Review of

Moving beyond the restrictions: The evaluation of the Alice Springs Alcohol Management Plan

A report prepared for the Alice Springs People's Alcohol Action Coalition

Suzanne MacKeith
Dennis Gray
Tanya Chikritzhs

13 August 2009

National Drug Research Institute
Curtin University of Technology

Introduction

This report has been prepared for the People's Alcohol Action Coalition to assist in their response to the *Moving beyond the restrictions: The evaluation of the Alice Springs Alcohol Management Plan* (hereafter referred to as 'the Report'). The Report was prepared by Kate Senior, Richard Chenhall, Bill Ivory and Christopher Stevenson for the Northern Territory Government, Department of Justice and Department of Health and Families.

This review will provide an overview of the background to, and rationale for, the Alice Springs Alcohol Management Plan (AMP), in light of the broader context of alcohol use and alcohol-related harm in Alice Springs. Brief comment will be made with respect to: the evidence base on which the authors of the Report relied; the adequacy of the methods applied; the format, structure and language of the Report; and the quality of scholarship demonstrated.

The review will focus primarily on the recommendations the Report makes in light of the substantial national and international literature available regarding the consumption of alcohol and the harms resulting from the misuse of alcohol, and offers some alternative recommendations based on the available evidence of what works.

It is important for readers of this review to be aware that two of the authors (Dennis Gray and Tanya Chikritzhs) were part of a larger experienced team that submitted a tender for the evaluation of the Alice Springs AMP. That original tender exceeded the amount allocated to the evaluation by the Northern Territory Government and the team was requested to re-submit the tender. The team did so but was still unable to undertake the work for the allocated funding. The tender was not awarded and a contract for the evaluation was subsequently awarded to the Menzies School of Health Research. We made this known to the People's Alcohol Action Committee when we were asked to prepare this

review so that they could ascertain whether there might be a possible conflict of interest. PAAC members did not believe that there was such a conflict and we have been scrupulous in trying to ensure that the review is firmly evidence-based. (For readers who might be interested, copies of our tender documents can be supplied on application to the authors.)

Background

The AMP was announced in September 2006, and its implementation coincided with the introduction of the Alice Springs Liquor Supply Plan (Northern Territory Licensing Commission, 2006) in October 2006. The goals of the Alice Springs AMP were developed from the *Northern Territory Alcohol Framework* (Renouf *et al.,* 2004) under the auspices of the Chief Minister's Taskforce in response to community concerns relating to the elevated incidence of alcohol consumption and related harm and crime.

High levels of harmful alcohol consumption have long been recognised as a problem in Alice Springs (Lyon, 1990). Although this has often been framed as an 'Aboriginal problem, excessive alcohol consumption is also a problem within the non-Indigenous population of Alice Springs. While high levels of consumption are a problem in the Aboriginal population, it has been estimated that non-Aboriginal consumption levels in Alice Springs are about twice the national average (Gray & Chikritzhs 2000).

For many years community groups have been concerned about the high levels alcohol-related harm in Alice Springs; although, as the Report makes clear, there have been markedly different perceptions of the problem and its solution. Various groups have made representations requesting the NT Government to address the issue including requests for various types of restrictions on the availability of alcohol, either across-the-board or to particular persons. In addition various demand and harm reduction activities have been introduced by government and non-government agencies, including Aboriginal community-controlled organisations (AhChee & Boffa, 2001; Hogan, Boffa, Rosewarne, Bell, & Ah Chee, 2006; Rosewarne & Boffa, 2003) – funded by both the Australian and NT Governments.

There is a lengthy history in Alice Springs of imposition of restrictions on alcohol in addition to those mandated under the NT Liquor Act. In 1978, the so-called 'Two Kilometre Law' – Section 45D of the Summary Offences Act – was introduced. This made it an offence to consume alcohol in a public place within two kilometres of a licensed premise, or to consume alcohol on unoccupied land without the owner's permission – although exemption was made for the Old Telegraph Station, a picnic spot popular with non-Aboriginal people. Trial restrictions/measures commencing in 2002 have included: take-away alcohol purchase times; take-away container sizes; high-strength alcohol sales; the number of containers of alcohol sold to an individual; camera surveillance installation

at drive-through bottle shops; and a requirement that staff are to hold Responsible Service of Alcohol (RSA) certificates (National Drug Research Institute, 2007).

Following enabling amendments to the Liquor Act, on application from the Alice Springs Town Council, the Licensing Commission declared the town 'dry' in August 2007. That is, the town was declared a 'public restricted area' in which alcohol consumption was prohibited. Areas exempt from the regulations were: licensed premises; homes; the picnic area at the Telegraph Station Reserve, an area mainly frequented by non-Aboriginal people and tourists; and one Aboriginal town camp situated on 'vacant' crown land (Namatjira's Camp). Nineteen Town Camps were excluded from the Public Restricted Area Declaration as they are located on leased crown land and are thus considered 'private premises' under the Act. The remaining camp is located outside the Municipality and is therefore not subject to the restrictions (Northern Territory Licensing Commission, 2007). The effect of this declaration has impacted disproportionately on Aboriginal people (National Drug Research Institute, 2007).

Ongoing concerns regarding alcohol consumption and the associated harms led to the introduction of the Liquor Supply Plan in October 2006 (an externally driven measure to change the drinking context) to further tighten the restrictions, and the Alcohol Management Plan, intended to be managed by the members of the communities affected by alcohol. These initiatives were further overlaid by the Federal Government's Northern Territory Emergency Response (NTER) intervention which, among other measures, added further restrictions on the sale, possession, transportation and consumption of alcohol on Aboriginal land in September 2007. The numerous initiatives and restrictions operating in Alice Springs add complexity to evaluation efforts. This however does not mean they can not be conducted competently.

Evidence-base, Methods and Content Issues

Scope of the Report

Menzies School of Health Research was commissioned to conduct evaluation of the Alcohol Management Plan in August 2008. The terms of reference as stated in the evaluation Report were to examine:

- What strategies from the Alcohol Management Plan (AMP) have been implemented?
- If a strategy has not been implemented, why, and what barriers are there?
- What has been the effect of such implementation?
- How can the impact of the alcohol management plans be assessed? (p. 26)

In addition the evaluators were asked to assess the applicability of the Tennant Creek 'Thirsty Thursday' initiatives to Alice Springs. (N.B. On page 20 of the Report, a slightly different description of the terms of reference is given.)

A reading of the Executive Summary alerts readers to the fact that the Report has not addressed these terms of reference. The Report has been framed around the ways restrictions on the supply of alcohol, and the manner and contexts in which alcohol is used in Alice Springs are perceived by members of the community and stakeholders, rather than an examination of the implementation and ongoing progress of the range of strategies that together form the AMP. The Report has gone significantly beyond the terms of reference, particularly in relation to policy options, treatment service provision and by suggesting the NTG be involved in reviewing the operations of community operated and managed services and initiatives.

Section 2 of the Report (Methodology and Type of Evaluation) provides the reasons for choosing to conduct a process evaluation, commenting that it was:

> Clear that only some aspects of the AMP [had] been implemented…. [and there was] minimal evidence to suggest that there was consideration of what strategies could be utilised to implement the [demand reduction and harm reduction] strategies of the AMP (p. 27).

Despite making these observations and given the terms of reference, reasons for these results (after the AMP had been operating for approximately two years) were not discussed nor given critical consideration. The Report states that some aspects of the plan had been operating for too little time to be adequately evaluated and that some aspects had not been implemented, and yet there is limited discussion of the particulars of what has not been implemented and the reasons why – despite this being a part of the terms of reference.

The review of the literature (Chapters 4 and 5) is inadequate and uncritical. There have been a number of major national and international reviews of the evidence with regard to the prevention and/or reduction of alcohol-related harms. These include:

- the 2008 report of the National Preventive Health Taskforce *Preventing Alcohol-related Harm in Australia: a Window of Opportunity,* the most recent national review;
- the 2005 book edited by Stockwell and others *Preventing Harmful Substance Use: the Evidence Base for Policy and Practice,* which summarises the international literature;
- the 2004 review by Loxley and others, *The Prevention of Substance Use, Risk and Harm in Australia: A Review of the Evidence* for the Ministerial Council on Drug Strategy;
- the 2003 book by Babor and others *Alcohol: No Ordinary Commodity,* an updated version of the Edwards and others book of 1994 on which the evaluators rely substantially;
- the 2007 review by the National Drug Research Institute, *Restrictions on the Sale and Supply of Alcohol: Evidence and Outcomes.*

No references to these key documents are made in the Report. Furthermore, no reference is made to either:

- the *National Drug Strategy,* which forms the basis for alcohol policy in the NT as well as nationally; or,

- the 2003 *National Drug Strategy: Aboriginal and Torres Strait Islander Peoples Complementary Action Plan*;

both of which are based on extensive reviews of the evidence.

In Chapter 5, a considerable amount of space is devoted to describing previous reports on alcohol issues and evaluations of interventions in Alice Springs. However, the Report contains no *critical* discussion, nor are the findings and implications of these related to the evaluation of the AMP or to the recommendations made in the Report.

As an example of the uncritical nature of the review, the authors write that 'Martin (1988) has demonstrated that for such individuals [Indigenous heavy drinkers] demand for alcohol is independent of price' (p.57). However, Martin asserts this in his paper but the data he presents do not unambiguously *demonstrate* this; and the assertion flies in the face of substantial and reliable, peer reviewed international evidence that the demand for alcohol is not inelastic and that heavy drinkers and young people are among those most impacted upon by price increases (Babor, *et al.*, 2003).

It is not until Section 6 (p. 75) that the Report provides any description of the AMP and its goals. The Report includes a table (6.1) of the components of the AMP and simply notes whether a strategy had been implemented or not. Comment is made that strategies of the AMP will need updating and to be 'more clearly specified' (p. 79). It would seem appropriate to have included some discussion here of the evidence base and rationale for each of the AMP strategies, given the terms of reference, and to discuss, what was done, how it was done, when it was done, by whom, and why some strategies were not implemented.

The Report indicates the following strategies have been implemented.

Supply reduction:

- Undertake targeted enforcement activities that focus on alcohol trouble spots;
- Implement, monitor and review alcohol restrictions introduced by the Licensing Commission;
- Introduce tailored alcohol management strategies before and after special events in Alice Springs;
- Enable quicker activation of emergency alcohol restrictions during violent incidents or natural disasters;
- Introduce simpler processes for complaints against a licensed premise;
- Obtain community input into further control on promotion, sale, supply or consumption of alcohol; and,
- Explore the feasibility of a permit system for buying alcohol.

Harm reduction:

- Encourage high risk premises, public areas or general areas to be declared restricted from alcohol;
- Expand sobering up services to include assisting people into rehabilitation;
- Ensure the availability of quality alcohol treatment and withdrawal services;
- Work with licensees and local communities to reduce anti-social behaviour around licensed premises;
- Strengthen options available to support families to protect their income from drinker's requests and demands;
- Support community to build zero tolerance of local alcohol-related violence; and,
- Build an effective range of options for rehabilitating people who commit alcohol-related offences.

Demand reduction:

- Provide small grants for local actions that address the impact of alcohol misuse and abuse; and
- Work with local sporting clubs and recreation clubs and other licensed premises to promote a responsible drinking culture.

According to the Report, the following strategies have not been implemented.

Supply reduction:

- Develop a code for the responsible promotion and advertising of alcohol in Alice Springs.

Harm reduction:

- Increase the effectiveness of the community patrol;
- Develop a local liquor accord;
- Promote low alcohol products and alternatives to drinking; and
- Work with key communities in the region to develop local alcohol management plans.

Demand reduction:

- Expand the training for health professionals to effectively challenge the behaviour of the risky drinker; and
- Develop a support program for families that involves parent and school based education.

There is brief discussion of the alcohol courts (an initiative implemented prior to the AMP) and their under-utilisation, but the Report fails to mention that offenders must 'appear to be dependent on alcohol' for referral (Northern Territory Government, 2004b). It does provide descriptions of: the Alcohol Reference Panel (ARP) and its role; police responses to the AMP; night and day patrols; and the hospital social work program. The point is made that some of the initiatives developed by services (Police and health organisations) are not recognised as being components of the AMP (by the services

themselves) but are instead considered to be additional to it. Regardless of whether they are perceived to be part of the AMP, these initiatives may represent some of the AMP's strategies, so their implementation and impact should have been addressed in the Report. Comment is also made that supply reduction measures had been emphasised in the management of alcohol issues in Alice Springs, but no discussion follows of the evidence-base for this course of action.

On the one hand, the implication of the title of the Report – *Moving beyond the restrictions* – is positive and suggests as does the AMP itself and sections of the Report that strategies in addition to restrictions are needed to reduce alcohol-related harms. On the other hand, however, there is a negative implication to this. That is, that the restrictions are an emergency, interim strategy until a broad change in drinking culture is achieved. This view is contrary to the national and international evidence that has consistently shown that restrictions on availability must remain part of any alcohol management package (Loxley, *et al.*, 2004; National Drug Research Institute, 2007; Stockwell, Gruenewald, Toumbourou, & Loxley, 2005). It also fails to recognise that modifications to the existing restrictions have the potential to achieve further significant reductions.

The report suffers from a lack of comparison with other regions or areas in the NT, where various combinations of restrictions have been implemented with different outcomes. Such comparison could also have enabled identification of the impacts of the specific local measures applied in Alice Springs: as opposed to measures implemented across the NT as a result of the Australian Government's Northern Territory Emergency Response (NTER), for example income quarantining in the absence of other restrictions.

A significant weakness of the Report is the failure to give due emphasis to the magnitude of the reduction in alcohol consumption in Alice Springs. It is not until page 161 that we are informed of the 18 per cent reduction in alcohol consumption following introduction of the AMP (although it should have also pointed out that in large part this was likely to have been consequence of the introduction of the Liquor Supply Plan at about the same time). However, despite this reduction, alcohol consumption and the related harms remain significantly higher in Alice Springs and the NT than elsewhere in Australia. Given this, there is a need to achieve further reductions in alcohol-related harms. This can most effectively be achieved through economic and availability restrictions with support from harm and demand reduction strategies (Babor, *et al.*, 2003; Loxley, *et al.*, 2004; National Drug Research Institute, 2007; National Preventative Health Taskforce Alcohol Working Group, 2008; Stockwell, *et al.*, 2005; Wagenaar, Salois, & Komro, 2009). Declines in overall consumption and reductions in the severity of assaults and homicides add weight to the evidence for the efficacy of current interventions, especially the Liquor Supply Plan, and strengthens the case for further restrictions.

Design and Analysis

There are serious methodological problems with the Report, including lack of technical understanding of appropriate techniques, and poor analysis of the consumption and epidemiological data, and the disingenuous justification of the telephone survey (including failure to distinguish between interviewer and response bias and the differential impact of these). This is ironic given that the Report includes a chapter on 'Developing evaluation framework and a minimum data set' and suggests that Menzies School of Health Research provides 'over arching advice to local evaluators' (p. 151) and develops a 'handbook for the evaluation of alcohol Management Plans' (p. 158). Technical issues aside, however, the findings that there had been a reduction in consumption and related indicators and that there is considerable opposition to restrictions were so obvious that whatever methodology was used the results would have been much the same.

The impact of declines in consumption on related harms is not adequately investigated. Some key indicators are omitted from analysis on the basis that mortality and morbidity from some causes could not be attributed entirely to alcohol. The Report suggests that conditions such as '… stroke or female breast cancer … have alcohol as a substantial risk factor, but are not directly caused by alcohol consumption.' (p. 156). This is an incorrect interpretation of the relationship between alcohol and these 'other' conditions. There are many conditions, especially injuries (e.g. injuries sustained from road crashes, falls and interpersonal violence and intentional self-harm) which are partially attributable to alcohol but this does not imply that the relationship has not been identified as causal. A sophisticated method for determining the 'ætiologic fraction' of hospitalisations and deaths for particular conditions that are alcohol caused has been developed and widely applied (English, *et al.*, 1995; WHO 2000; Heale, Chikritzhs, Jonas, Stockwell, & Dietze, 2002; Pascal, Chikritzhs, & Gray, 2009). Failure to consider alcohol-attributable injuries in particular is a substantial shortcoming of the Report as these conditions have been shown to be highly responsive to short-term changes in alcohol availability – including direct evidence from the Northern Territory for both Indigenous and non-Indigenous mortality (e.g. Chikritzhs *et al.* 2005).

The methods for calculating alcohol consumption are an issue. It is more likely that the Report over-estimates – not under-estimates (p. 93) – the level of alcohol consumption in Alice Springs. Using data supplied by the Liquor Commission, *per capita* consumption has been calculated using alcohol sales (converted to litres of alcohol) from outlets in Alice Springs as the numerator and the estimated residential population of Alice Springs plus an estimate of tourist numbers as the denominator. However, this fails to take account of the fact that a significant percentage of alcohol purchased in Alice Springs is consumed by residents of the broader Central Australian region visiting the town, but whose numbers are not captured in estimates of tourist numbers – thus over-estimating *per capita* consumption. A better estimate of consumption in Alice Springs is a regional estimate that includes sales from all outlets in the region as the numerator and the estimated residential

population plus and estimate of tourist for the region as the denominator (Gray and Chikritzhs 2000).

The time lines used in the Report to measure some impacts were too short and vary. For instance, with regard to hospital separations, alcohol-related assaults, and offences recorded by police (including 'total homicide and related offences'), the Report presents data for one year prior to the introduction of the AMP and Liquor Supply Plan and for two years afterwards. However, for assaults in general (reported by police) the Report presents data for three years prior to the interventions. No explanation given as to why this time period was not utilised in consideration of other offences. Presenting data for two years prior to, and two years subsequent to, the introduction of the Liquor Supply Plan and the AMP would have provided a more accurate picture of the impact.

Assault and offence data were not separated into Indigenous and non-Indigenous categories. This would have provided a more meaningful basis for data analysis – particularly as in the case of homicides and manslaughter there is a much stronger relationship between alcohol consumption and homicides among Indigenous than among non-Indigenous people (Steering Committee for the Review of Government Service Provision, 2009). Data related to the decline in grievous bodily harm offences were not included in the Report.

No consideration was given to road traffic accidents, although these contribute substantially to alcohol-attributable death and injury. Police and health departments routinely record such data and these could have been analysed with appropriate time series analysis using monthly or quarterly time points. We note also that, despite the potential for consideration of time series analysis of 'assault related hospital presentations' (p.98), the authors opted for annual aggregates.

Analysis of the data generally was poor. For example, the analysis of Figure 8.1 (p. 94) is confusing and inaccurate. In a crucial paragraph describing trends in alcohol consumption, the Report states that immediately following the introduction of the AMP in 'October 2007' the sales of cask wine fell, implying a causal relationship. In fact, the AMP was introduced in October 2006 so the reader is left wondering whether this is a typographical error and in some doubt as to the validity of the ensuing conclusions. Moreover, based on both the available data and existing international evidence, it was more likely that the decline was related to the introduction of the Liquor Supply Plan rather than to the strategies of AMP proper. The Report also stated that sales of fortified wines fell at the same time. However, while there was a marginal decline, the substantial fall in these sales occurred between March and September 2005. This appears to be associated with a substantial simultaneous increase in sales of cask wine. This outcome, so clearly apparent in the figure, is ignored. Further, although the Report mentions that 'data for overall alcohol sales shows a fall across the period 2006 to 2008' (p. 94) this is only provided in Figure 8.2 and could have usefully been included in Figure 8.1.

In Figure 8.3 it is apparent that the unadjusted trend has been utilised in the analysis of consumption data when it would have been more appropriate to rely on the adjusted trend which accounted for unrecorded wine sales – regardless of the 'negligible difference in the results' (p. 95). The Report states that the total consumption data were adjusted for 'seasonal variability' but does not report the methods used to make this adjustment. This claim is particularly puzzling as de-seasonalisation of a time series typically causes the loss of the first full period of data, as they are 'differenced' against the subsequent period. In this case, as the data are presented in quarters, the first four quarters would have been removed with the series thus beginning at March 2006.

No sources were supplied for the statistical data presented (Figures 8.1, 8.2 and 8.3 and Tables 8.1, 8.2, 8.3 and 8.4). Furthermore several citations (at least 20) in the Report were not listed in the references or were listed incorrectly. This includes some statistical data given. The accuracy of assertions made with regards to these citations cannot therefore be verified.

The Report did not include time series analyses of different interventions to attempt to tease out their differential impacts. For example, the bulk of the decline in consumption pre-dated the Dry Town initiative (August 2007) and the forced prohibition on town camps (about January 2008). In all, it would have been more appropriate to have included substantially longer time series for each of the measurable indicators.

In Section 6, a distinction is drawn between AMPs and Liquor Supply Plans emphasising that supply restrictions are imposed while AMPs can be negotiated between community members and stakeholders, or can be driven by government agencies, or governments depending on the context. While these aspects of alcohol management are differentiated here, the questions to the telephone survey participants did not differentiate between the two program initiatives. For example, participants were told, 'the purpose of the survey is to obtain people's opinions of the current Alcohol Management Plan and associated liquor restrictions in Alice Springs….' They were then asked, 'Could you spare 5 minutes to answer a few questions about your views of the restrictions?' (p. 180). Questions to participants from the town camps did not even refer to the AMP. Of the seven questions asked of town camp participants, six related to alcohol restrictions and alcohol laws, the last asked about services.

The bias evident in the phrasing of questions is cause for disquiet. It is stated that some 80 interviews were carried out with key stakeholders in Alice Springs prior to the telephone survey and the data gathered were used to formulate the telephone questionnaire. However, no outline or checklist of the questions asked of the key stakeholder group was provided so it is not possible to assess to what extent any possible bias in those questions might have had on the questions asked in the survey. The Report repeatedly states there is misunderstanding and confusion in responses surrounding the AMP. In particular, the

AMP is conceptualised as a set of restrictions. Given the nature of the questions asked, it is likely that the evaluators themselves have contributed to this misunderstanding and this in itself is enough to raise questions about the conduct of the evaluation and its recommendations.

The statement on page 48 that:

> Residential treatment may be indicated for patients who are highly resistant to treatment, have few financial resources, come from environments that present a high risk of relapse, and have more serious, coexisting medical or psychiatric conditions;

is taken directly from the book by Babor and others (2003, p. 213) from an original paper by Finney and others (Finney, Hahn, & Moos, 1996), neither of which are acknowledged in the Report. It is likely that this is inadvertent, rather than deliberate plagiarism, but it reflects the general lack of rigour in the review of the literature. A similar lack of rigour is reflected in poor proof reading of the Report and the fact that several organisations are misnamed. For example the People's Alcohol Action Coalition is referred to as the People's Action Against Alcohol Coalition (p.36) and in Appendix 1 several organisations are incorrectly named by replacing the word 'Aboriginal' with the word 'Indigenous'.

Ethical considerations were not discussed in the Report so mention is not made as to whether – given the involvement of Aboriginal people in the study – the evaluation was conducted in accordance with the NHMRC *Guidelines for Ethical Conduct in Aboriginal and Torres Strait Islander Health Research* (National Health and Medical Research Council, 2003).

The Report relied almost exclusively on subjective information to inform the evaluation and interpretation of the results to the neglect of the substantial international and national evidence. This has undermined what could have been good information if presented appropriately and has limited the scope of the Report. The general lack of rigour and apparent lack of expertise in the field has led to a poorly conducted evaluation, a poorly written report and a set of inadequate, if not potentially harmful, recommendations.

The Recommendations

The two main recommendations of the Report are:

- the current alcohol restrictions be maintained in their current form; and
- that extensive community consultation, education, social marketing be conducted before implementing any stronger measures (p. 162).

These recommendations are based on the conclusions that:

- 'it appears that the alcohol restrictions are unpopular and that further efforts in this direction are unlikely to be supported by the community' (p. 162);

- that resistance to the restrictions relates to inconvenience and the notion that they have been imposed rather than negotiated; and
- that non-Indigenous community members do not recognise that alcohol consumption and its consequences apply universally, rather than to Indigenous people only, and thus are unwilling to 'engage in strategies to address the problem of Alcohol (sic) in the community' (p. 162).

The emphasis in the Report is on the culture of drinking and the view that the culture, associated attitudes, and opposition to restrictions must be changed before any further changes to restrictions are introduced. This argument ignores the fact that legislation or regulation can be an effective means of changing culture. The most obvious examples are the changes in attitude and behaviour brought about by the introduction of compulsory seatbelt use and drink-driving legislation (Stockwell, 2006).

Maintaining the current restrictions

Higher levels of alcohol consumption are associated with higher levels of alcohol-related harm and lower consumption with lower levels of harm; and, overwhelmingly, the national and international literature demonstrates that supply reduction measures are the most effective means of reducing harmful alcohol consumption (Babor, *et al.*, 2003; Loxley, *et al.*, 2004); National Drug Research Institute, 2007; Stockwell, *et al.*, 2005; Stockwell, 2006). This point is made early in the Report itself but seems to have been ignored or forgotten in relation to the recommendations. The most effective supply reduction measures are increasing the price of alcohol through taxation, and restrictions on the physical availability of alcohol. Availability measures are broad ranging and have varying degrees of success. According to a review conducted by the National Drug Research Institute (2007), the most effective measures are:

- restrictions on the hours and days of sale on licensed premises;
- minimum legal drinking age enforcement for consumption and purchase;
- restrictions on high risk alcohol beverages (e.g. cheap cask wine/fortified wine);
- outlet density (though Stockwell, *et al.* (2005) suggest more research is required in this area);
- dry community declarations (when communities request declaration);
- mandatory packages of restrictions for remote and regional areas;
- restrictions on service to intoxicated people *when enforced*; and,
- community-based interventions *when enforced*.

Measures shown to have been less successful, unsuccessful or that increase harm include:

- staggered opening hours for licensed premises (which may increase violence);

- restrictions on service to intoxicated people *when not enforced*;
- liquor accords and community-based interventions *when not enforced*;
- local dry area alcohol bans (which do not decrease public disorder or hospitalisations, tends to elevate harms to Indigenous people, and often have the effect of being discriminatory);
- wet canteens in Indigenous communities (mixed results noted by Loxley *et al.* (2004) – community concerns relate to conflict between control of consumption and dependence on profits).

A reduction in consumption in the vicinity of 18 per cent is a significant and positive result for Alice Springs and appears largely due to the restrictions on availability that have been put in place. Nevertheless, harmful levels of consumption remain high compared to the national average and there is clearly room for further reductions. The evidence demonstrates that the further adjustment to licensing restrictions is likely to be the most efficacious means of doing this.

Rather than pursuing the potential offered by adjusting the restrictions, the Report recommended that they be maintained (albeit with one contradictory suggestion – see 'reassessing drinking in Indigenous communities' below). The rationale for this recommendation is that the restrictions are not popular with some segments of the Alice Springs 'community'. However, it is a common observation (supported by the evidence) that what is popular does not work and what works is not popular (Babor, *et al.*, 2003; National Drug Research Institute, 2007), and that leadership is needed for effective action. In recommending that the existing restrictions simply be maintained, the evaluators have missed an opportunity to build upon what has been achieved by those restrictions and to achieve potential further reductions.

Implementing community consultation, education and social marketing

The main thrust of this recommendation is that a social marketing campaign be investigated and implemented to better inform the community about the provisions of the AMP. Babor and colleagues (2003) define social marketing campaigns as an approach:

> … to health communications that applies standard marketing principles to 'sell' ideas, attitudes, and health behaviours. Social marketing seeks to influence social behaviours in order to benefit the audience and the general society (pp. 283-284).

Social marketing strategies and research processes are guided by the commercial marketing principles of 'exchange theory, audience segmentation, competition, 'the marketing mix', consumer orientation and continuous monitoring' (Grier & Bryant, 2005, p. 3). According to Grier and Bryant (2005), unlike legislation, which is coercive, punishes undesirable behaviour and is effective when behaviour change carries no immediate benefit to the consumer, social marketing is consumer-oriented, points out the cost-benefit relationship to the consumer and offers consumers a choice. In this respect social marketing is similar

to education but, rather than requiring consumers to accept changes for the broader benefit of society and receive no benefit themselves, it attempts to change behaviour by making it personally advantageous to do so.

However, the Report does not demonstrate an understanding of the mechanisms of social marketing campaigns. Social marketing is not education or raising public awareness; it is distinguishable by its consumer-focused orientation and is mindful of competing factors. Furthermore, the Report gives no consideration to the considerable resource required to mount an effective social marketing campaign.

According to some commentators, social marketing campaigns in the public health field have been over-reliant on the promotional aspects of the strategy and need to pay attention to consumer's desires (Grier & Bryant, 2005; McDermott, 2000). They have been criticised for focusing on the individual aspects of problematic behaviours rather than addressing the social, environmental and structural aspects of health problems. In response, an appreciation that a consumer focus lends itself to bottom-up, community-based approaches lends weight to the value of social marketing provided it is appropriately funded, coordinated and evaluated and provided it is accompanied by enforcement of supply restrictions.

Education and information dissemination, such as public service announcements (PSAs) and other counter-advertising such as warning labels concerning the harms caused by alcohol use, have been employed in some countries in an attempt to counteract the advertising of the alcohol beverage industry (Babor, *et al.*, 2003). PSAs have not been shown to be effective as they tend to be of a lower quality and are less frequently aired than industry advertisements. A more promising avenue of employing the media may be to address the ways the media influences public opinion and thus policy agendas. Babor and colleagues (2003) refer to media advocacy as a strategy employed by public health advocates to reframe the discourses around an issue from a focus on individual behaviour to a broader discourse on the social, economic and structural implications of alcohol policy and the behaviours of policy makers (Wallack & Dorfman, 1996). This strategy can be undertaken as part of a community action campaign, or as part of law enforcement or changes in regulations. It mobilises the media to shift focus to policy issues, rather than on individual behaviours, in a resource-efficient manner.

The observation in the Report that the non-Indigenous population does not recognise that the alcohol problem relates to non-Indigenous alcohol use as well as Indigenous use, suggests a social marketing campaign should be aimed at changing those perceptions. Over time this may change attitudes, but in the immediate future this is unlikely to address the harms currently occurring. In any case, in any meaningful sense, the emphasis on *the Alice Springs community* is misplaced. Alice Springs consists of several distinct communities which – while they might agree that something needs to be done about drinking – are unlikely to agree on the most appropriate strategies, no matter how strong a social marketing

campaign is, or how effectively it is implemented. The evidence for the efficacy of social marketing campaigns in the alcohol field is not strong and thus should not be considered a cornerstone recommendation.

The Report makes 11 supplementary recommendations for consideration by the NTG.

Implementing a community development model for reform

The Report suggests the creation of two community development positions, one Indigenous and one non-Indigenous: to oversee the alcohol working group; to coordinate community responses; to develop and maintain linkages between interest groups and alcohol services; to conduct on-going evaluation of the AMP; and to develop relationships with local media to disseminate information regarding the AMP. Other comments relating to this recommendation include:

- a five year commitment, funded by Dept Justice and Dept Health, community agenda driven, not funding body (p. 163);
- such a program would require specialist support for developing interventions and monitoring of said interventions, with a recommendation that Menzies is retained to provide such on-going advice and assistance (p. 163); and
- evidence from the literature demonstrates this to be feasible and effective, as it facilitates community involvement and produces measurable changes in alcohol risk behaviours (p. 163).

Community–led programs tend to be better accepted than those imposed by governments (and this sentiment seems to have been supported by the Report), but they need to form part of a broader range of interventions that include pricing and availability, drinking context modification (including responsible service practices and enforcement), treatment and early interventions, regulated promotion and other education and persuasion measures. In particular, community mobilisation programs in economically and ethnically varied local neighbourhoods, tend to operate most effectively as a support measure to law enforcement and licensee behaviour measures, such as responsible beverage service programs, rather than as a primary harm reduction intervention (Treno, Lee, Freisthler, Remer, & Gruenewald, 2005).

The implementation of a community development model to assist in reducing alcohol-related problems in communities is generally supported in the literature with qualifications (Babor, *et al.*, 2003; Holder, *et al.*, 2000; Treno, *et al.*, 2005). Babor and others (2003) comment on community mobilization approaches citing a number of authors (Hauritz, Homel, McIlwain, Burrows, & Townsley, 1998; Hauritz, Homel, Townsley, Burrows, & McIlwain, 1998; Homel, Tomsen, & Thommeny, 1992; Putnam, Rockett, & Campbell, 1993) and evaluations of approaches of grassroots programs (Arnold & Laidler, 1994; Cusenza, 1998), suggesting such approaches can be highly successful in reducing violence

and improving the enforcement of alcohol policy. Generally, these programs target licensed premises so their application to the problems arising from take-away sales is unclear. However, Babor and colleagues (2003) conclude that such interventions need to be sustained to maintain their effectiveness and they need to be enforced.

The justification for the 'community development' approach (aimed at changing the culture of drinking in Alice Springs) advocated in the Report is based on a 1989 study by Casswell and others (Casswell, Gilmore, Maguire, & Ransom, 1989); a small study by d'Abbs, Martin and Chenhall (d'Abbs, Martin, & Chenhall, 2008); and a section from the book by Edwards and others. The original section in the latter book reads:

> It is also *possible* that the strategies reviewed in this chapter, particularly highly visible and symbolic ones such as restrictions on alcohol advertising and mass media educational programmes *may* have their most significant impact on the social climate surrounding alcohol use… (Edwards, *et al.*, 1994, p. 180, emphasis added).

However, the citation in the Report omits the important qualifications emphasised in the citation above and gives the statement greater prominence than is the case in the book, and is counter to its central approach. The report of the National Preventative Task Force (2008) also seeks to change the culture of drinking in Australia but – while it includes the strategy advocated by the authors – it places greater emphasis on interventions such as restricting availability to change the culture rather than upon changes to belief and norms to change the context. It is also worth noting that a major study currently being undertaken in Kalgoorlie in Western Australia by Midford and others which has a key focus on normative change, equally emphasises the importance of implementing a broader range of interventions (Midford, 2005).

The Report refers to *the Alice Springs community* when in reality several communities exist within the area. Community cohesion is an unlikely outcome of a community development approach given the range of diverse interests represented. In this regard, and while such positions would better serve the various community interest groups in terms of coordinating educational and promotional activities, two 'community development positions' are unlikely to achieve a unity of norms and attitudes that have not been achieved by well over a decade of activity by various community groups and the NT Department of Health and Families.

Changing the social climate around drinking issues in Alice Springs

The Report suggests that a change in the social climate round drinking issues will occur through a variety of means. These include: social marketing; public health education, education in schools and public events; the supply of training packages to members of the Alcohol Reference Panel (which would include information on community development, drug and alcohol issues, effective networking and communication between services); the development, by the NTG, of a 'public information and awareness process about the AMP (p. 164)'. The Report also recommends that 'the AMP and the relevant legislation should

be adequately discussed with service providers, including police, night patrol, and the Liquor (sic) industry' (p. 164).

According to the Report, together these will highlight alcohol misuse as a problem for both Indigenous and non-Indigenous people and will encourage the community to consider ways to address alcohol problems. This recommendation links with the recommendations for a social marketing campaign and community development approach and reflects the Report's overall focus on the problems created by the 'drinking culture' in Alice Springs; and the underlying assumption that these approaches can, in themselves, change culture. Education and awareness-raising are popular interventions in Australia. However, few evaluations of programs have shown significant outcomes from these, and there is evidence that some programs can in fact increase problems (Loxley, *et al.*, 2004).

While promotional work and education can be useful in raising awareness and increasing knowledge, their impact in reducing consumption and related harms, that is, changing behaviour, are marginally effective in the short-term and ineffective in the long-term (Babor, *et al.*, 2003). With rare exception (e.g. McBride, Farringdon, Midford, Meuleners, & Phillips, 2004), few studies have shown long lasting behaviour change for children and adolescents resulting from school drug education programs (Babor, *et al.*, 2003).

As stated previously, the notion that community mobilisation will lead to culture change has not been researched extensively. Costs would be considerable and given the lack of strong evidence for effectiveness, the appropriateness of the recommendation for widespread implementation is questionable (Loxley, *et al.*, 2004), particularly when legislation and restrictions can be an effective means of changing the context of drinking within communities; a point not acknowledged or given consideration in the Report.

Establishment of a new Alice Springs Alcohol Working Group (AWG)

The Report makes the following points regarding the current Alcohol Reference Panel (ARP):

- existing ARP needs revisiting – representation and operation is an issue;
- consider new memberships, while not precluding *some* members of existing ARP (emphasis added), which better covers scope of community interests;
- meetings need to be timely, structured, informed by accurate and up-to-date information – agenda required and action resulting;
- funding for attendance, phone links-ups not suitable;
- role to be clearly defined by Minister. Current group has lost its way and there has been an obscuration of their original goals;
- reporting mechanisms to the Minister or other appropriate body;
- strategic plan to be developed with resources to meet agreed goals; and

- wider community to be made aware of ARP and its role (p 164).

The ARP is described as having oversight from the Department of Justice (p. 76) with representation from the community and government. The committee is chaired by an officer from the Racing, Gaming and Licensing Commission and membership is by invitation from the chair.

It is unclear from the Report what benefit would be gained in renaming the group. It is also unclear what the representational issues are with the ARP. The Report fails to specify which community interests are not represented on the current committee, and the suggestion that 'The Minister may wish to consider a new membership, not precluding consideration of some current members, which better covers the scope of community interests' (p. 14), is not specific enough to have any meaning.

Operationally, the Report suggests, the committee is unresponsive and inactive. However, the stated roles of the ARP are to:

> assist the monitoring and dissemination of information about the AMP…. and to facilitate exchange of information that will aid decisions about the effectiveness and development of strategies that make up the AMP (p. 80).

The main criticisms of the committee in its current form are that responsibilities need clarification and that little action results from meetings. The complaint that meetings are 'just discussion sessions' is curious given the stated roles of the panel and would suggest clarity is required. However, if the ARP is to be a grass-roots committee, it would seem appropriate for there to be some input from the committee members themselves in setting their agenda.

Again, cohesion and agreement between the members of the committee may be difficult given the vastly diverse and in some cases opposing interests of the group. The Report fails to give clarity as to the power dynamics operating within the group and how power to implement strategies would be divested from the NTG.

Improving the resources and infrastructure to deal with problems of alcohol misuse

The Report again proposes that education, 'particularly for those at high risk, at an early age' (p. 165) as a measure for consideration by the NTG with no evidence offered as to the efficacy of such approaches. 'There is increasing evidence that investment in preventive programs in childhood can contribute to the reduction of harmful drug use' (Loxley, *et al.*, 2004, p. 110). However, this statement is qualified with the observation by Loxley and others that these programs have not been replicated in Australia and their relevance in an Australian Indigenous context would require assessment.

The Report states 'the NTG should consider the wider implications and effects of alcohol misuse' (p. 165). This statement fails to acknowledge that the NTG has long considered the health, social, economic and cultural implications of alcohol use in the Territory in particular the Living with Alcohol Program implemented in 1992 (Stockwell, *et al.*, 2001; Chikritzhs *et al* 2005).

The Report suggests that the NTG review the effectiveness of the night and day patrols. The basis for this suggestion appears to be related to comments by Alice Springs residents (p. 165). These community-operated services are not responsible to the NTG, (only one patrol is funded by the NTG), and it is not clear that the NTG has the authority to conduct such reviews. Furthermore, imposition of such a review would undermine the control the Aboriginal communities have in operating such services. This proposal demonstrates a lack of understanding of the services and contradicts the Report's recommendations with respect to community-based approaches to managing the issue of alcohol in Alice Springs.

The Report is unclear as to the functions of the various patrols operating in and around Alice Springs. For instance, the Report states that the night patrol operates between Thursday and Saturday (p. 83) when in fact it is funded between Tuesday and Saturday. It is the youth patrol that is funded between Thursday and Saturday. Furthermore, no mention is made of the youth patrol operated by the Tangentyere Council. The Report provides an outline of the training that could be made available to night patrol providers. The units proposed could provide partial competence in a Certificate III in Community Services Work and represent 330 hours worth of study. This would require substantial commitment and resources from those who work and operate the night patrols and may be perceived as an unreasonable expectation. It is not clear that there has been any discussion with service providers about this and its implications.

Developing an effective framework for on-going monitoring and evaluation

The Report rightly suggests that the AMP requires evaluation and monitoring on an ongoing basis. It suggests that future evaluations are conducted by the Community Development Officer (yet to be recruited) and the ARP/AWG at the community level. The Report also stresses the importance of the availability of reliable data to measure the progress of the AMP, which would require the cooperation and input of multiple agencies. It goes on to suggest that any evaluation

> should monitor the progress of the intervention in terms of the linkages, coordination of services, input from wide variety of community organizations (sic) and ongoing communication and dissemination of results (p. 165).

Appendix 3 of the Report includes an example of tools to assist with self monitoring of projects which have been modified from a NSW Health Department capacity building project manual for health workers (Hawe, King, Noort, Jordens, & Lloyd, 1999). This may be useful in enabling the ARP to assess its activities. However, a broader approach to

evaluation of the effect of the AMP in reducing alcohol-related harm among the population is also required.

To be successful, community-led programs aiming to reduce alcohol-related harms must be based on what works and what is best practice. Such programs need be integrative and adequately evaluated. Evaluation needs to address the underlying assumptions on which the program is based or explain the program theory. For example, is a conceptual model articulated that expresses the associations between alcohol use and the consequences of its use? Does the evaluation map how the various elements of the intervention address the association in order to reduce the consequences? (Weiss, 1998). Whether the Alice Springs AMP was established on the basis of the available evidence of what works is not discussed. Furthermore, the Report is not structured in a way that gives coherent answers to these questions.

Developing a 'plain-language' handbook for the evaluation of alcohol management plans

The recommendation for the development of a 'plain-language' handbook for the evaluation of alcohol management plans recommendation links with the previous recommendation. The justification for the manual is that it will assist community members and stakeholders in planning, implementing and monitoring evaluations of AMPs. The Report states that such a manual:

> … should cover the identification of the key evaluation questions relating to the AMP goals and outcomes and the development, collection, analysis and reporting of the minimum evaluation dataset and associated indicators. It should also describe the role and importance of qualitative information in an evaluation and describe its collection, analysis and reporting. Finally the handbook should be designed to assist community members and stakeholders in accessing professional advice and support in those areas where it is appropriate. Such a handbook would be of major value in allowing communities to plan and implement AMP evaluations.
>
> We recommend that the Menzies School of Health Research be commissioned to develop such a handbook (p. 166).

There is an obvious irony in the latter statement given the inadequacy of the Report's own evaluation of the Alice Springs AMP. The availability of community action manuals is noted by Babor and colleagues (2003, p. 150) – an Australian manual by Lander (1995) and a Canadian manual by Neves and colleagues (1998). The Alcohol Advisory Council of New Zealand (2008) also provides literature on ways communities can mobilise their efforts to reduce alcohol consumption and alcohol-related harm. It would thus seem that implementation of this recommendation would simply duplicate effort that have already been undertaken.

Reassessing drinking in Indigenous communities

The suggestion that the NTG should engage in more comprehensive negotiation processes with town camp residents and their representatives regarding the current 'dry town camps'

laws is worthwhile, given that they are perceived as a prohibition measure and discriminatory. The proposal that town camp residents be given the opportunity to declare their residences dry is currently in place (Racing Gaming and Licensing, 2009).

Apart from the opinions expressed in the opinion survey, the Report does not provide any firm evidence of the extent to which drinkers are displaced outside the town boundaries and the extent to which harm occurs amongst them as a result of the dry town declaration. Nevertheless, if this is occurring the Report perhaps might have suggested what harm reduction strategies could be implemented. Additionally, a recommendation that this be evaluated might have been useful.

Among its supplementary recommendations the Report suggested the Northern Territory Government consider the introduction of wet canteens in Indigenous communities. As well as contradicting the Report's own recommendations that existing restrictions be maintained, this suggestion does not appear to have been made with regard to the views of Aboriginal communities themselves about the desirability or otherwise of the recommendation. Furthermore, the available evidence suggests that the establishment of wet canteens can lead to increased consumption and related harms (d'Abbs, 1998).

Licensed premises

The recommendation to implement a proactive and rigorous buy-back of licenses program (p. 167) dates back to at least the Report of the Royal Commission into Aboriginal Deaths in Custody (1991). There is evidence that outlet density has been associated with elevated consumption and related to elevated harms (National Drug Research Institute, 2007) and the recommendation has merit. However in the Report, backing for the recommendation is made with reference to an *editorial* by Gruenewald (2008) which presents a theoretical discussion about alcohol availability theory in answer to the questions, "What do alcohol outlets do in our communities?', 'How do they exert their effects?' and 'What mechanisms are involved?" (Gruenewald, 2008, p. 1585). Furthermore, Gruenewald's comments regarding the ways 'establishments culturally co-evolve with drinkers' habits and cultural practices with respect to drinking' (Gruenewald, 2008, p. 1586) are conjecture, not evidence-based.

The recommendation that a study be commissioned to examine the ways a culture of drinking is perpetuated by licensed premises that cater specifically to Indigenous people may have merit. However, the Report does not also recommend a similar study of non-Indigenous drinking. This would seen appropriate, particularly as the Report repeatedly states that the problems arising from alcohol use in Alice Springs are also to be found among the non-Indigenous population.

There was little discussion of the effectiveness of Responsible Service of Alcohol (RSA) measures which can be effective when both mandatory and rigorously enforced. The

recommendation that a cultural awareness component be included in the RSA training may have merit but was not based on evidence. Rather, it arose from a comment by a participant of the research.

Review of alcohol treatment services

Recommendations with respect to the provision of treatment services are beyond the terms of reference for this evaluation. The Report gives only a partial view of the various problems these services may be experiencing. Many of these services are operated by local community or NGOs and interference from government may be negatively received. The suggestion that competitive funding rounds would encourage collaboration takes no account of the limited resources, time and expertise that characterise some of the smaller services. A review by Gray and others (Gray, Green, Saggers, & Wilkes, 2009) of the community-led alcohol and other drug sector in Queensland found collaboration to be a luxury when resources were already scarce and made the point that collaboration and coordinated case management need to be resourced.

The mapping of services may be useful to identify gaps in the provision of services. The remainder of the recommendations are well beyond the terms of this evaluation.

Consider the needs of the elderly

It is unclear why this recommendation has been included as it is based on participants' perceptions of the inconvenience to the elderly (p. 110) rather than the views of the elderly themselves. Furthermore the Report states that it would be inappropriate for special dispensation for the elderly to accommodate their concerns. It is unclear what is meant when the Report proposes that the ARP/AWG consider 'other mechanisms' (p. 168).

An investment in community change

Rather than being a 'recommendation' the paragraph under this heading (p. 18) is a re-statement of what has preceded it and a re-emphasis of the need for culture change.

Conclusions

While it advocates an 'holistic approach' to addressing alcohol-related harm in Alice Springs, in our view, the thrust of Report negates this. The Report's failure to adequately contextualise its findings with regard to the broader literature has led them to emphasise a narrow response rather than one which is more broadly based and builds more firmly upon the public health evidence. Our concern is that if the recommendations made in the Report are accepted as they are, then at best, they will have little impact on reducing alcohol-related harm in Alice Springs and at worst, may be counterproductive. We thus suggest the following alternative recommendations.

Minimum pricing

Consideration should be given to a further tightening of restrictions through the introduction of minimum pricing for alcohol. Retail prices could be set at a 'minimum price per standard drink…below which alcoholic beverages could not be sold'. This would potentially reduce the practice of substitution between beverage types when price interventions are applied (e.g. Gruenewald *et al*, 2006). As summarised by the National Drug Research Institute, (2007):

> the PAAC and constituent members such as Central Australian Aboriginal Congress, have argued for the trial imposition by the Northern Territory Government of a minimum price per standard drink (set at the price per standard drink of full-strength beer) below which alcoholic beverages could not be sold.' (National Drug Research Institute, 2007: 185–6).

This was also proposed in *Northern Territory Alcohol Framework: Final Report* (2004) and a similar call has been made by the Parliament of Victoria's Drugs and Crime Prevention Committee (2006). Recent modelling analyses conducted by the University of Sheffield suggest that the social and cost savings of such an intervention would be substantial (Booth, *et al.* 2008).

Take-away free day

Restrictions on the sale of alcohol on particular days have been effective in remote Australian communities (National Drug Research Institute, 2007). Consideration should be given to a trial for a take-away free day. This could be linked to the day on which most social security entitlements are made – although not necessarily so.

Enforcement

Police should be supported with adequate resources to rigorously enforce adherence by licensees to existing legislation regarding the sale of alcohol to intoxicated persons (NT Liquor Act 2007).

Evaluation

The Alice Springs Alcohol Management Plan should be evaluated in accordance with the terms of reference. The various components of the plan require thorough investigation with specific interventions and programs assessed as to their effectiveness in meeting the goals of the AMP. Those components that were not implemented require consideration, among these are the following.

Establishment of a liquor accord

Liquor accords may be effective in reducing alcohol-related harms provided they are mandatory and that effective evidence-based strategies are rigorously enforced e.g. refusal of service to intoxicated persons, removal of low priced drink promotions (Loxley *et al.*

2004; NDRI 2007). As this was one of the AMP strategies not implemented it should be pursued.

Future evaluation

A framework for ongoing evaluation of the AMP and Liquor Supply Plan should be developed. This should include timely arrangements for the provision of data on key statistical indicators such as wholesale sales data and hospital admissions and the data should be analysed independently by persons with appropriate expertise.

Alcohol reference group

The role and goals of the Alcohol Reference Group are clearly defined by the NTG. The group's specific responsibilities are outlined together with reporting mechanisms and modes of operation.

Research

Consideration be given to undertaking a study to establish the extent to which people move outside the boundaries of the town to drink and what harms, if any, are associated with this behaviour.

Mapping services

The health and support services available to the Alice Springs and surrounding communities should be mapped to identify any gaps in service provision. However, mapping alone is of little use without commitments to fill the identified gaps.

Negotiation

Efforts should made by the NTG in conjunction with Tangentyere Council to renegotiate the 'dry town camp' laws with the Australian Government on behalf of the residents of the town camps.

References

AhChee, D., & Boffa, J. (2001). 'Alcohol in the Alice' and the Central Australian Division of Primary Health Care. Paper presented at the Central Australian Aboriginal Congress.

Alcohol Advisory Council of New Zealand (2008). *Planning for alcohol in the community*. Catalogue No. AL602. Wellington, New Zealand: Author.

Arnold, M. J., & Laidler, T. J. (1994). *Situational and environmental factors in alcohol-related violence* (Vol. No. 7). Canberra, Australia: Government Publishing Services.

Babor, T., Caetano, R., Casswell, S., Edwards, G., Giesbrecht, N., Graham, K., *et al.* (2003). *Alcohol: No ordinary commodity. Research and public policy*. Oxford: Oxford University Press.

Booth, A, Brennan, A., Meier, P. S., O'Reilly, D. T., Purshouse, R., Stockwell, T. *et al.* (2008). *The independent review of the effects of alcohol pricing and promotion: Summary evidence to accompany report on phase 1: Systematic reviews.* Sheffield, UK: University of Sheffield.

Casswell, S., Gilmore, L., Maguire, V., & Ransom, R. (1989). Changes in public support for alcohol policies following a community-based campaign. *British Journal of Addiction*, 84, 515–522.

Chikritzhs, T., Stockwell, T. & Pascal, R. (2005).The impact of the Northern Territory's Living With Alcohol Program, 1992–2002: revisiting the evaluation. *Addiction*, 100: 1625–1636

Cusenza, S. (1998). Organizing to reduce neighborhood alcohol problems: A frontline account. *Contemporary Drug Problems*, 25, 99-111.

d'Abbs (1998). Out of sight, out of mind? Licensed clubs in remote Aboriginal communities. *Australian and New Zealand Journal of Public Health*, 22(6), 679–684.

d'Abbs, P., Martin, D. F., & Chenhall, R. (2008). *Kakadu/West Arnhem Alcohol Management Plan project*. Cairns: James Cook University.

Edwards, G., Anderson, P., Babor, T. F., Casswell, S., Ferrence, R., Giesbrecht, N., *et al.* (Eds.). (1994). *Alcohol policy and the public good.* Oxford, UK: Oxford University Press.

English, D. R., Holman, C. D. J., Milne, E., Winter, M. G., Hulse, G. K., Coddle, J. P., *et al.* (1995). *The quantification of drug caused morbidity and mortality in Australia 1995*. Canberra: Commonwealth Department of Human. Services and Health.

Finney, J. W., Hahn, A. C., & Moos, R. H. (1996). The effectiveness of inpatient and outpatient treatment for alcohol abuse: The need to focus on mediators and moderators of setting effects. *Addiction*, 91, 1773–1796.

Gray, D., & Chikritzhs, T. (2000). Regional variation in alcohol consumption in the Northern Territory. *Australian and New Zealand Journal of Public Health*, 24(1), 35–38.

Gray, D., Green, M., Saggers, S., & Wilkes, E. (2009). *Review of the Aboriginal and Torres Strait Islander community-controlled alcohol and other drugs sector in Queensland.* Perth, WA: National Drug Research Institute, Curtin University of Technology.

Gray, D., & Saggers, S. (2005). The evidence base for responding to substance misuse in Indigenous minority populations. In T. Stockwell, P. Gruenewald, J. W. Toumbourou & W. Loxley (Eds.), *Preventing harmful substance use: the evidence base for policy and practice* (pp. 381–393). Chicester, UK: John Wiley & Sons, Ltd.

Grier, S., & Bryant, C. A. (2005). Social marketing in public health. *Annual Review of Public Health* Vol. 26: 319–339.

Gruenewald P.J., Ponicki, W.R., Holder, H.D., &Romelsjö, A. (2006) Alcohol prices, beverage quality, and the demand for alcohol: quality substitutions and price elasticities. *Alcoholism, Clinical and Experimental Research* 30(1):96–105.

Gruenewald, P. (2008). Why do liquor outlets matter anyway? A look into the future. Editorial. *Addiction*, 103, 1585–1587.

Hauritz, M., Homel, R., McIlwain, G., Burrows, T., & Townsley, M. (1998). Reducing violence in licensed venues through community safety action projects: The Queensland experience. *Contemporary Drug Problems*, 25, 511–551.

Hauritz, M., Homel, R., Townsley, M., Burrows, T., & McIlwain, G. (1998). *An evaluation of the local government safety action projects in Cairns, Townsville and MacKay: A report to the Queensland Department of Helath, the Queensland Police Service and the Criminology Research Council.* Retrieved from http://www.griffith.edu.au/__data/assets/pdf_file/0014/13235/crc.pdf

Hawe, H., King, L., Noort, M., Jordens, C., & Lloyd, B. (1999). *Indicators to help with capacity building in health promotion*. State Health Publication No (HP) 990099. Sydney: NSW Health Department.

Heale, P., Chikritzhs, T., Jonas, H., Stockwell, T., & Dietze, P. (2002). Estimated alcohol-caused deaths in Australia, 1990-97. *Drug and Alcohol Review*, 21, 121–129.

Hogan, E., Boffa, J., Rosewarne, C., Bell, S., & Ah 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*, 25, 207–212.

Holder, H. D., Gruenewald, P., Ponicki, W. R., Treno, A. J., Grube, J. W., Saltz, R. F., *et al.* (2000). Effect of community-based interventions on high-risk drinking and alcohol-related injuries. *Journal of the American Medical Association*, 284(18), 2341–2347.

Holder, H. D., & Treno, A. J. (2005). Moving towards a common evidence base for alcohol and other drug prevention policy. In T. Stockwell, P. Gruenewald, J. W. Toumbourou & W. Loxley (Eds.), *Preventing harmful substance use: the evidence base for policy and practice* (pp. 351–366). Chicester, UK: John Wiley & Sons, Ltd.

Homel, R., Tomsen, S., & Thommeny, J. (1992). Public drinking and violence: Not just an alcohol problem. *Journal of Drug Issues*, 22, 679–697.

Lander, A. (1995). *Preventing alcohol related violence: A community action manual*. Sydney, NSW: East Sydney Area Health Service and St Vincent's Alcohol and Drug Service.

Loxley, W., Toumbourou, J. W., Stockwell, T., Haines, B., Scott, K., Godfrey, C., *et al.* (2004). *The prevention of substance use, risk and harm in Australia: a review of the evidence*. Canberra: Commonwealth Department of Health and Ageing.

Lyon, P. (1990) *What Everybody Knows About Alice: a Report on the Impact fo Alcohol Abuse on Alice Springs*. Alice Springs: Tangentyere Council.

McBride, N., Farringdon, F., Midford, R., Meuleners, L., & Phillips, M. (2004). Harm minimization in school drug education: final results of the School Health and Alcohol Harm Reduction Project (SHAHRP). *Addiction*, 99(3), 278.

McDermott, R. J. (2000). Social marketing: A tool for health education. *American Journal of Health Behavior*, 24(1), 6–10.

Midford, R. (2005). Kalgoorlie Alcohol Action Project: Working with a community to prevent alcohol problems. *Centrelines*, 16, 3 & 5. Retrieved from http://ndri.curtin.edu.au/local/docs/pdf/centrelines/ndri016.pdf

Ministerial Council on Drug Strategy. *The National Drug Strategy: Australia's Integrated Framework 2004–2009*. Canberra: Ministerial Council on Drug Strategy, 2004.

Ministerial Council on Drugs Strategy. (2003). *National Drug Strategy: Aboriginal and Torres Strait Islander Peoples Complementary Action Plan 2003–2009*. Canberra: National Drug Strategy Unit, Australian Government Department of Health and Ageing.

National Drug Research Institute (contributors Chikritzhs, T., Gray, D., Lyons, Z. & Saggers, S.) (2007). *Restrictions on the sale and supply of alcohol: evidence and outcomes*. Perth, Australia: National Drug Research Institute, Curtin University of Technology.

National Health and Medical Research Council (2003). *Values and ethics: Guidelines for ethical conduct in Aboriginal and Torres Strait Islander health research*. Canberra: National Health and Medical Research Council.

National Preventative Health Taskforce - Alcohol Working Group (2008). Technical Report No 3: *Preventing alcohol-related harm in Australia: a window of opportunity*. Retrieved August 4, 2009. from http://www.preventativehealth.org.au/internet/preventativehealth/publishing.nsf/Content/09C94C0F1B9799F5CA2574DD0081E770/$File/alcohol-feb09.pdf.

Neves, P., De Pape, D., Giesbrecht, N., Kobus-Mathews, M., Kruzel, E., Abbott, D., *et al.* (1998). *Communities take action!* Toronto, Canada: Centre for Addiction and Mental Health.

Northern Territory. *Volatile Substance Abuse Prevention Act* (2004). Darwin: Northern Territory Government.

Northern Territory Government (2007). Reason for decision on application by Alice Springs Town Council for a Public Restricted Area**.** Retrieved August 12, 2009 from, http://www.nt.gov.au/justice/commission/decisions/07_Alice_Springs_Dry_Town_Decision.pdf

Northern Territory Government (2009). *Moving Alice Ahead - Responsible Alcohol Management Framework.* Retrieved August 6, 2009, from http://www.aliceahead.nt.gov.au/alcoholmanagement.shtml

Northern Territory Government (2009). *Moving Alice Ahead - Responsible Alcohol Management Framework.* Retrieved August 6, 2009, from http://www.aliceahead.nt.gov.au/alcoholmanagement.shtml

Northern Territory Licensing Commission (2006). Public Notice: Notice of application for declaration of a public restricted area - Municipality of Alice Springs Retrieved August 3, 2009, from http://www.caba.nt.gov.au/justice/commission/index_files/Public_Notice_Alice_Springs_Municipality_Nov_06.pdf

Parliament of Victoria, Drugs and Crime Prevention Committee. (2006). *Inquiry into strategies to reduce harmful alcohol consumption.* Melbourne: Parliament of Victoria.

Pascal, R., Chikritzhs, T., & Gray, D. (2009). Estimating alcohol-attributable mortality among Indigenous Australians: Towards Indigenous-specific alcohol aetiologic fractions. *Drug and Alcohol Review*, 28(2), 196–200.

Putnam, S. L., Rockett, I. R. H., & Campbell, M. K. (1993). Methodological issues in community-based alcohol-related injury and prevention projects: Attribution of program effects. In T. K. Greenfield & R. Zimmerman (Eds.), *Experiences with community action projects: New research in the prevention of alcohol and other drug problems* (pp. 31–39). Rockville, MD: Center for Substance Abuse Prevention.

Racing Gaming and Licensing (2009, July 1, 2009). How to Apply for a Restricted Premises Declaration Retrieved August 7, 2009, from http://www.nt.gov.au/justice/licenreg/documents/liquor/How_to_make_Private_Premises_Liquor_Free.pdf

Renouf, G., Townsend, J., Manzie, D., & Ah Chee. D. (2004). *Northern Territory Alcohol Framework: Final Report.* Darwin: Northern Territory Government

Rosewarne, C., & Boffa, J. (2003). Alcohol & Alice Springs: Meeting the needs and wishes of the community. *Indigenous Law Bulletin*, 38.

Royal Commission into Aboriginal Deaths in Custody (Johnston, E. Commissioner). (1991) *Royal Commission into Aboriginal Deaths in Custody: National Report,* 4 vols. Canberra: Australian Government Publishing Service.

Senior, K., Chenhall, R., Ivory, B., & Stephenson, C. (2009). *Moving Beyond the Restrictions: The Evaluation of the Alice Springs Alcohol Management Plan.* Darwin: Menzies School of Health Research & Monash University, Medicine Nursing and Health Sciences, School of Public Health and Preventive Medicine.

Steering Committee for the Review of Government Service Provision (2009). *Overcoming Indigenous disadvantage: Key indicators 2009*. Canberra: Productivity Commission.

Stockwell, T. (2006). Alcohol supply, demand, and harm reduction: what is the strongest cocktail? *International Journal of Drug Policy*, 17(4), 269–277.)

Stockwell, T., Gruenewald, P. J., Toumbourou, J. W., & Loxley, W. (Eds.). (2005). *Preventing harmful substance use: the evidence base for policy and practice*. Chicester, UK: John Wiley & Sons Ltd.

Stockwell, T. R., Chikritzhs, T., Hendrie, D., Fordham, R. J., Ying, F., Phillips, M., *et al.* (2001). The public health and safety benefits of the Northern Territory's Living with Alcohol programme. *Drug and Alcohol Review*, 20(2), 167–180.

Treno, A. J., Lee, J. P., Freisthler, B., Remer, L. G., & Gruenewald, P. J. (2005). Application of evidence-based approaches to community interventions. In T. Stockwell, P. J. Gruenewald, J. W. Toumbourou & W. Loxley (Eds.), *Preventing harmful substance use: the evidence base for policy and practice* (pp. 177–189). Chicester, UK: John Wiley & Sons, Ltd.

Wagenaar, A. C., Salois, M. J., & Komro, K. A. (2009). Effects of beverage alcohol price and tax levels on drinking: A meta-analysis of 1003 estimates from 112 studies. *Addiction*, 104, 179–190.

Wallack, L., & Dorfman, L. (1996). Media advocacy: A strategy for advancing policy and promoting health. *Health Education and Behaviour*, 23, 293.

Weiss, C. H. (1998). *Evaluation: Methods for studying programs and policies* (2nd ed.). Upper Saddle River, NJ: Prentice-Hall, Inc.

World Health Organization (2000). *International guide for monitoring alcohol consumption and alcohol related harm*. Stockwell T. & Chikritzhs T. (Eds) Geneva: World Health Organization. WHO/MSD/MSB/00.5