use among Aboriginal and Torres Strait Islander people, despite an increased need for access to treatment services (Teasdale et al 2008). A review of enablers and barriers of Indigenous drug use argues that at present, Indigenous drug users are largely dependent on mainstream services for the supply of clean needles and syringes, and that they stand to benefit from improvements such as longer hours of operation of NSP outlets and increased geographical coverage (Urbis 2008).

Putt and Delahunty (2006) maintain that in rural and remote areas, treatment and diversion options for illicit drug use remain extremely limited. They argue that if flexible outreach services are available, police will have increased opportunities to contribute to demand reduction strategies; however, these services need to involve integrated alcohol, illicit drug and mental health services and brief interventions that are suited to rural and remote Indigenous communities (Putt and Delahunty 2006).

A study conducted by Teasdale et al (2008) on the acceptability and accessibility of mainstream services for Aboriginal Australians with alcohol or drug use disorders in a Sydney Area Health Service (AHS), found a pressing need for services to work with Aboriginal communities to optimise the quality of mainstream treatment services. They found that whilst clients, Aboriginal AMS staff members and other key Aboriginal informants overall indicated some satisfaction with the services provided, a number of challenges and areas for improvement emerged. These included cultural appropriateness of clinical services (including the provision of better co-ordinated and more integrated health care for the individual and family), barriers to treatment access, development of culturally appropriate prevention initiatives, and further building of partnerships with Aboriginal communities and community services.

Another program conducted with the Nunga community in Adelaide, introduced an opioid substitution program for Aboriginal people using heroin within the area (Williams et al 2006). The Parks 'Way Out' Program commenced in 1999 and is a response to strong community attitudes towards heroin use. The implementation of opioid substitution gradually became seen as a useful support and help for those suffering from addiction and their families, who were strongly against the use of methadone (Williams et al 2006). The program, which offers drug treatment within a family-friendly holistic primary care service, is reportedly succeeding in making essential treatment services available to Nunga heroin users in Adelaide. However it should be noted that its success is based on its use as a means of harm minimisation rather than an attempt to cure (Williams et al 2006). Despite this, the program is still seen as a successful case of substitution treatment to heroin use.

## 6 Kava

### Summary

Whilst a relatively small proportion of Indigenous people use kava, the drug has serious health and social consequences. Use of kava is generally limited to the Arnhem Land region of the Northern Territory.

Strategies to address kava use include:

- Control of supply – The main response by governments to kava-related problems has been the introduction of legislative controls over its supply, however there is little information available as to whether these have been successful.
- Demand management – Kava management plans have been implemented to assist communities in controlling kava availability. The profits stemming from the control of trade are used for community development and maintenance initiatives.
- Treatment – There is no current evidence on treatment outcomes.

Self-report data from the 2002 NATSISS survey showed that 3.4% of Aboriginal people were using kava – of which 4.6% were male and 2.4% female (AIHW 2006). Kava is a drug extracted from the roots of the plant *Piper methysticum* long used by Pacific Islanders, and was first introduced into Eastern Arnhem Land in 1981. It is consumed by Aboriginal people as dried powder mixed with water (Clough and Jones 2004). The degree of dilution affects the potency of the kava preparation (FSANZ 2004). Kava is also used as a complementary medicine, as a dietary supplement, and for the treatment of anxiety, insomnia, premenstrual syndrome and stress (FSANZ 2004).

Heavy use of kava can lead to general ill health including shortness of breath, dry scaly skin, liver damage, malnutrition and changes to red and white blood cells and platelets (Alexander 1985). Other health risks include acute neurological effects, sudden cardiac deaths and the infectious disease melioidosis (Clough et al. 2003). Long-term consumption of large amounts of kava can lead to toxic effects such as ataxia and ascending paralysis without loss of consciousness (Cawte 1986).

Kava abuse and profiteering from its trade remain significant public health issues in Arnhem Land (Clough and Jones 2004). Use of kava has generally been limited to the Arnhem Land region of the Northern Territory (MCDS 1998, Loxely et al 2004). Some communities encouraged the use of kava as a substitute to alcohol because it was thought that, unlike alcohol, people drinking kava were not prone to acts of aggression (Territory Health Services 1999, DHAC 1999b, Clough and Jones 2006). By 2001, eight major communities (of 200 to 1500 people) and their associated family outstations had a significant kava-using history in Arnhem Land (Clough and Jones 2004).

As with the use of other substances, Aboriginal communities have expressed concern about the social effects of drinking kava. They include neglecting family and community duties, and spending large amounts of income on kava, leaving little for food and other essential items. The *Kava Management Act 1998* in the Northern Territory prohibits the selling of kava without a licence. Communities may apply to the Liquor Commission for a licence to sell and use kava if there is demonstrated support in the community (Territory Health Services 1999, Northern Territory Government 2005).

### 6.1 Control of supply

An integrated system to control the importation, distribution and sale of kava was instituted in Australia in 1997, consisting of a standard in the Australia New Zealand Food Standards Code (the Code), which operates in conjunction with the National Code of Kava Management (NCKM) on the Restriction of Sale and Advertising of Kava (FSANZ 2004). The Food Standards of Australia and New Zealand (FSANZ 2004) reports that the NCKM enables states and territories to introduce more restrictive measures if

considered necessary. Both the Northern Territory and Western Australia have introduced such legislation.

The main response by governments to kava-related problems has been the introduction of legislative controls over its supply (d'Abbs and Burns 1997).

- In response to reports of adverse health consequences, the Western Australian Government has prohibited its sale and supply since 1988 under the *Poisons Act 1964 (WA)* (Prescott 1990).
- Under the Northern Territory's *Kava Management Act 1998* the selling of kava without a license is illegal. Communities may apply to the Liquor Commission for a licence to sell and use kava if there is community support for its sale (Territory Health Services 1997). Kava management plans developed by communities include details of limits on purchases and hours of sale (Government of the Northern Territory 2001).

There is little evidence available about whether these regulatory actions have succeeded in limiting the consumption of kava, health related harms, or the economic damage caused by the black market trade. Prior research into the harmful effects of heavy long-term consumption of kava on physical health in Aboriginal communities has shown however that regulation is more effective than a complete ban of kava (Mathews et al 1988). Bans by traditional owners and/or the local councils on the sale or supply of kava in some Arnhem Land communities have proved unsuccessful without the support of effective government controls on the regional trade of kava (d'Abbs and Burns 1997). A review of an earlier attempt at regulating supply in the Northern Territory found that community councils were ill-prepared and ill-suited to administering a system of controlled supply of kava, that with few exceptions the government neither helped councils or other retailers to meet their requirements, nor monitored their activities to ensure compliance; and that entrepreneurs had capitalised on the opportunities created by the poorly policed system to use it to their own advantage (d'Abbs and Burns 1997). Clough and Jones (2004) also note the fragile nature of the regulatory system and suggest that ongoing consultation and consideration are required, along with continued successful policing to discourage illegal traders. It is also important that licensed retailers adhere to their kava management plans and that they reduce harm from excessive kava use (Clough and Jones 2004).

## 6.2 Demand management

Within the Northern Territory, kava management plans came into effect in 2002 under which communities have been encouraged to participate in controlling kava availability (Clough 2003, Clough and Jones 2004). Clough and Jones (2004) note that these management plans must be approved by the Licensing Commission and are required to address the boundary of the licensed area, any locations within the boundary from which the possession of kava should be excluded, times and place of sale, purchase limits, community expectations or rules and actions to monitor and modify kava's negative impacts. Ultimately, the system provides for monopoly control of the trade by local Aboriginal community organisations and uses the profits for community development and community maintenance initiatives (Clough and Jones 2004). It also gives the community an aspect of self-determination as kava availability is controlled under conditions specified by the local community (Clough and Jones 2004).

## 6.3 Treatment

Although a number of programs include kava as one of their target drugs, including CAAP's residential rehabilitation program, there is no evidence on treatment outcomes.

## 7 Other intervention programs

### 7.1 Addressing comorbidity and mental health

Comorbidity refers to the co-occurrence of one or more factors or conditions. Within the context of mental health and drug use, comorbidity refers to a range of diagnosed or undiagnosed mental health issues that exist alongside problematic drug use, such that the problems of disease management are compounded dramatically (Szirom et al 2004). The issue of comorbidity has gained increasing significance by state and territory governments who are engaged in a range of policy and program initiatives to improve services to people with dual diagnosis. Szirom et al (2004) report growing recognition that whole-of-government approaches must take into account multifactorial issues including housing, income, welfare, health, criminal justice, education and training.

The National Strategic Framework for Aboriginal and Torres Strait Islander Peoples' Mental Health and Social and Emotional Well Being 2004-2009 (SEWB Framework) reports that Aboriginal and Torres Strait Islander people experience higher rates of both social and emotional well being problems and some mental disorders than other Australians, but that Indigenous people often experience reduced access to community-based mental health care, particularly care that is sensitive to their specific needs. It stresses the fact that mainstream services need to acknowledge the need to improve access to services such as mental health services, general practitioners, drug and alcohol services, and child and family health services. Treating mental ill health can occur in primary health care or mental health settings and includes early intervention, treatment and monitoring, relapse prevention and access to specialist services including rehabilitation and long term support (SEWB Framework 2004). Importantly, services must be culturally appropriate and safe, and provide continuity of care across the life span.

In the area of medication management, Kowanko et al (2004) found that prior to their work, no research had appeared to bridge the areas of Aboriginal mental health and Aboriginal medication management, despite the fact that mental health disorders are pervasive and especially related to alcohol and other drugs. A survey conducted with workers and managers from approximately 30 health and other organisations across metropolitan, rural and remote South Australia found drug and alcohol use to be the most frequently cited issue affecting the quality use of medications by Aboriginal people. They report that subsequent lack of compliance with prescribed medications resulted in treatment orders and involvement of the Guardianship Board (a tribunal that has the power to make important decisions affecting the lives and property of people over whom it has jurisdiction), sometimes further alienating Aboriginal clients and families from mainstream services. Kowanko et al (2004) also report that self-medication with alcohol and cannabis was also common, leading to dangerous, unpredictable and often violent situations.

It is stressed that best practice treatment for working with Indigenous young people must sit within a holistic framework (Szirom et al 2004). Lee et al (2008) maintain that interventions that engage whole communities to increase youth resilience and connectedness and promote a 'collaborative culture' in schools and communities are associated with improved mental health. The Mental Health Alcohol Tobacco and Other Drugs Service (MHATODS) at the Brisbane Youth Detention Centre (BYDC) is reported to address the prevailing paradigm of separate service delivery for mental health and drug and alcohol treatment, by creating an integrated treatment service for young people in detention (Letters and Stathis 2004). In particular, awareness is given to understanding the cultural issues surrounding the mental health of Indigenous young people at the detention centre, and an Indigenous health worker has been employed to give advice and support on Indigenous issues as they impact on mental health or substance abuse assessments and treatment. The worker also assists in engaging young people in therapy and in enlisting support for them within the Indigenous community.

In their report outlining barriers to service provision for young people with presenting substance misuse and mental health problems, Szirom et al (2004) report that service providers within an Indigenous setting expressed concern about their inability to manage clients with comorbidities, which was particularly pertinent given the very high levels of demand for services. They suggest that best practice in working with Indigenous young people with substance misuse and mental health problems should follow examples such as the social health teams that work with Indigenous communities from within

Aboriginal Health Services, which include: Wuchopperren Health Service (QLD), Central Australian Aboriginal Congress (NT), Winnunga Nimmityjah Aboriginal Health Service (ACT), Nunkawarrin Yunti of SA Inc (SA) and Port Lincoln Aboriginal Health Service (SA). These health teams are reported to offer both access to mental health and drug and alcohol workers, and referral into appropriate services as needed.

*Elements of good organisational practice with Indigenous communities*

- understanding and recognising the impact of past policies on the Indigenous community
- focusing on holistic healing
- clear directions, planning, leadership and vision
- integration
- teamwork and a highly skilled workforce
- flexibility and responsiveness to clients
- established networks, and a commitment to collaboration and partnerships with other key organisations
- an integrated holistic approach
- effective communication systems
- sound organisational policies and procedures
- making a demonstrated difference in the lives of those being engaged
- building trust (Szirom et al 2004).

Recently, Schlesinger et al (2007) developed and tested the psychometric properties of a screening tool developed specifically for Indigenous Australians to measure co-morbid alcohol and drug as well as mental health risk – called the *Indigenous Risk Impact Screen (IRIS)*. The instrument was found to be a success, proving the ability to capture polydrug use accurately and providing information about two or more drugs classified as symptomatic on the IRIS alcohol and drug subscale. In particular, the subscale shows promise of being able to screen for binge drinking, which is often not captured by well-established drug and alcohol screens that only assess dependence (Schlesinger et al 2007). The authors conclude that:

*At a service level, it is recommended that the IRIS form a routine part of clinical practice for Indigenous clients to ensure appropriate identification, intervention and referral. Embedding the screen within service protocols will increase service ownership and will allow for the screen to be utilised in a manner which aids service delivery.*

Schlesinger et al (2007)

They anticipate that the instrument is easily implemented. Training and support in the appropriate use of the IRIS is available through the Centre for Drug and Alcohol Studies, Alcohol and Drug Service, and Prince Charles Hospital Health Service District (Schlesinger 2007).

## 7.2 Youth intervention programs in a community setting

Lee et al (2008) note that there is little data on substance misuse interventions for Indigenous youth, despite the fact that Indigenous youths are twice as likely as other Australians to be recent users of illicit drugs. In remote Aboriginal communities where a minority of youth attend school, interventions are needed both inside and outside of school. Their evaluation of a community-driven preventative youth initiative in Arnhem Land NT, established to reduce substance use and promote resilience among young people, found the collaborative approach to have potential in increasing connectedness and in addressing youth problem behaviours in Indigenous communities. Participants reported an increase in

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recreation and training opportunities, skill development and improved connectedness following the formation of a Youth Development Unit. Perceived achievements included promoting skills of Indigenous community members, enhanced inter-agency communication and an increased range of youth activities. Lee et al (2008) found that community members felt the unit had the potential to reduce youth problems, including substance misuse, and to increase respect for elders and culture.

Lee et al (2008) report that programs that combine youth training and employment preparedness with recreation and culture and which are accepted by communities, provide alternatives to substance misuse and have the potential to enhance youth resilience.

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## 8 Summary

Aboriginal and Torres Strait Islander people suffer a disproportionate burden of ill health compared to other Australians. Alcohol and other drug misuse plays a significant role in lower life expectancy rates, health at birth, and the social, economic and cultural wellbeing of Indigenous people.

This review has shown that overall, there is a need for further research into the area of Aboriginal and Torres Strait Islander alcohol and other drug use, as well as programs and initiatives which have had success in addressing these issues, as measures of best practice.

The literature shows that community empowerment and consultation are crucial to the success of health promotion strategies and programs. The most successful projects have had both widespread support from communities and families and have involved active participation of their members. Essentially, change needs to be driven from within at a cultural and social level in order to address the problems of alcohol and other drug misuse among Aboriginal and Torres Strait Islander peoples.

The CAP provides guidance, support and examples of best practice for services and relevant organisations looking to develop culturally appropriate drug and alcohol initiatives and programs for Aboriginal and Torres Strait Islander people.

## Appendix A Reference list

- Alexander K 1985, *Kava in the North, A study of kava in Arnhem Land Aboriginal Communities*, Monograph, ANU North Australia Research Unit, Darwin.
- Al-Yaman F, Doeland M, 2006, *Family violence among Aboriginal and Torres Strait Islander peoples*, Australian Institute of Health and Welfare, Canberra.
- Australian Bureau of Statistics (ABS) 2006, *Deaths Australia, 2005* Canberra: Australian Bureau of Statistics
- Australian Bureau of Statistics (ABS) 2007, *Law and justice statistics – Aboriginal and Torres Strait Islander people: a snapshot, 2006* <http://www.abs.gov.au/ausstats/abs@.nsf/mf/4722.0.55.003/>.
- Australian Bureau of Statistics (ABS) 2006, *Prisoners in Australia*, cat no 4517.0, ABS, Canberra.
- Australian Bureau of Statistics (ABS) 2006b, *National Aboriginal and Torres Strait Islander Health Survey 2004-05*, ABS, Canberra.
- Australian Bureau of Statistics (ABS) 2005, *Aboriginal and Torres Strait Islander peoples: contact with the law*, *Australian Social Trends*, cat no 4102.0, ABS, Canberra.
- Australian Bureau of Statistics (ABS) and Australian Institute of Health and Welfare (AIHW) 2001, *The Health and Welfare of Australia's Aboriginal and Torres Strait Islander Peoples*, Catalogue, no. 4704.0, ABS, Canberra.
- Australian Bureau of Statistics (ABS) 1995, *National Health Survey 1994*, ABS, Canberra.
- 2002, *Prisoners in Australia*, Catalogue, no. 4517.0, ABS, Canberra.
- Australian Bureau of Statistics (ABS) and Australian Institute of Health and Welfare (AIHW) 2008, *The Health and Welfare of Australia's Aboriginal and Torres Strait Islander Peoples 2008*, ABS and AIHW, Canberra.
- Australian Catholic University (ACU) 2006, *Evaluation of Centacare Sobering Up Shelter*, School of Social Work, ACU, Canberra.
- Australian Institute of Criminology, 2004, *Key findings from the Drug Use Careers of Female Offenders study*, <http://www.aic.gov.au/publications/tandi2/tandi289t.html>.
- Australian Institute of Health and Welfare (AIHW) 2008a, *2007 National Drug Strategy Household Survey: First results*, AIHW, Canberra.
- Australian Institute of Health and Welfare (AIHW) 2008b, *Aboriginal and Torres Strait Islander Health Performance Framework 2008 Report*, AIHW, Canberra.
- Australian Institute of Health and Welfare (AIHW) 2008c, *The effectiveness of the Illicit Drug Diversion Initiative in rural and remote Australia*, AIHW, Canberra.
- Australian Institute of Health and Welfare (AIHW) 2006, *Aboriginal and Torres Strait Islander Health Performance Framework 2006 Report*, AIHW, Canberra.
- Australian Institute of Health and Welfare (AIHW) 1995a, *National Drug Strategy Household Survey: Urban Aboriginal and Torres Strait Islander Peoples Supplement 1994*, AIHW, Canberra.
- 1995b, *NDS Household Survey: Urban Aboriginal and Torres Strait Islander Peoples 1994*, AGPS cat. No. 95 1273X, AIHW, Canberra.
- 1999a, *1998 National Drug Strategy Household Survey, First Results*, AIHW cat. No. PHE 15, Drug Statistics Series, AIHW, Canberra.
- 1999b, *NDS Household Survey 1998*, AIHW cat. No. PHE 27, Drug Statistics Series, AIHW, Canberra.

Baker A, Ivers R, Bowman J, Butler T, Kay-Lambkin F, Wye P, Walsh R, Jackson Pulver L, Richmond R, Belcher J, Wilhelm K, Wodak A 2006, 'Where there's smoke, there's fire: high prevalence of smoking among some sub-populations and recommendations for intervention', *Drug and Alcohol Review*, 25.

Baldwin S, (2003), 'Tiwi Islands Alcohol Management Plan', *prepared for the Tiwi Islands Drug and Alcohol Committee*, [http://nt.gov.au/justice/licenreg/documents/liquor/TIAMP\\_Plan.pdf](http://nt.gov.au/justice/licenreg/documents/liquor/TIAMP_Plan.pdf)

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*, vol. 25.

Briggs V 1996, 'Smoking and health in the Koori Community', *Aboriginal and Islander Health Worker Journal*, vol. 20, no. 5 (Sept/Oct), pp17–18.

Butler T, Levy M, Dolan K, Kaldor J 2003, 'Drug use and its correlates in an Australian prisoner population', *Addict Res Theory*, vol. 11, pp89-101.

Butler T, Richmond R, Belcher J, Wilhelm K, Wodak A, (2007) 'Should smoking be banned in prisons?', *Tobacco Control*, vol 16, <http://tobaccocontrol.bmj.com/cgi/content/full/16/5/291>

Cairney S 2005, *Petrol Sniffing*, ABC Health and Wellbeing  
<http://www.abc.net.au/health/library/stories/2005/11/24/1831506.htm>.

Canadian Government 1997, *Gathering Strength: Canada's Aboriginal Action Plan*, Minister of Indian Affairs and Northern Development, Ottawa.

Cao W, Treloar C 2006, 'Comparison of needle and syringe programme attendees and non-attendees from a high drug-using area in Sydney', New South Wales, *Drug and Alcohol Review*, vol. 25.

Cawte J 1986, 'Parameters of kava used as a challenge to alcohol', *Australian and New Zealand Journal of Psychiatry*, vol. 20, no. 1, pp70–76.

Central Australian Aboriginal Congress (CAAC) 1995, *An Aboriginal Workers' Guide to Family, Community and Public Health*, CAAC, Alice Springs.

— 1997, *Response to the draft report on petrol sniffing in Central Australia*, unpublished document Alice Springs, CAAC, cited in d'Abbs and MacLean, *Petrol Sniffing in Aboriginal Communities*.

— 1998, *Substance Misuse in Central Australia*, CAAC, Alice Springs. Citing Reser J 1994, *Representations of psychology in Aboriginal Australia, Network*, vol. 9, no. 1, pp1–11.

Chan C, 2005, *Alcohol Issues in Domestic Violence*, Australian Domestic and Family Violence Clearinghouse, [http://www.austdvclearinghouse.unsw.edu.au/PDF%20files/Alcohol\\_Issues.pdf](http://www.austdvclearinghouse.unsw.edu.au/PDF%20files/Alcohol_Issues.pdf).

Chikritzhs T, Stockwell T, Pascal R 2005, 'The impact of the Northern Territory's Living With Alcohol program, 1992-2002: revisiting the evaluation', *Addiction*, vol.100.

Clough A, Currie B, Yunupingu M, Conigrave K 2006, 'Letter to the editor: Action is required to reduce kava supply in Arnhem Land...again!', *The Medical Journal of Australia*, vol. 184, no. 2.

Clough A, Kylie Lee K, Cairney S, Maruff P, O'Reilly B, d'Abbs P, Conigrave K 2006, 'Changes in cannabis use and its consequences over 3 years in a remote Indigenous population in northern Australia', *Addiction*, vol. 101.

Clough R 2005, 'Associations between tobacco and cannabis use in remote Indigenous populations in Northern Australia', *Addiction*, vol. 100.

Clough A, Jones P 2004, 'Policy approaches to support local community control over the supply and distribution of kava in the Northern Territory (Australia)', *Harm Reduction Digest 24*, vol. 23.

Clough A, d'Abbs P, Cairney S 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*, vol. 23, pp381-390.

- Clough A 2003, 'Enough! Or too much. What is 'excessive' kava use in Arnhem Land?' *Drug and Alcohol Review*, vol. 22.
- Commonwealth Department of Health and Aged Care (DHAC) 1999a, *Health Financing Series Volume 1, Health Financing in Australia, the Objectives and the Players*, DHAC, Canberra.
- 1999b, *Review of the Commonwealth's Aboriginal and Torres Strait Islander Substance Misuse Program*, DHAC OATSIH, Canberra, <[www.health.gov.au/oatsih/pubs/index.htm#S](http://www.health.gov.au/oatsih/pubs/index.htm#S)>.
- 1999c, *National Recommendations for the Clinical Management of Alcohol-Related Problems*, 14.
- 2000a, *National Hepatitis C Strategy 1999-2000 to 2003-04*, DHAC, Canberra.
- 2000b, *National recommendations for the clinical management of alcohol-related problems in indigenous primary care settings: January 1999*, DHAC, Canberra.
- 2000c, *Promotion, Prevention and Early Intervention for Mental Health: A Monograph*, DHAC, Canberra.
- Correll P, MacDonald M, Dore G 2000, 'Hepatitis C infection in Indigenous communities in Australia', in Commonwealth Department of Health and Aged Care 2000, *Hepatitis C: Informing Australia's National Response*, DHAC, Canberra.
- Currie B 2003, 'Health effects of kava use in an eastern Arnhem Land Aboriginal community', *Internal Medicine Journal*, vol. 33, pp336-340.
- Currie B, Burrow J, Fisher D et al. 1994, 'Petrol sniffer's encephalopathy', *Medical Journal of Australia*, vol. 160, no. 12, pp800-801.
- Curtin University 2002, *New research into injecting drug use among Aboriginal People*, Media release, Curtin, Bentley WA, <[www.curtin.edu.au/curtin/centre/ndri/news/media/20020306aboriginal\\_idu.htm](http://www.curtin.edu.au/curtin/centre/ndri/news/media/20020306aboriginal_idu.htm)>.
- d'Abbs P 2006, 'Indigenous petrol sniffing: lessons from a coronial inquest' (Editorial), *Drug and Alcohol Review*, vol. 25.
- d'Abbs P, Brady M 2004, 'Other people, other drugs: the policy response to petrol sniffing among Indigenous Australians', *Drug and Alcohol Review*, vol. 23.
- d'Abbs P, Burns C 1997, *Draft Report on the Inquiry into the Issue of Kava Regulation*, prepared for the Sessional Committee on the Use and Abuse of Alcohol by the Community, Menzies School of Health Research, Casuarina.
- d'Abbs P, MacLean S 2000, *Petrol Sniffing in Aboriginal Communities: A Review of Interventions*, Cooperative Research Centre for Aboriginal and Tropical Health, Casuarina.
- 2001, 'Liquor licensing and community action in regional and remote Australia: A review of recent initiatives', *Aboriginal and Islander Health Worker Journal*, vol. 25, no. 2, pp18-26.
- Dale A, Marsh A 2000, *Evidence Based Practice Indicators for Alcohol and Other Drug Interventions: literature review*, Best Practice in Alcohol and Other Drug Interventions Working Group, Perth.
- Daly A, Gvozdenovic A 1994, *Evaluation of the impacts of public drunkenness decriminalisation legislation and the establishment of sobering up facilities on aboriginal people in Northern Western Australia*, 2 volumes, WA Alcohol and Drug Authority, Perth.
- Drug and Alcohol Services South Australia (DASSA) 2008, *Alcohol and its Effects* <http://www.dassa.sa.gov.au/site/page.cfm?u=122> page last updated January 2008
- Department of Health and Ageing (DoHA) 2007, *Petrol Sniffing Prevention Program Website* <http://www.health.gov.au/internet/petrol/publishing.nsf/Content/home>.
- Department of Health and Ageing (DoHA) 2004, *An evaluation of the Comgas Scheme*, DoHA, Canberra.

Department of Families, Housing, Community Services and Indigenous Affairs (FaHCSIA) 2006, *Substance Use and Misuse*, [http://www.fahcsia.gov.au/indigenous/annual\\_report/page6.htm](http://www.fahcsia.gov.au/indigenous/annual_report/page6.htm).

Department of Health, Housing and Community Care, Canberra, <[www.health.act.gov.au/c/health?a=daanddid=5000000](http://www.health.act.gov.au/c/health?a=daanddid=5000000)>.

2000, *Australian Capital Territory Aboriginal and Torres Strait Islander Regional Health Plan*, ACT Department of Health, Housing and Community Care, Canberra.

Dodson M, 2003, *Speaking notes: Violence Dysfunction Aboriginality* (to the National Press Club, Canberra).

Fiore MC, Bailey WC, Cohen SJ et al 2000, *Treating tobacco use and dependence*, Clinical Practice Guideline, US Department of Health and Human Services, Public Health Service, Rockville MD.

Food Standards Australia and New Zealand (FSANZ), 2004, Final Assessment Report Proposal P256: Review of Kava, [www.foodstandards.gov.au](http://www.foodstandards.gov.au).

Garrow A 1997, *Time to Stop Reinventing the Wheel: a Review of Petrol Sniffing in the Top End*, unpublished report, NT Health Services, Darwin.

Giesbrecht N, Haydon E 2006, 'Community-based interventions and alcohol, tobacco and other drugs: foci, outcomes and implications', *Drug and Alcohol Review*, vol. 25.

Gray D, Jackson Pulver L, Siggers S, Waldon J 2006, 'Addressing Indigenous substance misuse and related harms', *Drug and Alcohol Review*, vol. 25, no. 3.

Gray, D 2000, 'Indigenous Australians and liquor licensing restrictions', *Addiction*, vol. 96 no.10, pp1469-1472.

Gray D, Siggers S, Sputore B and Bourbon D 2000, 'What works? A review of evaluated alcohol misuse interventions among Aboriginal Australians'. *Addiction*, vol. 95, no. 1, pp11-22.

Gray D, Sputore B, Stearne A, et al. 2002, *Indigenous Drug and Alcohol Projects 1999-2000: A report prepared for the Australian National Council on Drugs*, ANCD Research Paper, no. 4, ANCD, Canberra.

Health Infonet 2006, *Summary of alcohol misuse among Indigenous peoples*, [http://www.healthinfonet.ecu.edu.au/html/html\\_community/alcohol\\_community/reviews/alcohol\\_our\\_review.htm#summary](http://www.healthinfonet.ecu.edu.au/html/html_community/alcohol_community/reviews/alcohol_our_review.htm#summary), last updated August 2006.

— 1999, *Ten Years of Health Transfer First Nation and Inuit Control*, Program Policy, Transfer Secretariat and Planning, Ottawa.

Hertzman C 1999, Population Health and Human Development, Ch 2 in Keating DP and Hertzman C, editors, *Developmental health and the wealth of nations: social, biological, and educational dynamics*, The Guildford Press, New York, pp21–40.

Hogan E, Boffa J, Rosewarne C, Bell S, Chee D 2006, 'What price do we pay to prevent alcohol-related harms in Aboriginal communities?' The Alice Springs trial of liquor licensing restrictions', *Drug and Alcohol Review*, vol. 25.

Ivers R, Castro A, Parfitt D, Bailie R, Richmond R, d'Abbs P 2006, 'The role of remote community stores in reducing the harm resulting from tobacco to Aboriginal people', *Drug and Alcohol Review*, vol. 25.

Ivers R, Parfitt D, Castro A, d'Abbs P, Richmond R 2006b, 'Evaluation of a multi-component community tobacco intervention in three remote Australian Aboriginal communities', *Australian and New Zealand Journal of Public Health*, vol. 30, no. 2.

Ivers R, Castro A, Parfitt D, Bailie R, Richmond R, d'Abbs P 2005, 'Television and delivery of health promotion programs to remote Aboriginal communities', *Health Promotion Journal of Australia*, vol. 16, no. 2.

Ivers R 2003, 'A review of tobacco interventions for Indigenous Australians', *Australian and New Zealand Journal of Public Health*, vol. 27, no. 3.

Ivers R, Farrington M, Burns C, Bailie R, d'Abbs P, Richmond R, Tipiloura E 2003, 'A study of the use of free nicotine patches by Indigenous people', *Australian and New Zealand Journal of Public Health*, vol. 27, no. 5.

Katherine Region Harmony Group (2007), Alcohol Management Plan, [http://www.nt.gov.au/justice/policycoord/documents/oapc/07\\_Draft\\_Katherine\\_AMP\\_1\\_Mar07\\_public\\_distribution.pdf](http://www.nt.gov.au/justice/policycoord/documents/oapc/07_Draft_Katherine_AMP_1_Mar07_public_distribution.pdf)

Keel M 2004, *Family violence and sexual assault in Indigenous communities* (briefing no. 4), Australian Centre for the Study of Sexual Assault, Australian Institute of Family Studies.

Kowanko I, de Crespigny C, Murray H, Groenkjaer M, Emden C, 2004, 'Better medication management for Aboriginal people with mental health disorders: a survey of providers', *Australian Journal of Rural Health*, 12(6).

Kylie Lee K, Conigrave K, Clough A, 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*, vol. 27.

Kylie Lee K, Clough A, Conigrave K 2007, 'High levels of cannabis use persist in Aboriginal communities in Arnhem Land, Northern Territory', *The Medical Journal of Australia*, vol. 187, no. 10.

Letters P, Stathis S, 2004, 'A mental health and substance abuse service for a youth detention centre', *Australasian Psychiatry*, 12(2).

Lindorff, K 2002, *Tobacco – time for action*, Final report of the National Aboriginal and Torres Strait Islander Tobacco Control Project, NACCHO, Canberra, pp 32, 100-101.

Loxley W, Gray D, Wilkinson C, Chikritzhs T, Midford R, Moore D 2005, 'Alcohol policy and harm reduction in Australia', *Drug and Alcohol Review*, vol. 24.

Loxley W, Toumbourou J, Stockwell T, Haines B, Scott K et al (2004), 'The prevention of substance use, risk and harm in Australia: a review of the evidence,' The National Drug Research Institute and the Centre for Adolescent Health, Commonwealth Department of Health and Ageing.

Lubman D, Hides L, Yucel M 2006, 'Inhalant misuse in youth: time for a coordinated response', *MJA*, vol.185, no. 6.

Maher C, Tilton E 1994, *Health Promotion or Self-Promotion? A Central Australian alcohol media strategy*, CAAC, Alice Springs.

Mathers C 1994, *Health differentials among adult Australian aged 25-64 years*, Health Monitoring Series No 1, AGPS, Canberra.

Meyerhoff G 2000, *Injecting drug use in urban Indigenous communities: a literature review with a particular focus on the Darwin area*, Danila Dilba Medical Service Education and Training Service, Darwin.

Ministerial Council on Drug Strategy 2004, *National Tobacco Strategy, 2004-2009: The Strategy*.

Ministerial Council on Drug Strategy 2004, *National Drug Strategy, Australia's integrated framework: 2004-2009*.

Mosey A 1997, *Report on petrol sniffing in Central Australia*, unpublished report, Territory Health Services, Alcohol and other Drugs Program, Darwin, cited in d'Abbs and MacLean 2000, Petrol Sniffing in Aboriginal Communities.

National Aboriginal Community Controlled Health Organisation (NACCHO) 1997, Submission to the House of Representatives Standing Committee on Family and Community Affairs, Inquiry into Indigenous Health, NACCHO, Deakin, ACT.

— 1999, Position paper on Aboriginal Community Controlled Health Services, NACCHO, Deakin, ACT.

— 2001, Submission to the Commonwealth Parliamentary Inquiry into the needs of urban dwelling Aboriginal and Torres Strait Islander peoples, NACCHO, Deakin ACT.

National Aboriginal and Torres Strait Islander Health Council and National Mental Health Working Group, 2004, *National Strategic Framework for Aboriginal and Torres Strait Islander Peoples' Mental Health and Social and Emotional Well Being 2004-2009*.

National Health and Medical Research Council (NHMRC) 1997, The health effects of passive smoking, Commonwealth of Australia, Canberra.

National Rural Health Policy Forum (NRHPF) 1999, Healthy horizons: a health framework for rural, regional and remote Australians 1999-2003, joint development of the National Rural Health Policy Forum and the National Rural Health Alliance for the Australian Health Ministers' Conference, NRHPF, Canberra.

National Tobacco Campaign 2008, homepage <http://www.quitnow.info.au/>.

National Tobacco Campaign 2008b, *Health Effects of Smoking* <http://www.quitnow.info.au/internet/quitnow/publishing.nsf/Content/damage-lp>.

National Centre in HIV Epidemiology and Clinical Research 2005, *HIV/AIDS, Viral Hepatitis and Sexually Transmissible Infections in Australia, Annual Surveillance Report*. NCHECR and Australian Institute of Health and Welfare. Canberra.

Nicholas R 2007, *Alcohol and other drug problems among Indigenous Australians from rural and remote regions: A policing perspective*, Australasian Centre for Policing Research.

Northern Territory Government 2005, *Information about the Kava Management Act and Regulations*, Northern Territory Government.

— 2001, Information and history of kava, Treasury Department, Darwin, <[www.nt.gov.au/ntt/licensing/kava.shtml](http://www.nt.gov.au/ntt/licensing/kava.shtml)>.

Office of the Liquor and Gambling Commissioner 2008, *Information for Councils: Dry Area Application*, Government of South Australia.

Office of the Status of Women 2001, Partnerships Against Domestic Violence, MetaEvaluation, Bulletin No. 6, Department of the Prime Minister and Cabinet, Canberra.

Panton S 2006, *Evaluation Report of the: Australian Alcohol Guidelines For Indigenous Communities and Don't Gamble With Your Health – health promotion playing cards*, Aboriginal Drug and Alcohol Council SA.

Prescott J 1990, Kava Use in Australia, *Drug and Alcohol Review*, vol. 9, no. 4, pp27–29. Queensland Aboriginal and Torres Strait Islander Health Partnership 1999, Queensland Framework for Action in Aboriginal and Torres Strait Islander Health, DHAC, OATSIH, Brisbane.

Preuss K, Brown J 2006, 'Stopping petrol sniffing in remote Aboriginal Australia: key elements of the Mt Theo Program', *Drug and Alcohol Review*, vol. 25.

Prichard J, Payne J, 2005, *Alcohol, drugs and crime: a study of juveniles in detention*, Australian Institute of Criminology: Trends and Issues in Crime and Criminal Justice.

Putt J, Payne J, Milner L, 2005, *Indigenous Male Offending and Substance Abuse*, Australian Institute of Criminology: Trends and Issues in Crime and Criminal Justice.

Putt J, Delahunty B 2006, 'Illicit drug use in rural and remote Indigenous communities', *Australian Institute of Criminology*, no. 322.

Richmond R, Butler T, Wodak A, Wilhelm A, Baxter E, (2006), 'Promoting smoking cessation among prisoners: feasibility of a multi-component intervention', *Australian and New Zealand Journal of Public Health*, vol 30 (5)

Roche AM, Ober C 2001, Rethinking smoking among Aboriginal Australians: the harm minimisation – abstinence conundrum, *Aboriginal and Islander Health Worker Journal*, vol. 25, no. 6, pp14–19.

Royal Australian and New Zealand College of Psychiatrists 2000, Submission to the House of Representatives Standing Committee on Family and Community Affairs, in *Health is Life: Report on the Inquiry into Indigenous Health*, Commonwealth of Australia, Canberra.

Saggers S, Gray D 1997, 'Supplying and promoting 'grog': the political economy of alcohol in Aboriginal Australia', *Australian Journal of Social Issues*, vol. 32, no. 3, pp215–237.

— 2001, Port Hedland and Roebourne substance misuse services review, National Drug Research Institute (NDRI), Curtin University, Perth.

Saggers S, Gray D 2007, 'Defining what we mean' in *Social Determinants of Indigenous Health* (ed Carson B, Dunbar T, Chenhall R, Bailie R), Allen and Unwin, Crows Nest NSW Australia.

Sandover R, Houghton S, O'Donoghue T 1997, 'Harm minimisation strategies utilised by incarcerated Aboriginal volatile substance users', *Addiction Research*, vol. 5, no. 2, pp113–136.

Sandover R, Houghton S, O'Donoghue T 1997, Harm minimisation strategies utilised by incarcerated Aboriginal volatile substance users, *Addiction Research*, vol. 5, no. 2, pp113–136C.

Schlesinger C, Ober C, McCarthy M, Watson J, Seinen A 2007, The development and validation of the Indigenous Risk Impact Screen (IRIS): a 13-item screening instrument for alcohol and drug and mental health risk, *Drug and Alcohol Review*, vol. 26.

Senior K, Chenhall R, Daniels D 2006, '“Stuck nose”: experiences and understanding of petrol sniffing in a remote Aboriginal community', *Contemporary Drug Problems*, vol. 33.

Sheil H 1997, Building Rural futures through co-operation, Churchill, Monash University Centre for Rural Communities, quoted in Commonwealth DHAC 2000, Promotion, Prevention and Early Intervention for Mental Health – A Monograph, National Mental Health Promotion and Prevention Working Party, DHAC, Canberra.

Siggins Miller Consultants, Centre for Primary Health Care, and Queensland Alcohol and Drug Research and Education Centre 2003, Current practice in the management of clients with comorbid mental health and substance use disorders in tertiary care settings, a report to the Commonwealth Department of Health and Ageing, DHA, Canberra.

Silagy C, Stead LF 2001, Physician advice for smoking cessation (Cochrane Review), in the Cochrane Library Issue 2, Oxford, Update Software, <[www.update-software.com/abstracts/ab000165.htm](http://www.update-software.com/abstracts/ab000165.htm)>.

Stathis S, Letters P, Doolan I, Whittingham D 2006, 'Developing an integrated substance use and mental health service in the specialised setting of a youth detention centre', *Drug and Alcohol Review*, vol.25.

Stathis H, Eyland S, Bertram S 1991, Patterns of drug use amongst NSW prison receptions, Report No. 23, Department of Corrective Services, Sydney.

Stearne A, 2007, *Drug and Alcohol Services Association of Alice Springs Community-Based Outreach Program: Final Evaluation Report*, National Drug Research Institute, Curtin University of Technology.

Stempel P, Saggers S, Gray D, Stearne A 2004, Indigenous drug and alcohol projects: elements of best practice, Australian National Council on Drugs, National Drug Research Institute, Curtin University of Technology.

Teasdale K, Conigrave K, Kiel K, 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*, vol. 27.

---

Thomson N, Burns J, Hardy A, Krom I, Stumpers S, Urquhart B, 2008, 'Overview of Australian Indigenous health status October 2008', <http://www.healthinfonet.ecu.edu.au/ouoverview>.

United States Department of Health and Human Services 2006, *The Health Consequences of Involuntary Exposure to Tobacco Smoke: A Report of the Surgeon General*. [Atlanta, Ga.]. Department of Health and Human Services, Centers for Disease Control and Prevention, National Centre for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health. Washington, D.C. [http://www.cdc.gov/tobacco/data\\_statistics/sgr/sgr\\_2006/index.htm](http://www.cdc.gov/tobacco/data_statistics/sgr/sgr_2006/index.htm)

Urbis 2008, *A Review of Enablers and Barriers of Indigenous Drug Users Accessing Needle and Syringe Programs – a report for the COAG Multilateral Group on Needle and Syringe Programs*, Department of Health and Ageing (DoHA) (unpublished report).

van der Sterren A, Anderson I, Thorpe L 2006, "Individual' harms, Community 'harms': reconciling Indigenous values with drug harm minimisation policy', *Drug and Alcohol Review*, vol. 25.

Victorian Aboriginal Health Service 1999, Study of young people's health and well-being: cigarette smoking, VAHS Co-operative Ltd, Melbourne.

Weatherburn D 2008, 'The role of drug and alcohol policy in reducing Indigenous over-representation in prison', *Drug and Alcohol Review*, vol. 27.

Williams N, Nasir R, Smither G, Troon S 2006, 'Providing opioid substitution treatment to Indigenous heroin users within a community health service setting in Adelaide', *Drug and Alcohol Review*, vol. 2

Yick J, Mason C, Jackson S, 2008, *Female Indigenous Victims of Violence – The Northern Territory Criminal Justice System From Victimisation to Court Ordered Sanctions*, for the 2008 Australian and New Zealand Society of Criminology Conference, Canberra, NT Department of Justice.