



Australian Government
Preventative Health Taskforce

AUSTRALIA: THE HEALTHIEST COUNTRY BY 2020



Technical Report 3
Preventing alcohol-related harm in Australia:
a window of opportunity
Including addendum for October 2008 to June 2009

*Prepared for the National Preventative Health Taskforce
by the Alcohol Working Group*

Australia: the healthiest country by 2020.
Technical Report No 3
Preventing alcohol-related harm in Australia: a window of opportunity
Including addendum for October 2008 to June 2009

ISBN: 1-74186-931-5
Online ISBN: 1-74186-932-3
Publications Approval Number- P3-5460

Paper-based publications

(c) Commonwealth of Australia 2009

This work is copyright. Apart from any use as permitted under the *Copyright Act 1968*, no part may be reproduced by any process without prior written permission from the Commonwealth. Requests and inquiries concerning reproduction and rights should be addressed to the Commonwealth Copyright Administration, Attorney-General's Department, Robert Garran Offices, National Circuit, Barton ACT 2600 or posted at <http://www.ag.gov.au/cca>

Internet sites

This work is copyright. You may download, display, print and reproduce this material in unaltered form only (retaining this notice) for your personal, non-commercial use or use within your organisation. Apart from any use as permitted under the *Copyright Act 1968*, all other rights are reserved. Requests and inquiries concerning reproduction and rights should be addressed to Commonwealth Copyright Administration, Attorney-General's Department, Robert Garran Offices, National Circuit, Barton ACT 2600 or posted at <http://www.ag.gov.au/cca>

Acknowledgements

THE TECHNICAL REPORT ON ALCOHOL WAS PREPARED ON BEHALF OF THE NATIONAL PREVENTATIVE HEALTH TASKFORCE:

Professor Rob Moodie, Chair
Professor Mike Daube, Deputy Chair

Ms Kate Carnell AO
Dr Christine Connors
Dr Shaun Larkin
Dr Lyn Roberts AM
Professor Leonie Segal
Dr Linda Selvey
Professor Paul Zimmet AO

THE REPORT WAS PREPARED WITH ADVICE FROM THE NATIONAL PREVENTATIVE HEALTH TASKFORCE ALCOHOL WORKING GROUP:

Professor Rob Moodie (Chair)

Professor Steve Allsop
Ms Kate Carnell AO
Mr David Crosbie
Professor Margaret Hamilton AO
Superintendent Frank Hansen
Mr Todd Harper
Professor Leonie Segal
Dr Linda Selvey
Associate Professor Ted Wilkes
Professor Paul Zimmet AO

Writer: Mr Brian Vandenberg

WE WOULD ALSO LIKE TO THANK THE FOLLOWING PEOPLE FOR THEIR CONTRIBUTIONS TO THE REPORT:

Professor Robin Room (Director), and Mr Michael Livingston, AER Centre for Alcohol Policy Research and Turning Point, Alcohol & Drug Centre Melbourne

Ms Meriel Schultz, Adviser, National Preventative Health Taskforce
Ms Michelle Scollo, Senior Adviser, Cancer Council Victoria

The Population Health Strategy Unit and the Publications Unit and Communications Branch,
Australian Government Department of Health and Ageing



Contents

1	Introduction: changing the drinking culture in Australia	1
1.1	Purpose	1
1.2	The drinking culture in Australia	2
1.3	Determinants of drinking behaviour	2
1.4	Alcohol policy and programs in Australia	3
1.5	Recent developments in Australia	4
2	Key trends in alcohol consumption	5
2.1	Alcohol consumption in Australia and other countries	5
2.2	Drinking patterns among Australians	6
2.3	Product preferences	8
2.4	Alcohol prices and consumer spending	9
3	Key trends in alcohol-related harm	11
3.1	Health impacts	11
3.2	Social impacts	13
3.3	Health inequalities	15
4	Best practice in prevention	17
4.1	Current activity	17
4.2	Regulating the physical availability of alcohol	23
4.3	Taxation and pricing	27
4.4	Drink-driving countermeasures	27
4.5	Treatment and early intervention	28
4.6	Altering the drinking context	30
4.7	Regulating promotion	32
4.8	Education and persuasion	35



5 Policy Imperatives	37
5.1 The state of alcohol policy in Australia	37
5.2 The best mix of interventions	38
5.3 Challenges in implementation	40
5.4 Opportunities for action	42
5.5 Priorities	43
References	45
Addendum for October 2008 to June 2009	51





1. Introduction: changing the drinking culture in Australia

1.1 Purpose

This paper has been prepared for the National Preventative Health Taskforce to provide up-to-date and evidence-based information on policies and programs to prevent alcohol-related harm in Australia. While the paper is intended as an overview of the most relevant and generally available evidence, in the interests of brevity it covers many issues in summary only.

The paper attempts to answer three questions:

- What are the key trends in alcohol consumption and related harm in Australia?
- What are the most effective approaches to preventing and reducing alcohol-related harm?
- What are the gaps and opportunities for preventative action in Australia?

The paper is informed by the most current and readily available information on alcohol consumption and related harm, and the scientific literature on approaches to preventing and reducing alcohol-related harm. It draws upon evidence and examples of approaches from both within Australia and internationally. The paper summarises and acknowledges preventative work addressing alcohol-related harm already under way in Australia, and includes some commentary on its effectiveness, and also attempts to highlight gaps and opportunities for further preventative action.

The range of interventions that are reviewed in some detail in the paper include:

- Regulating physical availability
- Taxation and pricing
- Drink-driving countermeasures
- Treatment and early intervention
- Altering the drinking context
- Regulating promotion
- Education and persuasion.

An emerging theme from the paper is that there is currently a unique window of opportunity in Australia for a significant expansion of activity in the prevention of alcohol-related harm. In part, this opportunity grows from increased community and political concern about the harmful consumption of alcohol (especially focused on youth drinking) and a heightened willingness from all levels of government to take action in the area.

Furthermore, there is an increasingly solid base of evidence upon which policy decisions can be made – even from the brief review presented in this paper, it is clear which of the various policies and programs hold the most promise of being effective, and those which offer the least.

It is also apparent that there are potential synergies with other public health efforts to address tobacco, obesity and a range of chronic diseases.



The priorities for preventative action that are suggested in this paper are reflected in the overarching discussion paper *Australia: the Healthiest Country by 2020*.

1.2 The drinking culture in Australia

Alcohol plays many roles in contemporary Australian society – as a relaxant, as an accompaniment to socialising and celebration, as a source of employment and exports, and as a generator of tax revenue. It is intrinsically part of Australian culture. The majority of Australians who regularly drink, do so in moderation. Around three-quarters (72.6%) of Australians drink below levels for long-term risk of harm.⁽¹⁾ However, short-term consumption of alcohol at harmful levels, while only occasional, is also a prominent feature of the drinking culture in Australia. One in five Australians (20.4%) drink at short-term risky/high-risk levels at least once a month.⁽²⁾ Put another way, this equates to more than 42 million occasions of binge drinking in Australia each year.

While overall levels of alcohol consumption and drinking patterns have not changed markedly over the past decade, there is an increasing community awareness of the problem of harmful consumption of alcohol. These patterns continue to produce substantial costs to the health of Australians. Alcohol consumption accounts for 3.2% of the total burden of disease and injury in Australia: 4.9% in males and 1.6% in females.⁽³⁾ Beyond its impacts on the health and wellbeing of individuals and communities, the harmful consumption of alcohol also impacts significantly across a range of other areas, including workforce productivity, healthcare services such as hospitals and ambulances, road accidents, law enforcement, property damage and insurance administration.

The annual cost to the Australian community from alcohol-related harm is estimated to be more than \$15 billion.⁽⁴⁾ In Australia, concern in the general community about alcohol's adverse health and social effects is growing. A recent survey of Australians revealed that 84% of people are concerned about the impact of alcohol on the community.⁽⁵⁾

1.3 Determinants of drinking behaviour

The current national alcohol strategy⁽⁶⁾ observes that Australia's drinking cultures are driven by a mix of powerful, intangible social forces, such as habits, customs, images and norms, and other interlocking and equally powerful tangible forces relating to the social, economic and physical availability of alcohol, including promotion and marketing, age restrictions, price, outlets, hours of access and service practices⁽⁶⁾ (see Fig. 1). Certainly, there is no single factor that determines why people drink at harmful levels. Health-damaging behaviours related to poor diet, inadequate exercise, cigarette smoking, excessive drinking and illicit drug use appear to be embedded in a complex network of social determinants and risk and protective factors, and behaviours are also mediated by cultural influences.⁽⁷⁾

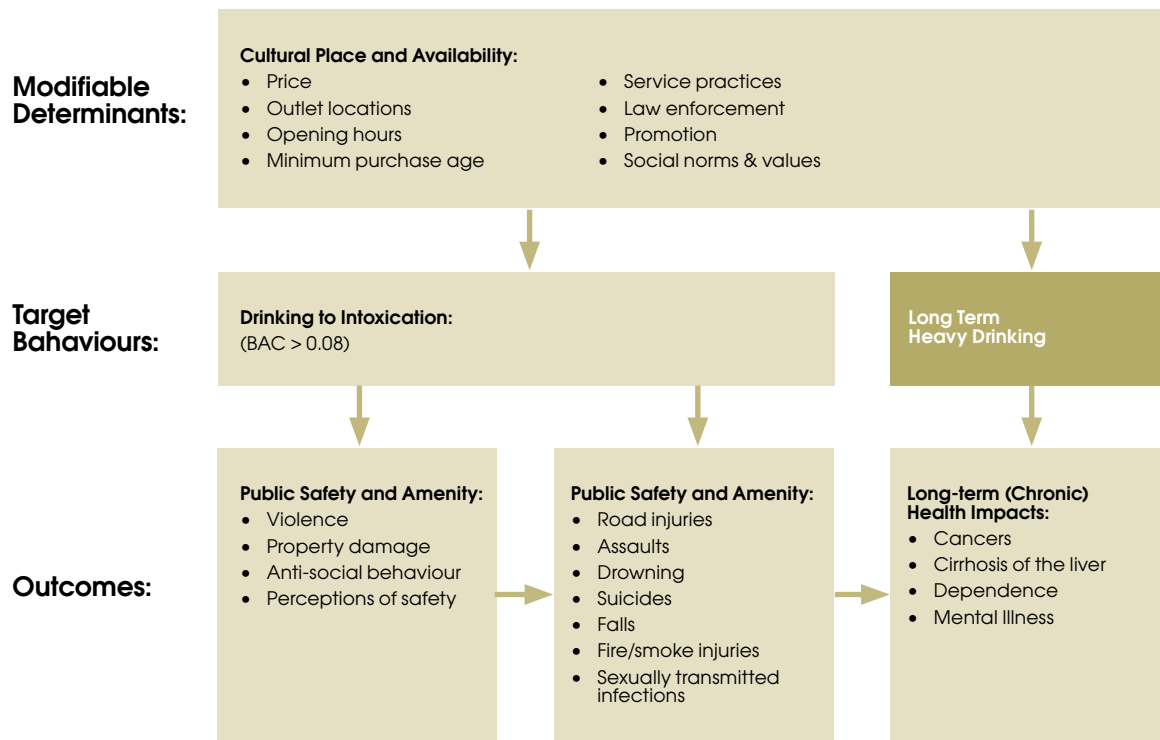


Figure 1: Alcohol-related harm: determinants, behaviours and outcomes
 Source: National Alcohol Strategy 2006–2009(6)

1.4 Alcohol policy and programs in Australia

Preventing alcohol-related harm is a responsibility shared among all levels of government. The Australian Government and the states and territories are working together through the mechanisms of the Ministerial Council on Drug Strategy to implement initiatives as part of the *National Alcohol Strategy 2006–2009*. (6) The strategy is a plan for action developed collaboratively between governments, industry and community partners. Key action areas initially identified for the strategy include:

- Monitor and review of alcohol promotions
- Increase community awareness and understanding of the extent and impacts of intoxication
- Improve enforcement of liquor licensing regulations

- Support whole-of-community initiatives to reduce alcohol-related health problems
- Develop and implement social marketing campaigns to reduce alcohol-related harms.

At a state and territory level, key alcohol policy and program responsibilities include law enforcement, licensing regulation, the provision of treatment services and drug education in schools. Additionally, all states and territories have strategic plans to address alcohol, which vary in scope and funding. Given the diverse range of adverse outcomes of drinking often experienced at a local community level, local governments also play an important role, including their functions in environmental health, planning, community development, waste disposal and youth services.



Local governments can contribute to the management of the physical availability of alcohol and the creation of safer drinking settings, and engage in environmental design and planning that contributes to and supports community wellbeing. There are many examples of innovative, locally responsive measures in Australia, in part to respond to the modern phenomena of 'night-time economies'.(8)

Throughout Australia, there is also a considerable amount of community-based activity under way in preventing alcohol-related harm, some of which is government funded and some of which is led by charitable groups. The contribution of community-level action is significant, and is integral to the effective implementation of federal, state and local government policies and programs.

Overall, while rhetoric is aimed at prevention, and there is currently a mood to address the negative side of alcohol use, there is great difficulty in gaining coherent, cooperative, strategic and effective action. This situation might be compared to the place of and responses to tobacco smoking in Australia in the 1960s.

1.5 Recent developments in Australia

NATIONAL BINGE DRINKING STRATEGY

On 28 March 2008, the Prime Minister announced a new national strategy to address the binge drinking epidemic among young Australians.(9)

COUNCIL OF AUSTRALIAN GOVERNMENTS (COAG) BINGE DRINKING AGREEMENT

The Council of Australian Governments (COAG) recently agreed on the importance of tackling the harmful consumption of alcohol among young people and asked the Ministerial Council on Drug Strategy to report to it in

December 2008 on options to reduce binge drinking, including in relation to closing hours, the responsible service of alcohol, reckless secondary supply and the alcohol content in ready-to-drink beverages. The Australia New Zealand Food Regulation Ministerial Council is to request Food Standards Australia New Zealand to consider mandatory health warnings on packaged alcohol.(10)

MINISTERIAL COUNCIL ON DRUG STRATEGY (MCDS)

The work of the Ministerial Council on Drug Strategy (MCDS) includes a focus on the assessment of late-night lock-outs for licensed premises and the development of a preferred framework to more effectively target police resources on binge drinking hot spots. It is also focused on a national policy framework for the responsible service of alcohol, a preferred regulatory model to address the secondary supply of alcohol to minors, options for reducing the alcohol content in products (including those aimed at young people), possible standards and controls for alcohol advertising targeting young people, and advice regarding the impact of health warnings on alcohol products.(11)

NORTHERN TERRITORY INITIATIVE AND OTHER ABORIGINAL AND TORRES STRAIT ISLANDER SPECIFIC INITIATIVES

Perhaps the most radical experiments in responding to problems, especially among Aboriginal Australians, have been carried out in the Northern Territory. Most recently, the *Northern Territory Initiative* was implemented by the then Minister for Aboriginal Affairs of the previous Australian government, and is soon to be reviewed after one year of implementation. This is a complex area and this paper will not attempt to summarise interventions specific to Indigenous Australians or presume to provide comprehensive information in this area.

2. Key trends in alcohol consumption

2.1 Alcohol consumption in Australia and other countries

Information on levels and patterns of alcohol consumption is diverse, and it can be difficult to identify the key features for the purposes of monitoring trends in drinking and related harm, and the possible opportunities for intervention. Unfortunately, in Australia at the current time, some of the most significant and valuable data is not readily available to the public health field. (12) For example, alcohol sales data, while it is known to be collected and analysed by the alcohol beverage industry, is not available for the purposes of this paper, nor indeed is it easily accessed for public health research purposes in general. The Taskforce notes with some concern that the continuation of the most accessible data sets on alcohol consumption levels in Australia, collected and compiled by the Australian Bureau of Statistics (ABS), is currently under review. Efforts are therefore urgently required to seek the continuation of these valuable data sets.

Per capita consumption of alcohol is an important measure from a public health perspective because it is 'to a considerable extent, related to the prevalence of heavy use, which in turn is associated with negative effects'. (13) Total per capita consumption of alcohol in Australia alcohol grew rapidly in the 1970s and has not returned to low levels since then; in 2007 it was estimated to be 9.88 litres of alcohol per capita (see Fig. 2). Among the different alcoholic beverage categories, there have been significant changes in per capita consumption over the past 70 years. Since peaking at over 6.4 litres of alcohol per capita in the mid-1970s, per capita consumption of beer has steadily declined and is now at a level similar to that of the late 1950s.

This reduction partly reflects changes in consumer tastes towards wine, and the increase in the availability of relatively low-priced wine. Consumption of wine has increased almost fourfold since the late 1940s, when intake was 0.77 litres of alcohol per capita. In 2005 wine consumption in Australia reached an all time record of 3.13 litres of alcohol per capita. When interpreting the trend in per capita consumption in Australia, it should be noted that the data does not take into account the ageing of the population; as people age, they generally consume less alcohol. Hence, as the Australian population continues to age over the coming decades, it is expected that per capita alcohol consumption will most likely decrease.

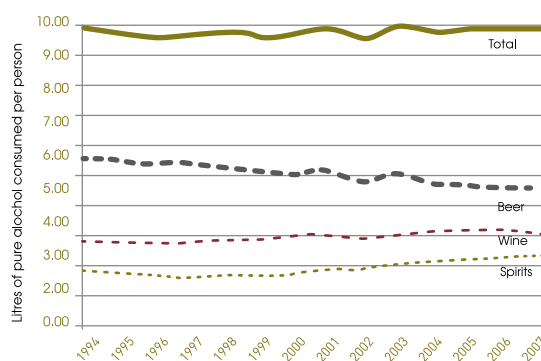


Figure 2: Apparent per capita consumption of alcohol (litres of alcohol), Australian persons aged 15+ years, 1994 to 2007 (years ending 30 June)

Source: ABS unpublished data and ABS 2008

Per capita consumption of alcohol in Australia is high by world standards. Australia is ranked within the top 30 highest alcohol-consuming nations, out of a total of 180 countries. Table 1 shows Australia's level of per capita alcohol consumption (9.02 litres of pure alcohol) and ranking (#30) compared to other selected countries in 2003. More recent estimates of per capita alcohol consumption for Australia (9.88 litres of pure alcohol in 2007) suggest that our international ranking is now likely to be even higher.



Table 1: Per capita consumption of alcohol by country and rank (out of 180 countries), selected countries*

RANK	COUNTRY	PER CAPITA CONSUMPTION†
1	Luxembourg	15.56
2	Ireland	13.69
7	Germany	11.99
8	UK	11.75
10	Spain	11.68
14	France	11.43
20	Russian Federation	10.32
23	Netherlands	9.68
24	New Zealand	9.68
30	Australia	9.02

RANK	COUNTRY	PER CAPITA CONSUMPTION†
31	Greece	9.01
33	USA	8.61
37	Italy	8.02
42	Japan	7.59
52	South Africa	6.72
63	Sweden	5.96
70	Thailand	5.59
74	China	5.20
120	Papua New Guinea	1.62
168	Indonesia	0.09

* Values are for various years before and including 2003

† Per capita alcohol consumption (litres of pure alcohol) among adults

Source: WHO 2008(14)

2.2 Drinking patterns among Australians

It is estimated that 83% of Australians are drinkers, and that 1.4 million Australians consume alcohol on a daily basis.(2) In 2007, males (10.8%) were almost twice as likely as females (5.5%) to drink daily.

Two in every five Australians drink on a weekly basis. However, there is a sizable proportion of the population (10.1% in 2007) who, for various reasons, have never drunk any alcohol (see Table 2).

Table 2: Frequency of alcohol consumption, proportion of the population aged 14+ years, Australia, 1991 to 2007

FREQUENCY	1991	1993	1995	1998	2001	2004	2007
Daily	10.2	8.5	8.8	8.5	8.3	8.9	8.1
Weekly	41.0	39.9	35.2	40.1	39.5	41.2	41.3
Less	30.4	29.5	34.3	31.9	34.6	33.5	33.5
Ex-drinker	12.0	9.0	9.5	10.0	8.0	7.1	7.0
Never	6.5	13.0	12.2	9.4	9.6	9.3	10.1

Source: AIHW, National Drug Strategy Household Surveys,(2) various years

Almost three-quarters (72.6%) of Australians drink below levels that would incur long-term risk of harm. However, among young adults (aged 20–29 years), the prevalence of drinking at levels posing long-term risk of harm is significantly higher (16%) than among other age groups (see Fig. 3).

This pattern of drinking is the equivalent of consuming 29 or more standard drinks per week for males and 15 or more standard drinks per week for females. Among Australian teenagers in 2007, this drinking pattern was considerably higher among females (10.6%) than among males (7%).

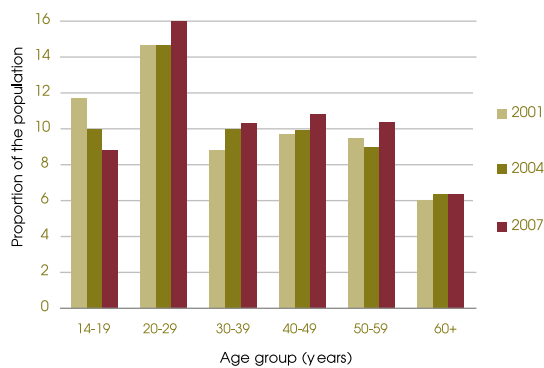


Figure 3: Drinking at risky/high risk of harm in the long term by age and year, proportion of the population aged 14+ years, Australia, 2007

Source: AIHW National Drug Strategy Household Survey(2)

While almost half (48.3%) of the Australian population drink at low risk levels, one in five Australians (20.4%) drink at short-term risky/high-risk levels at least once a month. This pattern of drinking is the equivalent of consuming seven or more standard drinks on any one day for males, and consuming five or more standard drinks on any one day for females. In short, this generally equates to drinking to the point of intoxication, or what is often termed as 'binge drinking'. This sort of drinking is most prevalent among adults aged 20-29 years, one-quarter (24.9%) of whom do so on at least a monthly basis. Overall, Australian males are more likely than females to drink at short-term risky/high-risk levels on regular (at least once a month) occasions (17.1% of females compared to 23.6% of males). However, among teenagers, females are more likely than males to regularly drink at levels of risky/high-risk of harm in the short term: 28.3% of female teenagers compared to 24.5% of male teenagers (see Figs. 4 and 5). Between 2001 and 2007 there were only slight changes in the prevalence of drinking at risky/high risk of harm in the short term across the age groups.

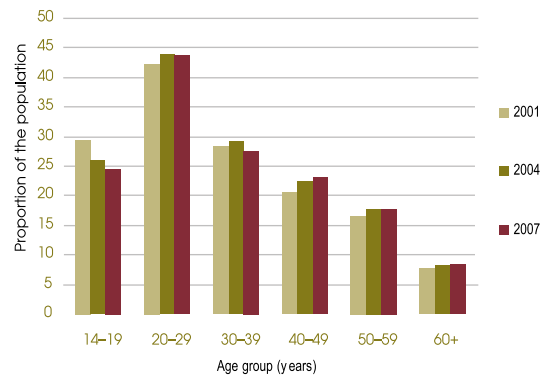


Figure 4: Monthly drinking at risky/high risk of harm in the short term* by age and year, proportion of the male population aged 14+ years, 2001 to 2007

Source: AIHW National Drug Strategy Household Survey(2)

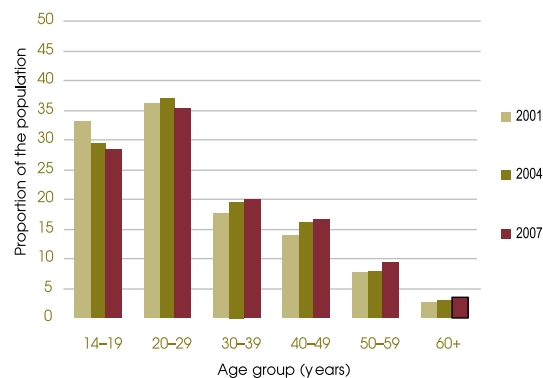


Figure 5: Monthly drinking at risky/high risk of harm in the short term* by age and year, proportion of the female population aged 14+ years, 2001 to 2007

Source: AIHW National Drug Strategy Household Survey(2)

(*Risky/high-risk drinking in the short term = seven or more standard drinks on any one day for males; five or more standard drinks on any one day for females.)



2.3 Product preferences

The most preferred types of alcoholic beverages among Australian female drinkers, in descending order, are bottled wine, bottled spirits and liqueurs, ready-to-drink beverages (RTDs) in a bottle and RTDs in a can. Over the 2001 to 2007 period, the preference for bottled wine had the greatest increase among females, growing from 57.3% to 63.8%. Among males, the most preferred types of alcoholic beverages, in descending order, are full-strength beer, bottled wine, bottled spirits and liqueurs, and RTDs in a can. Over the 2001 to 2007 period, the preference for RTDs in a can had the greatest increase among males, growing from 18.2% to 24.3% (see Figs. 9 and 10).

With regard to which types of alcoholic beverages are most commonly involved in the harmful consumption of alcohol, Stockwell *et al.* have estimated(16) that straight spirits (79.7%), alcoholic cider (78.9%), pre-mixed spirits (71.8%) and regular strength beer (72.6%) are the top four types of beverages consumed by Australian drinkers on days when they drank at risky/high-risk levels. Among 12- to 17-year-olds, the top three types of beverages are straight spirits (98.9%), regular beer (78.9%) and RTDs (76.7%). Spirit-based beverages held the highest market share, representing 62.7% of total alcohol consumption among this age group, with slightly more consumed as straight spirits than as RTDs.

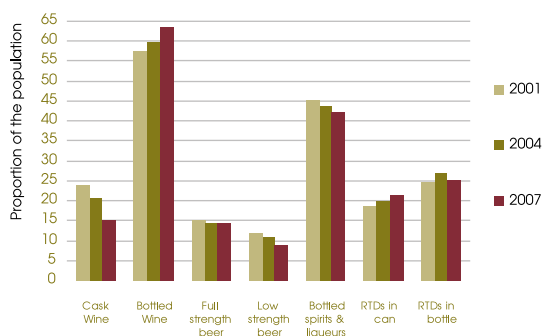


Figure 9: Preference for selected alcoholic beverages by year, proportion of the male population, Australia, 2001 to 2007

Source: AIHW(15)

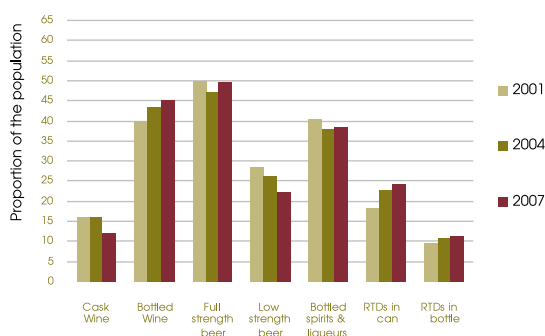


Figure 10: Preference for selected alcoholic beverages by year, proportion of the female population, Australia, 2001 to 2007

Source: AIHW(15)

2.4 Alcohol prices and consumer spending

The real price of alcohol in Australia has remained relatively low compared to other commodities, and in some cases has dropped. For example, a glass of wine costing \$1 in June 1999 dropped in real terms to \$0.90 in March 2008 (see Fig. 6).

The affordability of alcohol in Australia today is reflected in the fact that, on average, Australian households are spending proportionately less on alcohol nowadays compared to the amount they spent 20 years ago, despite total per capita consumption of alcohol changing little over the same period. The proportion of average weekly expenditure by Australian households on alcoholic beverages in 1984 was 3.4% (\$12.30), compared to 2.6% (\$23.32) in 2003–2004 (ABS 2005).⁽¹⁷⁾

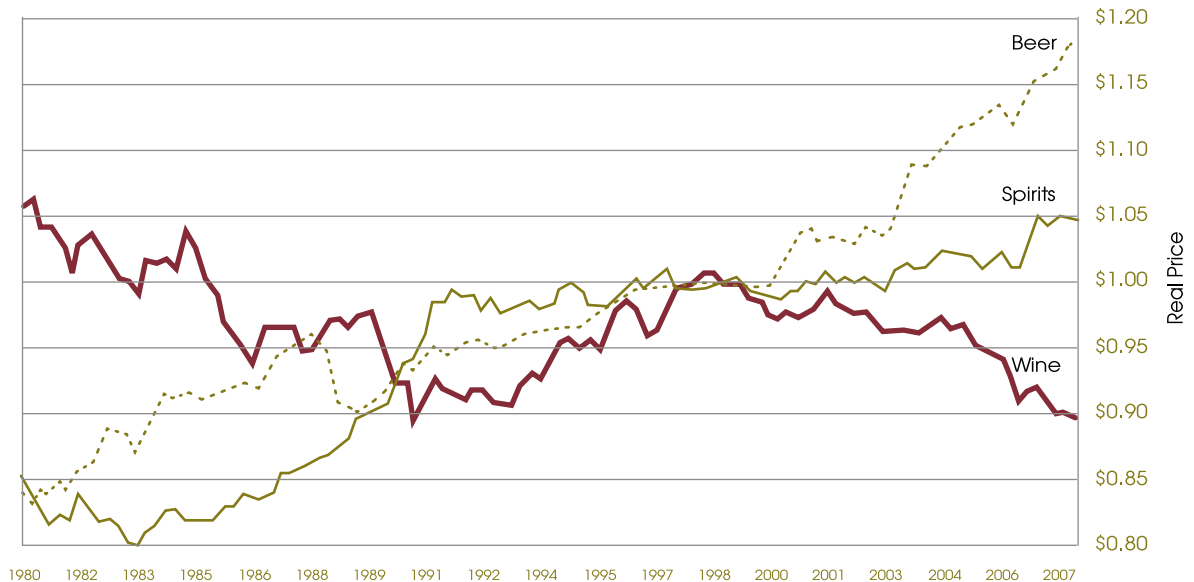


Figure 6: Prices of alcoholic beverages relative to other consumption (June 1999 \$1.00), Australia, September 1980 to March 2008

Source: ABS, various years



3. Key trends in alcohol-related harm

3.1 Health impacts

It is important to consider both the short-term and long-term health impacts of the harmful consumption of alcohol, as both result in significant morbidity and mortality. The typical effects of moderate alcohol consumption are those on the brain, such as feelings of relaxation, wellbeing and loss of inhibitions. However, as intake increases, pleasant effects are lessened by adverse effects such as drowsiness, loss of balance, nausea and vomiting, and other more serious harmful effects such as aggressive behaviours, unconsciousness, kidney failure and increased risk of accidents and injury (18). Overall, more people die from the acute effects of alcohol than the long-term or chronic effects.(18)

Alcohol consumption accounts for 3.2% of the total burden of disease and injury in Australia: 4.9% in males and 1.6% in females.(19)

It should be noted that although this percentage is lower than the contribution from tobacco smoking (7.8%) and high body mass (7.5%), there remains some debate over the method to calculate the disease burden attributable to alcohol. That the Australian figure may be an underestimate is suggested by the higher reported burden of disease from alcohol for New Zealand (10% for men and 4% for women).(20)

Alcohol has been causally linked to more than 60 different medical conditions.(13) In Australia, alcohol was linked to 3430 deaths per year and 85,435 disability-adjusted life years (DALYs) per year.(3)

In the 10 years between 1992 and 2001, more than 31,000 Australians died from alcohol-attributable injury and disease – a greater number died from acute (usually in the context of acute intoxication) rather than chronic conditions (often related to longer term dependence on alcohol).

Table 3: Deaths and burden (DALYs) attributable to alcohol by specific cause, Australia, 2003

SPECIFIC CAUSE	DEATHS		DALYS	
	NUMBER	PROPORTION OF TOTAL (%)	NUMBER	PROPORTION OF TOTAL (%)
Alcohol abuse	918	0.7%	34,116	1.3%
Suicides & self-inflicted injuries	553	0.4%	12,245	0.5%
Road traffic accidents	396	0.3%	11,121	0.4%
Oesophagus cancer	368	0.3%	4,594	0.2%
Breast cancer	184	0.1%	4,152	0.2%
Other	1,012	0.8%	19,207	0.7%
Total harm	3,430	2.6%	85,435	3.2%

Source: Begg *et al.* 2005

The most common cause of death due to intoxication was road crash injury, and among the chronic conditions alcohol-related liver cirrhosis accounted for the majority of deaths.(21)

Deaths from acute causes are most common among young people, particularly those aged 15–29 years, while deaths from alcohol-attributable chronic diseases are more common among people aged over 45 years.



More males than females died from both acute and chronic alcohol-attributable conditions (21.)

Over half a million hospitalisations were caused by risky and high-risk drinking in Australia in the eight years between 1993/94 and 2000/01.(21) The most numerous conditions among these hospitalisations were for alcohol dependence (87,186), injuries caused by assault (76,115), road crash injuries (47,167) and attempted suicide (20,374). As many as 10,094 hospitalisations were attributed to some form of ‘alcoholic overdose’ from very high blood alcohol levels, including alcohol poisoning and aspiration vomitus. Overall, the majority of hospitalisations were for acute conditions (67.8%).(21)

Future projections of the leading causes of disease burden predict that the proportion due to alcohol will remain stable and within the top 14 leading causes among Australian males by 2023 (see Fig. 7). The proportion of disease burden caused by anxiety and depression is also expected to remain stable by 2023, while ischaemic heart disease and lung cancer are expected to decline. Type 2 diabetes is predicted to be the leading cause of disease burden among Australian males by 2023.

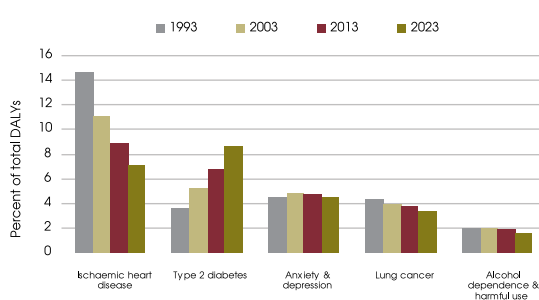


Figure 7: Leading causes of burden (DALYs) in males, Australia, 1993 to 2023

Source: Begg *et al.* 2007(19)

At low levels of consumption, alcohol may also have some benefits – various studies have found reductions in some forms of heart disease (particularly in middle-aged and older males) and ischaemic stroke (in older females), diabetes, gallstones and dementia.

The extent and even the existence of such benefits remain controversial.(22, 23) In terms of population, health, heart disease and stroke are the most important of these potential benefits. Nearly all the potential benefits are confined to males over the age of 45 and women past menopause, and can be gained with a drinking pattern of as little as one drink every second day. Since alternative means of preventing heart and vascular disease are available, the clinical consensus is that people need not take up or maintain drinking for health benefits.

DRINKING DURING PREGNANCY

Recent data show that 59% of Australian women drank alcohol at some time during their pregnancy and that 14% reported drinking five or more drinks in a sitting in the three months prior to pregnancy – 58% during the first and second trimester and 54% in the third trimester.(18) Maternal alcohol consumption can result in a spectrum of harms to the fetus. Although the risk of birth defects is greatest with high, frequent maternal alcohol intake during the first trimester, alcohol exposure throughout pregnancy (including before a pregnancy is confirmed) can have consequences for the development of the fetal brain. It is not clear whether the effects of alcohol are related to the dose of alcohol and whether there is a threshold above which adverse effects occur.(24) This uncertainty is reflected in policy regarding alcohol use in pregnancy within Australia and overseas.(25) Although the risks from low-level drinking (such as one or two drinks per week) during pregnancy are likely to be low, a ‘no-effect’ level has not been established, and limitations in the available evidence make it impossible to set a ‘safe’ or ‘no-risk’ drinking level for women to follow in order to avoid causing harm to their unborn baby.



In 2005–2006 there were a total of 145,000 drug treatment episodes recorded in Australia, of which 56,000 (or 39%) were for alcohol problems.⁽¹⁵⁾ While this figure is high, it is perhaps relatively low given the estimated 585,000 Australians who drink at levels considered to be high risk to health in the long term, many whom might be considered the potential target group for treatment.⁽¹⁵⁾ Females accounted for 31% of alcohol treatment episodes in 2005–2006. Persons aged 20–29 years received 22% of treatment episodes. For persons aged 10–19 years receiving treatment, the proportion treated for alcohol problems has increased from 15% to 23% between 2001–2002 and 2005–2006.

The interactions between other drugs (tobacco, illicit and prescription) and alcohol are complex. Australian studies reveal a close association between heroin overdose and alcohol consumption at harmful levels at the time of overdose. Australian research has also found that among cannabis users, alcohol was almost universally used on a regular basis, with most users consuming alcohol at harmful levels. There are also parallels in aetiological research regarding the uptake of one psycho-active substance increasing the likelihood of use of others. There has also been some work done regarding parents' attitudes and behaviour as a factor in influencing tobacco, alcohol and other drug use. For all of these substances, it is important that prevention efforts focus on delaying the uptake of regular use. This paper does not attempt to deal with the obvious crossover between mental health issues and the harmful consumption of alcohol, and the increasing problem of poly-drug use, but any preventative action needs to bear these factors in mind.

3.2 Social impacts

The effects of alcohol consumption go beyond diseases, accidents and injuries to a range of adverse social consequences, both for the drinker and for others in the community. These consequences include harm to family members (including children) and to friends and workmates, as well as to bystanders and strangers. Alcohol-related disturbance and assault ranges from acts of vandalism, offensive behaviour and disruption to far more serious antisocial behaviour, which can result in violence or injury to others.^(18,23) While it is not a perfect description of the wider social impacts of the harmful consumption of alcohol, some commentators have coined the term 'passive drinking', akin to passive smoking, to refer to the impact of drunken behaviour on third parties.



FAMILIES AND CHILDREN

It is a reality that the most visible effects of drinking on others, including children, result from accidents and injury (including violence) during or after drinking occasions.(18, 23) When families have to deal with a relative’s alcoholism, violence, injury or even death, these serious consequences can cause great suffering.(18, 30) Drinking within families is an important consideration because, depending upon the circumstances, it can be either a positive or negative influence on the drinking behaviour of young people. It is estimated that 13% of Australian children aged twelve years or less are exposed to an adult who is a regular binge drinker.(26) It has been estimated that 31% of parents involved in substantiated cases of child abuse or neglect experience significant problems with alcohol use.(27)

In Australia, it is estimated that 47% of all perpetrators of assault and 43% of all victims of assault were intoxicated prior to the event.(28) It has also been reported that 34% of homicide perpetrators and 31% of homicide victims were alcohol affected at the time of the homicide. In addition, it has been estimated that alcohol is an important factor in 50% of cases of domestic physical and sexual violence.(29) In a single year (1998–1999), there were 8661 people admitted to Australian hospitals with injuries from alcohol-related assaults; 62,534 alcohol-related assaults were reported to police in the same year, and it is estimated that many more went unreported. Of the hospitalisations with injuries from alcohol-related assaults, 74% were male and two-thirds were aged 15–34 years.(30)

An important factor in alcohol-related violence is the setting where drinking occurs. Australian studies have generally confirmed that alcohol-related violence most commonly occurs in and around inner-city hotels, in the early hours of Saturday and Sunday mornings, and usually among young adult males.(31)

Furthermore, it has been shown that the majority of alcohol-related incidents occur in a minority of high-risk licensed venues.(32)

It is not surprising that much of the time and resources of policing in Australia is related to incidents involving alcohol. One study reported that alcohol is involved in 62% of all police attendances, 73% of assaults, 77% of street offences, 40% of domestic violence incidents and 90% of late-night calls, from 10.00pm to 2.00am.(31)

The total social cost of the harmful consumption of alcohol is estimated to be more than \$15 billion each year.(4) The majority of these costs are for tangible social costs such as crime (\$1.6 billion), health (\$1.9 billion), productivity in the workplace (\$3.5 billion), productivity in the home (\$1.5 billion) and road accidents (\$2.2 billion) (see Table 4).

Table 4: Estimated social costs of alcohol abuse, Australia, 2004–2005

TYPE OF COST	\$M
Reduction in workforce and absenteeism	3,579
Labour in the household	1,571
Medical	541
Hospital	662
Nursing homes	401
Pharmaceuticals	298
Ambulances	75
Road accidents	2,202
Police	747
Criminal courts	86
Prisons	142
Property	67
Insurance administration	14
Productivity of prisoners	368
Resources used in abusive consumption	1,689
Loss of life	4,135
Pain and suffering (road accidents)	354

Source: Collins & Lapsley 2008(4)



3.3 Health inequalities

GEOGRAPHIC

There are variations in alcohol consumption across Australia and different impacts on specific high-risk population groups. Per capita alcohol consumption varies significantly between urban and rural areas, and between Australian states and territories. For instance, while the prevalence of drinking at short-term risky/high-risk levels at least monthly is 18.7% in New South Wales and 19.4% in Victoria, it is 28.4% in the Northern Territory.⁽¹⁾ Alcohol consumption levels (and alcohol-attributable mortality and morbidity) are consistently found to be lower for people living within major cities when compared to outer regions. In 2004 it was estimated that the proportion of Australians who drank at risky/high-risk levels for short-term harm, residing in outer regional (24%) and remote/very remote (28%) locations was between 20% and 40% greater than for residents of major cities. The proportion of the population residing in outer regional and remote/very remote locations who drank at risky/high-risk levels for long-term harm were 11% and 16% respectively, compared to 9.5% in major cities. Not surprisingly, there are also geographic differences in the rates of alcohol-related harm in Australia. The Northern Territory has the highest rate of alcohol-attributable deaths and hospitalisations in the country.

INDIGENOUS AUSTRALIANS

Indigenous Australians are about twice as likely to abstain from alcohol as non-Indigenous Australians, but those who do drink may be up to six times more likely to drink at high-risk levels than non-Indigenous people.⁽³⁴⁾ A survey estimated that 38% of Indigenous people aged 14 and over drank at risky/high-risk levels for acute harm, compared to 20% among non-Indigenous people; and that 23% drank at risky/high-risk levels for chronic harm, compared to about 10% of non-Indigenous people.⁽³⁵⁾ However, a less recent, but better designed, Indigenous-specific survey of substance misuse found that about 58% of all Indigenous respondents drank at risky/high-risk levels.⁽³⁶⁾ Among Indigenous people who live in remote parts of Australia, levels of alcohol consumption are particularly high.

In 2002–2003 the rate of hospital admission among Indigenous males for conditions related to high levels of alcohol use was between two and seven times greater than for non-Indigenous males. Such conditions include acute alcohol intoxication, alcoholic liver disease, harmful use and alcohol dependence. In addition, between 1999 and 2003 about 71% of Indigenous homicides occurred in situations where both the perpetrator and victim were drinking (as opposed to 19% of non-Indigenous homicides).⁽²⁹⁾ Other studies have shown that the rates of death from wholly alcohol-caused conditions among residents of Western Australia, South Australia and the Northern Territory are almost eight times greater for Indigenous males than for non-Indigenous males and 16 times greater for Indigenous females than for other females.⁽³⁷⁾ The level of alcohol-attributable death among young Indigenous Australians (15–24 years) has also been shown to be almost three times greater than for their non-Indigenous counterparts – with the divergence between the two populations apparently increasing in recent years.⁽³⁸⁾



YOUNG AUSTRALIANS

Rates of risky drinking in Australia peak amongst young people,(2) and alcohol-related harm is substantial for both adolescents and young adults. Drinking contributes to the three leading causes of death among adolescents – unintentional injuries, homicide and suicide – along with risk-taking behaviour, unsafe sex choices, sexual coercion and alcohol overdose.(18) A recent study of self-reported harm found that drinkers under the age of 15 years are much more likely than older drinkers to experience risky or antisocial behaviour connected with their drinking, and the rates are also somewhat elevated among drinkers aged 15–17 years.(39) Furthermore, initiation of alcohol use at a young age may increase the likelihood of negative physical and mental health conditions, social problems and alcohol dependence. Regular drinking in adolescence is an important risk factor for the development of dependent and risky patterns of use in young adulthood. Childhood and adolescence are critical times for brain development and the brain is more sensitive to alcohol-induced damage during these times, while being less sensitive to cues that could moderate alcohol intake.

Like adolescents, young adults continue to be greater risk takers than older adults, but their decision-making skills remain undeveloped – factors that are reflected in the high levels of injuries sustained by this age group. Alcohol affects brain development in young people; thus, drinking, particularly ‘binge drinking’, at any time before brain development is complete (which is not until around 25 years of age) may adversely affect later brain function. In addition, young adults are also the adult age group most likely to take mood-altering drugs.(2)

Trends in youth drinking are unclear, with neither school survey data (ASSADS) nor the National Drug Strategy Household Survey (NDSHS) demonstrating clear trends in drinking amongst adolescents or young adults in the last decade. While a recent examination of Victorian data relating to young people aged between 12 and 24 found no clear trend in rates of risky drinking, it revealed that rates of hospitalisation and presentation at emergency departments have increased dramatically over recent years. The study suggests that the relationship between survey-derived estimates of alcohol consumption and rates of alcohol-related harms is not as clear-cut as expected, and raises concerns about the sensitivity of population surveys in detecting changes in harmful drinking patterns.(40)

Drinking can also lead to poorer outcomes for people who have a mental health condition, whether it is a high-prevalence condition such as depression or a low-prevalence condition such as schizophrenia.

There has been little analysis of the patterns of consumption and trends in alcohol-related dysfunction or harm in older people in Australia. Older people are more vulnerable to the effects of alcohol due to changes in their body composition, decreased metabolic capacity, the presence of co-morbid conditions and the medications that regulate these conditions. Older people express concern about reduced perceptions of safety associated with public place drinking. Women in the baby boomer age group, now aged in their 50s to 70s, are more likely than their parents to be alcohol consumers and it might be anticipated that this will produce an increase in alcohol-related morbidity in their older years, but this is yet to be documented.

Certain occupational groups are also known to regularly drink at risky/high-risk levels, especially tradespeople and unskilled workers, and those working in the hospitality, agricultural and mining industries.



4. Best practice in prevention

4.1 Current activity

Considerable activity aiming to prevent alcohol-related harm is currently under way in Australia. The extent to which the considerable preventative desire and activity (planned or under way) is likely to be effective, and how well this activity reflects an evidence-based approach, is considered in the next section of this paper. In general, the measures that are most often called for by community members tend to be the least effective, while the most effective measures are the least popular and are thus probably the most difficult for governments to introduce, usually requiring strong leadership and well-planned implementation.

WHAT IS PREVENTION IN THIS AREA?

The stated aim of Australia's current National Drug Strategy is to 'prevent the uptake and minimise the harmful effects of drug use in Australian society'. Known as 'harm minimisation', this approach has been defined as encompassing:

- **Supply reduction** strategies designed to restrict the harmful supply of drugs
- **Demand reduction** strategies designed to prevent the uptake of harmful drug use
- **Harm reduction** strategies to reduce drug-related harm for individuals and communities.

The approach of harm minimisation, while complex and requiring continuing support from public advocates, is based on scientific evidence and underpins the definition of prevention adopted for the review of alcohol-related interventions in this paper. It can encompass universal as well as targeted interventions (both selective: particular high-risk sub-populations; and indicated: those with emerging problems).

Though not explored in detail in this paper, the concept of the **prevention paradox** assists in understanding prevention approaches in the areas of public health and public safety. This approach suggests that more (net) harm may be prevented through universal interventions – focusing on the majority who are less seriously involved in harmful alcohol/drug use, rather than through interventions that only target the smaller proportion of high-risk users.

WHAT WORKS IN ALCOHOL-RELATED PREVENTION?

The following discussion is informed by recent reviews of the available research evidence. This includes:

- the World Health Organization's (WHO) international review of alcohol-related research and public policy(13)
- a recent Australian research monograph on the prevention of substance use, risk and harm(7)
- a recent update of the latter, with a focus on prevention interventions targeting adolescents.(41)

Other recent reviews have also been drawn upon, to a lesser extent, including Stockwell 2004,(42) Loxley *et al.* 2005(7, 43) and NDRI 2007.(36)

The conclusions reached in the WHO report(13) with regard to the respective strengths and weaknesses of different types of interventions, according to the available international research evidence, are summarised in Table 6. Included in this table are Australian-authored evaluations of the equivalent interventions provided by Loxley *et al.*(7) and Toumbourou *et al.*(41) The scales used to rate the interventions by the respective authors are summarised in Table 5 below.



Table 5: Key to the rating scales shown in Table 6

RATING	EVIDENCE OF EFFECTIVENESS	BREADTH OF RESEARCH SUPPORT	TEST ACROSS CULTURES	AUSTRALIAN EVALUATION
0	Lack of effectiveness	No studies undertaken	Not tested	Limited investigation
★	Limited effectiveness	1 well-designed study completed	Tested in 1 country	Evidence for implementation
★★	Moderate effectiveness	2–4 studies completed	Tested in 2–4 countries	Evidence for outcome effectiveness
★★★	High degree of effectiveness	5+ studies completed	Tested in 5+ countries	Evidence for effective dissemination
?	No evidence available			N/A
●				Warrants further research
✘				Evidence is contra-indicative

This rating scale applies to the WHO’s international review (13) and Australian reviews.(14).

Of the 39 interventions listed in Table 6, at least half of these are universal (targeted at the whole population) and approximately half are targeted at high-risk groups. The international review by Babor *et al.* concludes that interventions targeting the whole population generally have higher effectiveness ratings and are less costly to implement and maintain, on average, than those targeting high-risk groups.(13) In general, the types of interventions that are considered most effective according to the ratings are, in order:

1. Regulating physical availability.
2. Taxation and pricing.
3. Drink-driving countermeasures.
4. Treatment and early intervention.

The types of interventions for which there is somewhat less evidence of effectiveness are, in order:

5. Altering the drinking context
6. Regulating promotion
7. Education and persuasion

There are differences in the ratings of some interventions between the international review(13) and the Australian review.(7) (for example, the treatment of alcohol problems and mass media campaigns). Also, importantly, it should be recognised that although the effectiveness of some interventions do not rate highly, in some cases this may be due to the limited research evidence that is available to inform the rating (for example, advertising content controls).

Table 6: Ratings of policy-relevant strategies and interventions

STRATEGY OR INTERVENTION	EFFECTIVENESS	BREADTH OF RESEARCH	CROSS-CULTURAL TESTING	COST TO IMPLEMENT	AUSTRALIAN EVALUATION
Regulating physical availability	***	***	**	High	**
	***	***	**	Low	
	**	**	**	Low	**
	**	***	**	Low	●
	***	*	*	Low	*
	**	**	*	Low	
	***	***	***	Low	**
	***	***			***
	***	***			**
	***	***			
Taxation and pricing	***	***			
	***	***			
	***	***			
	***	***			
	***	***			
	***	***			
	***	***			
	***	***			
	***	***			
	***	***			
Drink-driving countermeasures	**	***	***	Moderate	
	***	**	**	Moderate	***
	***	***	**	Low	
	***	***	**	Moderate	
	***	**	*	Low	*
	**	**	**	Low	
	0	*	*	Moderate	*
					*
		**	***	Moderate	***
	*	***	***	High	***
Treatment and early intervention	*	***	***		
		***	***		
	*	*	**	Low	●
	*	**	*	Moderate	
	*	***	**	Moderate	
	*	*	*	Moderate	** (if not enforced)
	0	*	*	Low	** (if not enforced)
	**	*	**	High	
	0	**	*	High	
Altering the drinking context	**	***	*	High	**
	**	***	*	High	**
					*
					*
					*
					*
					*
					*
					*
					*
Regulating promotion	?	●	●	Low	
	?	●	●	Low	●
	0	***	**	High	*
Education and persuasion	0	*	*	High	
	?	●	●	Moderate	●
	●	●	●	Moderate	*
	0	*	*	Low	*
	0	*	*	Low	*

Source: Adapted from Babor et al. (2003), (13); Loxley et al. (2004), (7); Toumbourou et al. (2007), (41)



4.2 Regulating the physical availability of alcohol

Regulating physical availability refers to the accessibility or convenience of the alcohol products, and relates to policies that aim to prevent alcohol-related harm through controls on the condition of sale to the drinker as a retail customer.⁽¹³⁾ In Australia, there has been a recent review of the evidence for restricting the sale and supply of alcohol by the National Drug Research Institute.⁽³⁶⁾ While regulation of the 'economic' availability of alcohol (i.e. the price of alcohol) is, currently, exclusively a federal responsibility in Australia, via measures such as taxation, the physical availability of alcohol is generally regulated by state and territory governments, and to a limited extent by local governments.

Restricting the hours and days of sale of alcohol is a standard component of alcohol policy and regulation, and there is a substantial body of international and Australian work that has examined the impact of changes to trading hours for licensed premises on levels of alcohol consumption and rates of related harms. Most Australian studies have shown that increased trading hours have been accompanied by significantly increased levels of alcohol consumption and/or harms.⁽³⁶⁾ A recent Australian study by Chikritzhs and Stockwell⁽⁴⁴⁾ found that small extensions of trading hours for licensed hotels in Perth, Western Australia, significantly increased the numbers of drink-driver road crashes. More specifically, this study demonstrated that the relationship between trading hours and increased drink-driver road crashes was mediated by the quantity of alcohol purchases. The National Drug Research Institute (NDRI) reports that several studies have indicated that young males and regular heavy drinkers are especially likely to take advantage of longer trading hours.⁽³⁶⁾

Restrictions on density of outlets can be achieved by requiring minimum distances between outlets or limiting the number of outlets in a particular location.

Liquor licensing systems or planning controls can potentially be used to limit the number of places where alcohol can be sold. In recent years in Australia there has been a significant liberalisation of licensing laws and a corresponding growth in outlets, both on- and off-premises. Recent research from three states,⁽⁴⁵⁻⁴⁹⁾ has demonstrated consistent links between the availability of alcohol in a region and the alcohol-related problems experienced there. In particular, these studies have linked rates of violence to density of alcohol outlets. A longitudinal study in Melbourne has highlighted that changes in the number of outlets in an area are directly related to changes in the rates of night-time assaults occurring there. The links between outlet density and other outcomes are less clear cut, although some international evidence suggests higher outlet density is related to higher rates of: risky alcohol consumption,⁽⁵⁰⁾ motor vehicle accidents,⁽⁵¹⁾ risky sexual behaviour,⁽⁵²⁾ pedestrian injury,⁽⁵³⁾ child maltreatment⁽⁵⁴⁾ and neighbourhood amenity problems.⁽⁵⁵⁾ The results of this research are clear: liberalising alcohol availability is likely to increase alcohol-related problems. The results certainly call into question the general assumption behind actions in recent decades that have been made in accordance with National Competition Policy such as the state-led liberalisation of liquor licensing regimes – that the number of a type of outlet should be determined by market demand for the product, without consideration of community amenity or impacts.

Apart from issues of outlet density, there is the question of whether particular types of outlets or their design and location are particularly likely to cause problems. There is good evidence that certain premises contribute disproportionately to problems,⁽³²⁾ highlighting the need to further examine the types of outlets that are related to assaults. Further data, such as alcohol sales, opening hours, capacity and venue style, could provide substantial insights into how different outlets contribute to the effect of outlet density on assault.



GROWTH IN ALCOHOL OUTLETS

While not completely deregulated, liquor licensing laws and regulations in most jurisdictions have been significantly relaxed over the past decade, generally coinciding with the required reviews under the National Competition Policy. One of the effects of this has been a proliferation in the number of new licensed premises in some jurisdictions (see Fig. 8).

Along with an increase in the total number of licensed premises, there has been an increase in the numbers of premises with extended trading hours, the numbers of licences to sell packaged liquor (i.e. take away) and over time, an increased concentration of licences held by just a few businesses.

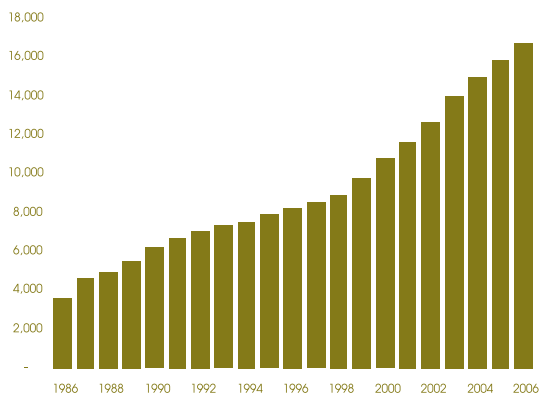


Figure 8: Number of liquor licences by year, Victoria, 1986 to 2006

Source: Consumer Affairs Victoria, unpublished data

Restricting **availability by alcohol strength** is known to be an effective intervention, both internationally and in Australia. In Australia, it has been estimated that full-strength beer makes the largest single contribution to all risky and high-risk alcohol consumption (39%).(21) The National Drug Research Institute (NDRI) reports that studies that have examined the relationship between alcoholic beverage type and levels of alcohol-related harm have found increasing evidence that beer consumption is

more commonly associated with drink-driving. (36) The NDRI also observes that while most studies identify wine as a comparatively low-risk beverage, a study by Stockwell *et al.* (1998) (56) found that certain types of wine that offer high alcohol content at a relatively low price were strongly associated with hospitalisations for alcohol-related road injuries, falls, assaults and suicides. Some small regional or remote communities in Australia, with relatively large Indigenous populations, have introduced **sales bans** on cask wine and cask fortified wine. According to the NDRI,(36) evaluations of some of these bans show that such restrictions can result in reduced alcohol-related harm in the communities where the bans exist.

The issue of the **server liability** for injuries to intoxicated people or third parties affected by the actions of a person affected by alcohol is a complex and controversial area of the law. (57) In the US, 'Dram Shop' laws and court decisions under common law in many states allow people injured through the actions of an intoxicated person to recover damages from a licensee or licensed premises owner. Such licensees are, in most Dram Shop legislation, also vicariously liable for their employees' actions in serving an (intoxicated) patron.(57) Loxley *et al.* report(7) that studies show Dram Shop laws have a modest deterrent effect, and that the underlying rationale for discouraging service of intoxicated persons is sound and there is no likelihood of adverse consequences. A recent Australian review of the key aspects of law and the implications of recent court decisions has reported that there is now a less onerous duty of care imposed on licensees and their staff with regard to the consequences of serving alcohol.(58) (See also the discussion of responsible service of alcohol (RSA) interventions in Section 4.6 of this paper).

Minimum legal purchase age refers to the age at which alcohol can actually be purchased by a person. This is distinct from the age at which alcohol can be consumed, sometimes referred to as the legal drinking age.



The distinction is important because while all state and territory laws in Australia prohibit a minor from purchasing alcohol, they do not necessarily prohibit consumption in certain circumstances. Babor *et al.* emphasise that consistent *enforcement* of laws regarding purchase age is critical if reduced alcohol consumption and related harm among young people is to be achieved.(13) Although the minimum legal purchase age for alcohol in all Australian jurisdictions is 18 years, the average age at which Australians have their first full serve of alcohol is 17 years, and as detailed earlier in this paper, there is a high prevalence of underage drinking that has not changed significantly in the past 20 years. In the US, where the minimum legal purchase age for some time ranged between 18 and 21 years, several studies have found that increasing the age limit is an effective means of reducing road crash death and injury among teenagers and young adults. The NDRI reports(36) that some studies have also found that the higher legal minimum drinking age is associated with reductions in alcohol consumption among young people. There is, therefore, some evidence that raising the purchase age to 21 can reduce teenage drinking, as well as harms. Kypri's account(59) of recent attempts to increase the minimum purchase age in New Zealand to 20 demonstrated that popular debate convinced a majority of the public that raising the age would be an appropriate way to reduce young people's harm from drinking. Toumbourou *et al.* here in Australia have recommended that a first step in this direction would be better monitoring of alcohol-related developmental harms using longitudinal and other developmental research.(41)

It must be acknowledged that consumption of alcohol by children and adolescents in the home and in certain social settings is often sanctioned by parents, often in the belief that it is relatively harmless or might be helpful in educating young people about alcohol.(60) The majority of young Australians who report drinking at home also report parents as being the primary suppliers of their alcohol.(61)

In New South Wales, it is now an offence to supply alcohol to minors in a private home without the direct approval of a parent or guardian. This has often been referred to as the **NSW secondary supply law**. While the impact of this law on youth drinking is not yet known, legislation of this kind has been welcomed by advocates against alcohol-related harm and there is currently considerable lobbying of government to support the introduction of similar laws in other Australian jurisdictions.(60)

Another example of restrictions on the physical availability of alcohol, which is known to be effective in reducing alcohol-related harm in some Australian Indigenous communities, is referred to as **dry community declarations**.(36) Some remote Indigenous communities in Western Australia, the Northern Territory and South Australia have declared themselves 'dry', using provisions of state/territory legislation. The key element of such dry area declarations is a combination of Indigenous community control and statutory authority, along with police enforcement for ensuring that dry community declarations reach their potential. Evidence suggests that although there are shortcomings (for example, sly grogging) and associated costs to this approach, overall there are reductions in consumption and alcohol-related harm. It should be noted that dry community declarations are distinct from **local dry area alcohol bans**, as the latter relate to restrictions on drinking in designated public places and are usually imposed where there are high rates of alcohol-related public disorder.(36) While local dry area bans have been found to decrease public order problems in designated areas, overall it is not yet fully known if they reduce public order offences, alcohol-related hospitalisations or police detentions of intoxicated persons. Often dry area restrictions simply displace drinkers to other areas where there are no, or fewer, restrictions, and dry area declarations are often seen as inherently discriminatory because of the negative impacts on Indigenous people already at risk of alcohol problems.(36)



Currently receiving considerable attention in some Australian jurisdictions are measures related to restricting the hours of sale of alcohol, known as **lockouts**. These do not restrict trading hours per se, however, because outlets are permitted to continue trading until their usual closing times. However, after a certain time, such as 2:00am or 3:00am, *new* patrons and those wishing to re-enter the premises are not permitted to do so. Lockouts aim to reduce the movement of people between clubs after a certain time, since it is this movement of people between venues that police have reported as being a major cause of alcohol-related incidents late at night. There are examples of lockout programs in operation in locations throughout Australia, such as in Ballarat and Bendigo in Victoria, and across Queensland, where a 3.00am lockout now applies to all late-night licensed premises. The Victorian government has also trialed a 2.00am lockout throughout four inner-city municipalities of Melbourne. The NDRI reports(36) that, as yet, there is limited formal evidence of the effectiveness of lockout programs, in part because they often occur as one element within a range of programs aimed at reducing late-night alcohol-related problems (for example, CCTV cameras, street lighting, public transport, police presence).

While they are not usually focused solely on issues that relate to the physical availability of alcohol, **community-based prevention** programs have become increasingly popular in recent years because of emerging understandings of how environmental and social conditions contribute to alcohol problems.(7) A detailed discussion on the range and scope effects of community based programs is not provided here, but can be obtained elsewhere (see Loxley *et al.* 2007:(7) pp166–167).

4.3 Taxation and pricing

The price of alcohol clearly impacts on consumption patterns. There are more than 50 studies from around the world showing that when alcohol increases in price, consumption is reduced.(12, 39-42) The World Health Organization (WHO) is one of many international and national health organisations that strongly endorse the use of increased alcohol taxation (higher prices for alcohol products) as an effective preventative strategy to reduce alcohol-related harm.(62) At the same time, it is important to recognise that there is a complex relationship between price and consumption.(63, 64) Patterns of alcohol consumption can vary considerably according to individual factors such as the age, sex and income levels of the drinker. Other factors such as availability, the cultural setting, the marketing and image of the product are also important. Studies consistently show that lower socio-economic groups and people with limited disposable income (young people, Indigenous groups and heavy drinkers) are more directly impacted by the price of alcohol products. Higher income drinkers tend to drink more expensive alcohol, and while price may lead them to reduce their consumption marginally, they are also able to alter drinking preferences to cheaper alternatives.(65, 66) The nature of the alcohol product is also a key variable. An Australian study identified considerable variations in price elasticity (the amount that price needs to change before it impacts on consumption) for different alcohol products. It concluded that spirits are twice as price sensitive as wine and beer.(67)

Given the complexity of the relationship between alcohol price and consumption, increasing alcohol taxation does not necessarily lead to a linear reduction in the levels of alcohol-related harm. It is important that the relationship between the price of individual alcohol products and consumption amongst particular groups of drinkers is carefully modelled against known price elasticity and existing consumption patterns.



While increasing the price through taxation is likely to lead to a reduction in per capita consumption, increasing the price of individual products may not necessarily achieve this goal. In some cases, product-based changes can create opportunities for new products and drinking patterns that increase levels of harm. (68) In this context, it is important to recognise that the production costs of alcohol products vary considerably between product types (eg spirits are relatively inexpensive to manufacture compared to beer and wine products) which in turn has a bearing on the cost price to consumers.

Australia's alcohol tax system can best be understood as a constantly changing reflection of the history of alcohol consumption in Australia, and the status of various alcohol products. It also reflects changing powers of taxation between state and territory governments and the Australian Government. As a consequence, different products – wine, spirits, beer, ciders, fortified wines – are all taxed differently. The excise duties arrangements can generally be described as a **volumetric tax system**, because the amount of excise duty depends on the volume of alcohol contained in the particular product. Wine equalisation tax can be described as an **ad valorem tax system**, because the rate of tax depends on the value of the retail selling price of the particular product. Customs duties are a combination of both volumetric and *ad valorem systems*. GST is set at a fixed rate of 10% of the product price, on top of all other taxes (see Table 7).

Table 7: Summary of the types of alcohol taxes applied by category of alcohol product

	BEER	SPIRITS & RTDS	WINE	CIDER
GST	Yes	Yes	Yes	Yes
Excise duty	Yes	Yes	No	No
WET	No	No	Yes	Yes
Customs duty (ad valorem)	No	Yes (imported)	Yes (imported)	No
Customs duty (volumetric)	Yes (imported)	Yes (imported)	No	No

Within some categories there are various concessions and exceptions. Smaller wineries, for instance, are largely exempt from their value added tax (the Wine Equalisation Tax) for all cellar door sales.

Recent estimates show that the Australian Government will collect over \$6 billion as a result of the production and consumption of alcohol during the 2008/09 financial year.(68, 4) However, a substantial disparity exists between the amount of tax revenue received by the Australian Government from risky drinking compared with the overall amount spent in attempting to prevent harmful consumption of alcohol. For example, it has been estimated that Australian adolescents (aged 12–17 years) spent approximately \$217 million on alcoholic beverages in 2002, netting the Australian Government approximately \$112 million in tax revenue.(69) This means that for every dollar spent on alcohol interventions aimed at adolescents, the government receives around \$7 in alcohol tax revenue.(69)

The current taxation rates translate into a wide variety of taxation per standard drink of alcohol (see Fig. 13). For those who argue that alcohol should be taxed according to the amount of alcohol in each product and container, the current system represents a massive distortion of this principle.

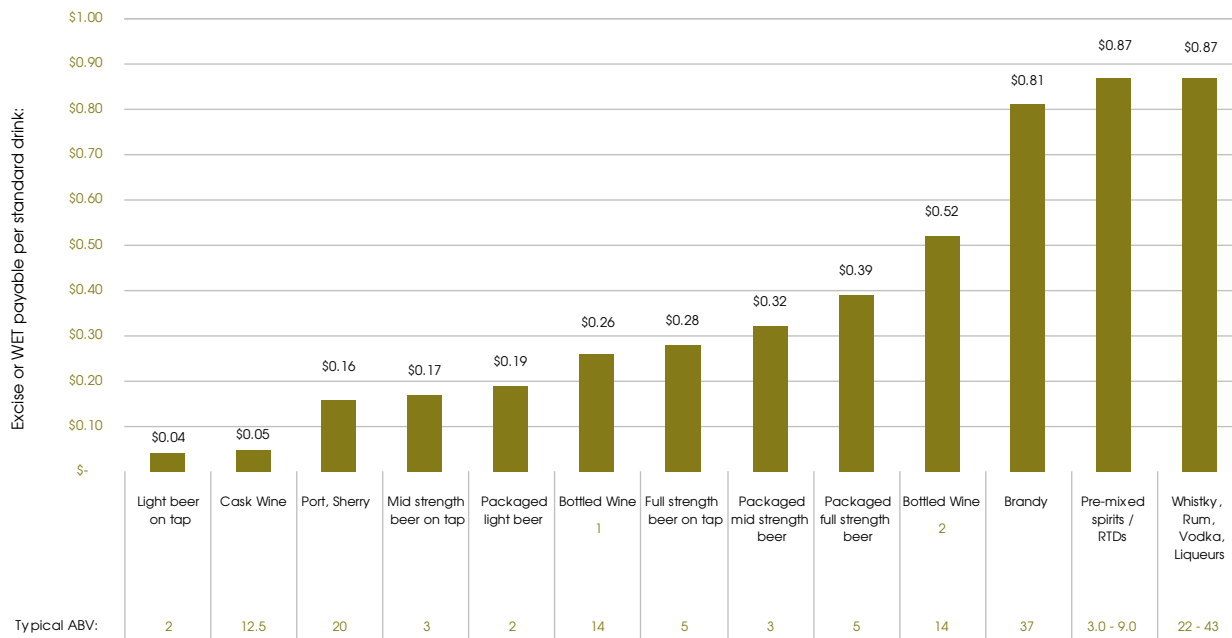


Figure 13: Tax payable per standard drink* of alcohol, various products, Australia, as at 1 August 2008*

Note: *Includes a 1.15% ABV excise-free concession for beer. WET payable per standard drink of wine is based on a four-litre cask of wine selling for \$13 (incl. GST) ('Cask Wine'), a 750ml bottle of wine selling for \$15 (incl. GST) ('Bottled Wine 1'), a 750ml bottle of wine selling for \$30 (incl. GST) ('Bottled Wine 2') and a 750ml bottle of port selling for \$13 (incl. GST) ('Port, Sherry'). A standard drink is equal to 0.001267 litres or 10 grams of pure alcohol.

As noted above, Australia has been through a continuous process of change in relation to the taxation and pricing of various alcohol products. There are three changes that are particularly interesting to note. In the late 1980s, states and territories adopted various forms of licensing for all alcohol sales. As part of this system, most jurisdictions offered low-alcohol beer (less than 3.5% alcohol by volume) for a significant concession in fees. The license fee concession translated into cheaper low-alcohol beer and, in combination with intense market competition in the beer market and the introduction of harm-reduction measures such as random breath testing, created an ideal environment for low-alcohol beer. Producers recognised the benefit of investing considerable developmental and marketing investment into low-alcohol beer.

As a consequence, low-alcohol beer increased its sales very significantly and captured approximately 20% of the total Australian beer market.(70)

The Northern Territory's 'Living with Alcohol' program provides another example of how changes in price through government taxation increases contributed to a reduction in per capita consumption. In 1992, the Northern Territory government used a **hypothecation** approach by placing a levy of 5 cents per standard drink on the sale of alcohol products with more than 3% alcohol by volume and used the revenue to fund a range of alcohol-prevention measures in the territory. (71) Evaluations of the 'Living with Alcohol' program found that the increase in price had contributed to a major reduction in the level of alcohol-related harm within the Northern Territory.(72, 73)

Over the last 15 years, there have been a series of changes in the level of excise and taxation applied to various forms of the ready to drink (RTD) product segment of the Australian alcohol market.



These changes have resulted in major shifts in drinking patterns across Australia, particularly in relation to brown spirit pre-mixed drinks (mostly around 5% alcohol by volume in 375ml cans) and white spirit pre-mixed bottled drinks (mostly around 5% alcohol by volume in 375ml bottles). With each price change, sales of these RTDs have increased or decreased quite significantly. While there is considerable evidence that these increases and decreases in sales represent shifts in product preferences (market share) rather than shifts in per capita drinking, the patterns of consumption have clearly been directly influenced by taxation and pricing. There is substantive evidence that the higher the price, the lower the consumption of these products, and the lower the price, the higher the consumption of these products. Perhaps just as importantly, the shifts in consumption patterns are more marked amongst the young and lower social-economic groups.(2, 68, 74)

The principle of alcohol taxation reform most often discussed by public health advocates is usually that of applying excise taxes to all categories of alcoholic beverages. That is, taxing the beverages on their alcohol content, as a mild discouragement of consumption. Along with taxation reform of this kind, there have been calls to raise the price of the cheapest forms of alcohol. This is referred to as the **floor price of alcohol**. Given that price is being used as the lever, it is the floor price that should be given more attention in order to achieve a real shift in per capita consumption, rather than just product preference. Within this context, it is important to acknowledge that the impact of any increase in the floor price for alcohol will impact more on young people, Indigenous communities, heavy drinkers and lower socio-economic groups.

It appears that the most likely model that can effectively reduce alcohol-related harm would be based on an across-the-board excise model that also includes regulating the floor (minimum) price, especially with regard to small containers. The excise tax could be scaled within different product types to

ensure there were strong financial incentives for the production of lower alcohol products (for example, low-strength beer, wine and RTDs), and so that the highest-risk alcohol products (i.e. spirits, which can more easily cause overdose) are taxed at an appropriately higher rate. In combination with a volumetric taxation system, in which all products are taxed according to alcohol content, all products could effectively have a floor price based on their alcohol content in a 300ml container.

Modelling this alcohol taxation system would be a very challenging exercise, particularly when health advocates have very limited access to actual sales data. As noted above, competing in the alcohol market requires extensive market testing and monitoring. This generates a level of detailed information that is not available to health researchers and policy makers. Perhaps just as importantly, this model would have a negative impact on some segments – particularly cask wine and cider – while advantaging other market segments – spirits and spirit-based RTD products. It would be very difficult to gain broad political support for such a model, given the level of public and political opposition from powerful alcohol producers. There has been some modelling undertaken that considered a range of alcohol taxation scenarios that would move the alcohol excise and taxation system closer to a true volumetric base, while remaining revenue neutral within each market segment. These models are publicly available, but have attracted limited support as they increase the price of cask wine and ciders while more expensive wines are reduced in price.(36) Until public health researchers and advocates have access to accurate sales data, and economic modelling can be implemented on the combination of floor price and a more volumetric approach to alcohol taxation, it is difficult to strongly put forward a particular model. At the same time, there is a substantive history in Australia that illustrates the danger of changing taxation levels of particular products without considering the implications both on consumption patterns and the development and marketing of alternative alcohol products.



4.4 Drink-driving countermeasures

Drink-driving laws and the associated programs of enforcement and social marketing are considered to be one of the great public health success stories of the late 20th century. In Australia, state and territory laws allow a Blood Alcohol Content (BAC) of up to 0.05% while driving for full licence holders, 0.00% for learner drivers and 0.00 per to 0.02% for provisional drivers, depending on the state or territory. Those who operate commercial aircraft, public or heavy vehicles, commercial vessels, machinery and mobile plant or farm equipment must observe the BAC restrictions required by their employer, as well as those required by law. For most adults, drinking no more than two standard drinks on an occasion will maintain their BAC below 0.05%. The evidence for the deterrent effect of such laws is strong, although the effects can erode over time and hence some countries have continued to **lower BAC limits**.(13) From the 1970s, Australian states world leaders in driving down rates of drink-driving through random breath tests and other means.

There is some evidence, albeit tentative, that having lower **BAC limits for young drivers** reduces the risk of road fatalities, especially if the BAC limit is 0.00%.(7) More broadly, there is good evidence that lower BAC limits, delayed access to full licence and curfews for young drivers can be effective in reducing drink driving among young people; **graduated licensing schemes** can potentially incorporate all of these measures within a single system.(13)

Random breath testing (RBT) has been shown to be effective in several countries, including Australia, in reducing road crashes, injuries and fatalities.(7) The defining feature of RBT is that any motorist at any time may be required to take a breath test, and there is nothing they can do to influence their chances of being tested.(13) Research suggests that there is a strong tendency for motorists to comply with drink-driving laws in jurisdictions that use RBT programs because of the *uncertainty* about the real risk of detection.(13) Herein lies part of

the impressive cost effectiveness of random breath testing. RBT is considered a superior method of enforcing drink-driving laws than **sobriety checkpoints**, which only check drivers who are judged to have been drinking.(13) In Australia, creating the public perception that there is a high chance of being caught drink driving through RBT has been achieved by a combination of high-visibility policing (road blocks, 'booze buses') and frequent social marketing campaigns that emphasise the likelihood of drink drivers being detected.(7)

Among the range of punishments for drink driving, the penalty that appears to have had the most consistent impact is **licence suspension**.(13) Increasing the severity of fines and imposing penalties such as imprisonment for drink driving have not been shown to result in reduced rates of drink driving or car accidents.(13) However, it is estimated that up to 70% of people who lose their licence continue to drive while unlicensed, as the risk of apprehension is relatively low.(43) The major concerns with disqualified drivers continuing to drive are that it undermines the effectiveness of licence suspension and is also linked to a range of other high-risk behaviour such as repeated drink driving and speeding.(43) Court diversion of drink drivers to educative and **mandatory treatment** interventions and the incapacitation of vehicles using **ignition interlock devices** are regarded as effective means of increasing compliance with licence suspension and reducing recidivism.(7, 13)

While there is no evidence that on-premise designated driver programs produce negative effects, the impact of such programs is very modest and even with concerted promotions they only produce a small positive effect.(13) An Australian review of these schemes was somewhat more supportive, pointing to research findings that the programs do have some positive influence on the behaviour of young people in selecting a sober driver, and that given the cost of such programs is usually borne by licensed premises, there is no opportunity cost in recommending such schemes.(7)



4.5 Treatment and early intervention

This paper considers treatment and early intervention as essential components of a preventative approach to the harmful consumption of alcohol. While treatment and prevention are traditionally viewed as separate and sometimes unrelated activities, it is critical that they be embraced as part of a holistic approach to tackling alcohol problems from a public health perspective. While treatments are primarily designed to serve the needs of individuals, there are a number of ways that treatment can also have a positive impact at a whole-of-population level:

- By raising public awareness of alcohol problems
- Influencing national and community agendas
- Involving health professionals in advocacy for prevention
- Providing secondary benefits for families, employers and road users.(13)

Brief interventions in primary health settings. For early-stage alcohol problems, brief interventions are consistently identified as a key ingredient in a comprehensive alcohol-prevention strategy because they are regarded as relatively inexpensive, they take very little time and they can be implemented by a wide range of health and welfare professionals.(7) Their benefit as preventative measures arises from the relative effectiveness in treating early-stage problem drinking, obviating the need for later more intense and costly treatment.(43) Brief interventions are designed to motivate high-risk drinkers to moderate their alcohol consumption, and typically involve one to three sessions before or soon after the onset of problem drinking.(13)

In Australia, brief interventions, as yet, are a relatively untapped opportunity, due in part to the need for greater recognition of the role that the primary health workforce can play. (43) Efforts during the 1980s and early 1990s to introduce more systematic screening, early identification and potentially brief or extended responses were variously tried.

These included the Coordinator of Alcohol and Drug Education in Medical Schools (CADEMS) that supported curriculum development for undergraduate medical students, a range of General Practice trials (especially in New South Wales, sometimes in association with other specific interventions including tobacco and even efforts to develop a combined risk-screening instrument for a number of conditions) and studies of the use of screening instruments (especially AUDIT) in hospital settings. Follow-up has been patchy, and even where the uptake and utility under experimental conditions was promising, the longer term effort and cost required to achieve widespread involvement has not been sustained. With a sense of déjà vu, the authors note a recent study of the effectiveness of brief interventions in hospital emergency departments, which suggests that these can potentially reduce subsequent alcohol-related injuries significantly.(75) For assessments and brief interventions to become part of routine practice of doctors, nurses and other health professionals, an approach at the health system level accompanied by funding and promotion is needed. It is unrealistic to expect overstretched health service providers to implement brief interventions without reimbursement or other recognition.

While this paper especially addresses primary prevention, it is worth noting that there remains a serious lack of accessible and available evidence-based treatment services for later stage alcohol dependence and other alcohol-related disorders across Australia (in private and public as well as in city and remote locations). With a still evolving specialist clinical workforce, there remains a relative vacuum for training and professional development at senior clinical levels, and it is this group that ultimately set the standard and nature of practice in any field. A comment from a senior clinician on the more recent development of Medicare support for private practice GPs and clinical psychologists is pertinent: *'it means that I get all these patients treated under the mental health items with fundamental alcohol-related problems where alcohol was not properly managed'*.



Workplace interventions. Australian workplaces are another setting with great potential for brief interventions with at risk drinkers. There are two main rationales for workplace interventions with regard to the harmful consumption of alcohol: to improve productivity; and to improve workplace safety.(7) In the Australian context, approaches to workplace alcohol issues are influenced by occupational health and safety laws and policies, and devising prevention strategies must be considered in this context. Historically, alcohol problems in the workplace have been dealt with through employee assistance programs (EAPs) and employers' policies on alcohol and drug use; however, there has been insufficient research to determine the effectiveness of EAPs in responding to and/or preventing alcohol issues in the workplace.(7) Nonetheless, EAPs do provide the potential opportunity for interventions that are known to be effective, such as brief interventions for high-risk drinkers. A recent study of alcohol consumption by Australian workers and the impact on absenteeism has pointed to the need for workplace education to influence young employees' attitudes and behaviours regarding alcohol use.(76) The study also suggests that there is a need to take a whole-of-workplace approach when designing and implementing prevention strategies that target both 'problem drinkers' and workers who drink at short-term risk levels, even infrequently, because the latter have an elevated risk of alcohol-related workplace absenteeism.(76) Others have pointed to the need for addressing structural factors in the workplace as a more sustainable prevention measure, such as reducing stressful working conditions that may lead to health-damaging behaviour such as the harmful consumption of alcohol.(77)

Alcohol problem treatment. Internationally, and particularly in Australia, the evidence base with regard to the treatment of alcohol problems is very well developed and is now at the stage of determining what is best practice rather than attempting to determine if treatment can work.(7) Effective alcohol treatment

options include motivational interviewing, brief interventions, social skills training, community reinforcement approach, relapse prevention and some aversion therapies.(7) There is evidence that **mutual help** programs such as 12-Step Facilitation Therapy, which encourages attendance at Alcoholics Anonymous (AA) meetings, are particularly effective for severely dependent drinkers with low levels of social support.(7) Although popular and widely used, there are also treatments that have little evidence of efficacy, including insight-orientated psychotherapy, confrontation counselling, relaxation training, general 'alcoholism counselling', education and milieu therapy.(7) **Pharmacotherapies** for alcohol dependence include disulfiram, naltrexone and acamprosate. Reviews have found that naltrexone and acamprosate are the safest and most effective of the three pharmacotherapies in the long and intermediate terms, respectively.(7)

Thiamine supplementation. A unique preventative measure to address the risk of serious brain damage from thiamine deficiency (known as Wernicke-Korsakoff's syndrome) that can result from heavy consumption of alcohol over many years, along with poor nutrition, is thiamine supplementation. Since 1991, all baking flour in Australia has been supplemented with thiamine as a universal method to increase thiamine levels in the diet of at risk populations.(7) This is included here as an example of a preventative measure that requires ongoing consideration, as there has since been advocacy for the removal of supplements (including thiamine) by the pure food advocates and there is concern that the reach of thiamine in bakers flour might not be the most cost-effective population measure in preventing this condition.(78)

Since the 1980s, **sobering-up centres** have been established in many parts of Australia, particularly Indigenous communities, as humane forms of care for publicly intoxicated individuals, and as an alternative to individuals being arrested and held in police cells and watch houses.(34)



However, there have been very few evaluations of sobering-up centres, despite their popularity in Australia.(79) In many ways, sobering-up centres function primarily as a broad harm-reduction measure, rather than as a treatment program. As Brady *et al.* describes them,(80) sobering-up centres are not a detoxification centre, nor are they aimed at long-term rehabilitation; rather, their role is to keep people out of police custody to reduce alcohol-related harm and to offer practical care in a safe environment for a limited time, including protection, shelter and food. Nevertheless, they could provide an opportunity for interventions that can be effective.

Sometimes related to these are **night patrols**, which are a particularly common alcohol harm-reduction strategy in many Indigenous communities.(7) Night patrols provide transport to safe locations for intoxicated persons, particularly in remote areas.(7) Evaluations of the effectiveness of night patrols, on their own, as an intervention is somewhat equivocal, although they have been rated as being effective in communities in reducing alcohol-related violence and getting intoxicated people off the streets.(7)

4.6 Altering the drinking context

Because drinking takes place in a social, cultural and community context, it follows that the harmful consumption of alcohol or the harmful consequences of this may be prevented or ameliorated through strategies that modify this context.(13) Such harm-reduction measures are important elements of an overall alcohol policy, as they are generally more socially and politically palatable. However, harm-reduction measures should not be considered as an equal substitute for the measures known to be most effective, as measures that aim to alter the drinking context are comparatively under-evaluated and generally possess less potential for reducing alcohol-related harm.(13)

It is clear that effective law enforcement is the key ingredient to ensure the efficacy of strategies that aim to alter drinking contexts as a way of preventing the harmful consumption of alcohol. While all Australian jurisdictions do have **bans on serving intoxicated persons and underage persons**, it is the extent to which these laws are adequately enforced that determines their effectiveness. Similarly, although very popular, the effectiveness of **responsible service of alcohol** (RSA) programs (also referred to as responsible beverage service, RBS) is also contingent on proper enforcement.(36) Without concerted efforts by police and/or liquor licensing authorities to enforce existing liquor laws, the imposition of RSA policies and/or training, while potentially raising awareness of relevant issues, has limited impact on the behaviour of servers or intoxication levels of patrons.(36) When highly publicised, the threat of substantial financial penalty has been shown to be particularly effective at motivating behaviour change among licensees, which has in turn resulted in reduced levels of alcohol-related harms, but it is not clear whether such financial penalties remain effective in the long term without frequent and highly visible examples of enforcement.(36) There is evidence of RSA programs being effective when they include a mandatory component combined with effective enforcement.(13) While mandatory server training has led to an increase in the number of servers undertaking training, program quality and content differ significantly between jurisdictions, and the high mobility of the workforce makes it difficult to sustain and monitor.

Mosher *et al.* assessed training programs offered by states and territories that have either mandatory or incentive-based laws, and found that the quality of programs is generally low, with only two jurisdictions meeting minimum standards.(81) A further criticism of RSA training programs has been that they focus solely on training servers, and do not include a more comprehensive community plan to address wider environmental issues, a factor that limits their potential.(82) To date, only a limited



number of RSA training programs have been evaluated in Australia.(36) In addition to training bar staff in the responsible service of alcohol, there have also been programs designed to train staff in **managing aggressive behaviour**, given the reality that some patrons may have become already intoxicated elsewhere and that some aggressive behaviour may not be necessarily alcohol-related at all.(13) There have been very few evaluations of such programs, although there is evidence that they can improve staff and patron interactions generally, but the long-term sustainability of these improvements relies on maintaining training and standards of practice.(13)

Proactive policing or **intelligence-led policing** has been successful in some parts of the world and has been partially adopted in some Australian jurisdictions.(13) It involves monitoring alcohol-related incidents in and around licensed premises, combined with regular police visits to the licensed premises that are most often linked to alcohol problems. For example, the New South Wales police have adopted a system of enforcing liquor laws through the collection of data such as feedback to police about alcohol-related crimes that have followed drinking at a specific licensed premises.(83) Known as the 'Alcohol Linking Program', the intelligence-led enforcement system has been shown to reduce alcohol-related crime, and similar approaches are now being trialled and implemented in other jurisdictions.

Voluntary codes of bar practice typically take the form of '**liquor accords**' in Australia. The emergence of liquor accords as a means of reducing alcohol-related problems in late-night entertainment centres began in Victoria in the early 1990s, and since then there has been a rapid proliferation throughout several states.(36) Accords are local, community-based initiatives to involve licensees, other businesses, local government authorities, community representatives and police, but which are implemented and largely coordinated by the latter to reduce alcohol-related harm in the late-night drinking environment.(36)

There are many possible components of accords, such as RSA, drink discounting bans, trained security personnel, provisions of food, use of safe glassware and alcohol containers, and environmental modifications to reduce conflict and thereby reduce the risk of violence.(7) Few accords have been formally evaluated, and among those that have, most have been unable to demonstrate effectiveness in either the short- or (particularly) long-term reduction of alcohol-related harms.(36) The appeal of accords probably rests more on the development of local communication networks, the facilitation of local input, a sense of local 'control' and improving public relations through open negotiations than in the actual reduction of harm. Even so, improved communication and participation may also be perceived as desirable and worthwhile outcomes in some circumstances. Loxley *et al.* acknowledge that there is no doubt that accords can be an effective vehicle for introducing some harm-reducing practices into licensed drinking venues; however, it is recommended that voluntary regulation such as this is accompanied by effective law enforcement.(7)

The **promotion of alcohol-free events**, while popular in many countries, including Australia, has not been found on its own to be effective in reducing alcohol problems.(36) Alcohol restrictions for large sporting and leisure events have usually been implemented as part of a range of initiatives, making it difficult to determine their specific impact.(36) Based on evidence that some injuries from alcohol-related violence were linked to the use of drinking glasses and bottles as weapons, a number of licensed premises around the world now serve alcohol only in **toughened glass** or **plastic containers**.(13) However, the soundness of this approach has been called into question by a study that found that injuries to bar staff actually increased when toughened glass was used.(13)

Providing food service on premises that serve alcohol, as a way of encouraging eating while drinking and hence reducing the effects of alcohol, is a popular element in liquor accords.(7)



However, the specific contribution of making food available on licensed premises as a way of preventing intoxication has not been determined, and in the case of certain foods (for example, salty snacks) there may actually be a risk of the opposite effect on alcohol consumption.(7)

Community mobilisation has been used to raise awareness of problems associated with on-premises drinking, develop specific solutions to problems and pressure licensees to take responsibility for some of the impacts on the local community, such as noise, litter and anti-social behaviour.(13) There is no set formula by which community action projects operate, as each project has differing aims and objectives, often in response to localised problems.(36) Studies overseas support the view that when community mobilisations are implemented as comprehensive, evidence-based strategies and are well funded, they can influence server behaviour, drinking behaviour and levels of alcohol-related harms associated with licensed premises.(36) Although some relatively small community mobilisation projects are currently under way in Australia, results from evaluative studies are yet to be published.(36) In general, community mobilisation approaches have at least a temporary effect on licensed premises in terms of serving practices and patron behaviour but in the longer term they often tend not to be implemented in a systematic way, and prove to be expensive and difficult to sustain.(13)

4.7 Regulating promotion

Alcohol marketing and promotion is a global activity, with the largest corporations promoting their products across the world.(13) Marketing strategies include an integrated mix of advertising on television, radio, print media, point of sale promotions, product design (including the packaging and naming of alcohol beverages) and the internet. Sponsorship of sports and cultural events is also a common marketing strategy used by alcohol companies, particularly in Australia. The key questions from a public perspective are:

- what is the impact of marketing and promotion on overall consumption and particularly the misuse of alcohol in the community?
- what are the most effective measures for preventing the adverse impacts of alcohol marketing and promotion?

Total alcohol advertising expenditure in Australia in 2007 was reported to be \$128 million (see Table 8). However, this figure is highly conservative, given that it generally relates to the advertising of products rather than of alcohol outlets, for which alcohol advertising expenditure is now very significant. Nor does it include sponsorship, 'below the line' advertising or internet advertising, the latter being a significant growth area in recent years. In Australia, the main sectors in which alcohol advertising expenditure occurs, and through which the greatest exposure is achieved, are through commercial television advertising (38%) and outdoor advertising (32%). Globalised alcohol manufacturers (for example, Diageo; Pernod Ricard Pacific) are among the biggest spending advertisers in Australia. The amount spent on advertising by spirits and wine producers combined, now equals that of the traditionally dominant beer market in Australia, reflecting an increasingly competitive alcohol beverage market.



Table 8: Alcohol advertising in Australia by sector, advertiser and beverage category, 2007

SECTOR	PERCENTAGE SHARE	RANK	ADVERTISER	\$ MILLIONS	ANNUAL CHANGE	BEVERAGE CATEGORY	PERCENTAGE SHARE
Metro TV	33%	1	Diageo	19.1	29%	Beer	47%
Regional TV	5%	2	Carlton & United Beverages	14.4	-24%	Spirits	26%
Metro press	5%	3	Tooheys Brewery	14.0	10%	Wine	21%
Regional press	1%	4	Boag J & Son	9.9	13%	Premix / cider	6%
Magazines	14%	5	Pernod Ricard Pacific	6.9	60%		
Radio	5%	6	Beringer Blass Wine Estates	5.3	93%		
Cinema	5%	7	Southcorp Wines	4.8	191%		
Outdoor	32%	8	Suntory	4.8	421%		
Direct mail	1%	9	Carlton Special Beverages	4.7	238%		
		10	Heineken	3.9	36%		
			Others not in top 10	39.9	-5%		

Source: Nielsen Media Research AdEx 2008

The impact of advertising on individuals can be seen as having both immediate effects, such as influencing decision making with regard to brand preference, as well as longer term effects such as reinforcing pro-drinking messages.⁽¹³⁾ In this way, it is both the content and frequency of exposure to advertising that can have an impact on individuals' attitudes and behaviours. The impact of alcohol advertising on young people is an area where there has been considerable research, but of somewhat poor quality, yielding conflicting results that range from positive associations between young people who have been exposed to and/or enjoy alcohol advertising and an increased risk of harmful consumption of alcohol, to negative associations or inconclusive results.⁽⁷⁾ Numerous studies have found a link between alcohol advertising and alcohol-related knowledge, beliefs and intentions of young people.⁽⁸⁴⁾

Unlike tobacco advertising, which was banned in Australia in 1995, there are no alcohol **advertising bans** in Australia, although some restrictions, including **advertising content controls**, do apply (see further below). In Australia, alcohol advertising is subject to a number of different laws and codes of practice.

The Australian Association of National Advertisers Code of Ethics covers general advertising issues. Other applicable laws and codes include:

- The Trade Practices Act
- State and territory fair trading legislation
- The Commercial Television Industry Code of Practice
- The Commercial Radio Code of Practice
- The Outdoor Advertising Code of Ethics.

The Commercial Television Industry Code of Practice states that advertisements can only be shown during M, MA or AV classification periods. However, on weekends and public holidays, alcohol advertisements can be shown as an accompaniment to the live broadcast of a sporting event. Alcohol advertising is covered in detail by the Alcohol Beverages Advertising Code (ABAC) Scheme. The main aims of the scheme are to ensure that alcohol advertising presents a responsible approach to drinking, and does not have appeal to children or adolescents. Among other rules in the code, the administration of the following is often questioned by community members: 'Advertisements for alcohol beverages must not depict the consumption or presence of alcohol



beverages as a cause of or contributing to the achievement of personal, business, social, sporting, sexual or other success' (ABAC 2008, Clause C (i)).(85)

The ABAC Scheme is funded and administered entirely by the alcohol industry. Commonwealth and state and territory governments are involved through one government representative on the ABAC Management Committee.

Despite the ABAC Scheme's rules, which discourage advertising that has 'strong or evident appeal to children or adolescents', research shows that a substantial amount of alcohol advertising is communicated to young people. For example, several advertisements for alcoholic beverages screened on television in metropolitan Melbourne were found to be more likely to reach 13- to 17-year-olds than adults (see Table 9).

Table 9: Advertising on metro Melbourne television, year to March 2005

PRODUCT	TOTAL ANNUAL SPEND	FREQUENCY OF ADS	RELATIVE EXPOSURE (OF 13-17-YEAR-OLDS VS 18-29-YEAR-OLDS)
Heineken Lager	\$ 94,000	110	1.12
Cougar Bourbon	\$ 45,000	103	1.04
Archers Spri Schnapps	\$ 57,000	110	1.04
Bundaberg Rum Dry & Lime Mix	\$ 36,000	88	1.06
Orlando Jacobs Creek Sparkling Rose	\$ 89,000	34	1.11

Source: King, Taylor and Carroll (2005)(86)

As a self-regulatory scheme, ABAC's effectiveness largely depends on the independence of its complaints body with the powers to sanction.(43) Recent research has revealed that less than three in 10 (28%) people surveyed reported an awareness of restrictions or regulations covering the advertising of alcohol, in terms of what can be

said or shown. It is estimated that only 3% of the total adult population are aware of the existing ABAC scheme and know what it relates to.(87) Among the 30% of people who reported being concerned about any alcohol advertising, only 2% had made a formal complaint. Some of the reasons why those who were concerned did not make a complaint included the belief that it would not achieve anything (30%), not having time (25%) and not knowing who/how/where to complain (15%). ABAC currently has no powers to sanction advertisers who breach the code rules; however, a Senate Committee inquiry currently under way is considering proposed federal legislation that would introduce sanctions on advertisers who breach the code, which would be determined by an independent adjudicating panel.(88)

In 2003, the Ministerial Council on Drug Strategy considered a report on the effectiveness of the ABAC Scheme that identified the following issues of concern:

- The current system does not address public health concerns about alcohol advertising and use. In particular, most complaints about alcohol advertising are dealt with under the general advertising complaints resolution system rather than the alcohol-specific system.
- The high dismissal rate for complaints about alcohol advertisements heard by the ASB does not engender community confidence in the complaint system and may discourage people from making complaints about alcohol advertisements.
- The general public is largely unaware of the complaint resolution system and, in particular, how to make complaints.
- The system lacks transparency. In particular, there is insufficient reporting of the outcomes of complaints.
- The current system does not apply to all forms of advertising; for example, packaging, electronic advertising, sponsorships, point of sale advertising and promotions.



- The effectiveness of the current system is compromised by the amount of time taken to resolve complaints (MCDS 2003, unpublished).

While some of these concerns have been addressed, pressure remains to move to a more tightly regulated advertising environment with strict government controls. The WHO recently recommended that governments be supported:

- to effectively regulate the marketing of alcoholic beverages, including effective regulation or banning of advertising and of sponsorship of cultural and sports events, in particular those that have an impact on younger people
- to designate statutory agencies to be responsible for monitoring and enforcement of marketing regulations
- to work together to explore establishing a mechanism to regulate the marketing of alcoholic beverages, including effective regulation or banning of advertising and sponsorship, at the global level.

One of the most formidable obstacles to effective education and persuasion strategies regarding alcohol (which are discussed in the next section below) is product advertising by the alcohol industry that intentionally promotes pro-drinking messages to the general population, much of which also reaches young people. In response, the governments of some countries have sponsored **counter-advertising programs**. (13) These might include public services announcements, or warning messages within actual product advertisements. However, studies suggest that counter-advertising usually has only limited effectiveness, often because it is communicated at low frequencies and in poorer quality productions compared to alcohol beverage advertising.(13) In contrast, counter advertising in the tobacco field is of proven effectiveness, primarily because in that context hard-hitting messages were possible (essentially that the tobacco industry was not in business for the consumer's good). Counter advertising may be a more politically realistic option than banning advertising altogether, and should

be strongly supported from a public health perspective, but it is important that its message not be compromised. Although rare, there are examples of well-planned and implemented counter-advertising programs that have had some success, particularly in building support for public health-oriented alcohol controls,(13) and there is very strong evidence from other public health areas such as tobacco about the value of such approaches.

4.8 Education and persuasion

International reviews of education and persuasion strategies suggest that even with adequate resources, such approaches have limited potential for success on their own.(13) Part of the reason for this is the counter effect of powerful forces that underpin unsafe and unhealthy drinking cultures, such as the price, availability and promotion of alcohol products. Recent Australian research for the development of a national alcohol social marketing initiative reports that 'the challenge for communication is that intoxication is closely linked to alcohol per se. When we simply asked participants about their earliest memories in relation to alcohol there was an overwhelming tendency to leap to their first drunk experience. Further, these experiences were recalled with a sense of pride and nostalgia, even though the stories inevitably involved some embarrassment.'(89) A key element to the success of social marketing in the public health area is effective integration with and reinforcement by other complementary strategies.(7) For instance, the success of **social marketing** in promoting quitting smoking and road safety, including anti-drink-driving campaigns, is indicative that education and persuasion strategies can be effective when coupled with other measures such as support services, changes to the environment, regulation and enforcement.

Throughout the world, **alcohol education in schools** is an enormously popular approach to addressing the issue of harmful consumption of alcohol among young people. The traditional alcohol education programs that are based



on an informational approach, while still very common, have not been shown to prevent or reduce the harmful consumption of alcohol by young people, and in some cases have actually been counterproductive by stimulating an interest in drinking among young people.(13) In recent years, there has been a shift towards normative education, which aims to correct young people's perceptions about their peers' drinking and thus de-normalise the harmful consumption of alcohol.(13) While this makes intuitive sense, it has been found that such school-based educational interventions, in general, produce only modest results that are short-lived unless accompanied by ongoing booster sessions. Importantly, given there are considerable risks involved in school-based education, it has been recommended that investment in such programs be accompanied by a proportionate investment in evaluation.(7) There are some examples of sound outcomes but these are relatively unusual. These generally involve whole-of-community efforts and they are usually associated with a close evaluation that ensures they are implemented (with modifications through feedback) as planned. In Australia, these include the School Health and Harm Reduction Project (SHAHRP) in Western Australia(43) and the Gatehouse Project in Victoria, whose primary target was reduced school bullying but where the side benefit was a comparative reduction in the use of tobacco and alcohol.(90) Related to alcohol education programs for school students are **parent education** programs. While some reviews cite promising signs of effectiveness, in general there remains a lack of research to fully determine the value of such programs.(7)

Low-risk drinking guidelines have been adopted in many countries, including Australia, to provide advice on the health risks and benefits of drinking at various levels for the general adult population, and for particular sub-groups. Despite their popularity, there is very little research that demonstrates the effectiveness of guidelines.(13)

However, guidelines do potentially fulfil an important function as supporting information for other measures known to be effective, such as brief interventions in primary care, and as the basis for health promotion messages and social marketing campaigns. In Australia, the current alcohol guidelines.(91) are under review. New draft guidelines prepared for public consultation are due to be finalised and released in late 2008. The new draft guidelines have been informed by updated modelling on the health risks of drinking, which have produced new estimates of the lifetime risks of alcohol-related harm. Emerging evidence also indicates that previous studies claiming the significant health benefits of alcohol consumption have tended to overestimate the effects. The consultation draft indicates the main changes are expected to include a new simplified, universal guideline level for alcohol intake for both short-term and long-term risks, a new guideline with special precautions for children and adolescents, and a new guideline for pregnant or breastfeeding women.(18)

Warning labels on alcohol products, while not required in Australia, have a high level of public support. Evaluations of alcohol warning labels are generally limited to the US experience, where labels were implemented in 1989. While there is some evidence of effects on knowledge and attitudes, there is no evidence that warning labels influence drinking behaviour.(92) By contrast, the tobacco labelling experience offers strong evidence that warning labels can be effective, not only in increasing information and changing attitudes but also in changing behaviour. These successes of tobacco warning labels suggest that alcohol warning labels should be graphic and attention-getting, should occupy a considerable portion of the package surface, and should involve rotating and changing messages.(92) Perhaps most importantly, they should complement and be complemented by a wider range of strategies aimed at changing drinking behaviour.



5. Policy imperatives

5.1 The state of alcohol policy in Australia

A recent report by the WHO warns that ‘the difference between good and bad alcohol policy is not an abstraction, but very often a matter of life and death’.(13) Nonetheless, it is acknowledged internationally that ‘alcohol policy is often the product of competing interests, values and ideologies’, and hence is not always based entirely on scientific evidence.(13) More specifically, the cultural significance of alcohol in many societies, along with its economic importance and the political influence wielded by the global and domestic alcohol beverage industries, create a hostile environment for public health policies, especially those aimed at reducing consumption overall as a way of preventing and reducing alcohol-related harm.

While we can see that it is politically necessary to have ‘collaborative and cohesive’ alcohol policy where all interested parties are included, this poses significant impediments to the implementation of the most effective preventative interventions. Notwithstanding this, Australia has been assessed as being comparatively progressive and among the best in the world in terms of evidence-based alcohol policy.(93) In a recent commentary on national alcohol control policies in 18 countries, Babor and Winstanley (94) report that ‘contrary to the generally pessimistic reports about alcohol policies, the case of Australia provides cause for optimism’. This assessment probably speaks to the relative low level of well-integrated policies globally, rather than an opportunity for complacency in Australia.

Stockwell (2004:(42)) has judged that while there are ‘some significant disappointments’, there are also ‘some wonderful examples of successful Australian public policies around alcohol from the past two decades’. Among the population-wide strategies that have been successful in reducing alcohol-related harm in Australia, Stockwell highlights taxation and drink-driving legislation/enforcement. For high-risk groups, the compulsory fortification of bakers flour with thiamine and liquor licensing restrictions in some Indigenous communities are considered as successes. Among the strategies not likely to have been effective, Stockwell points to the dissemination of national drinking guidelines, the introduction of standard drink labelling on alcohol containers, and efforts to encourage GPs to deliver brief interventions and advice about low-risk drinking. Stockwell also underlines some significant ‘setbacks’ in Australian alcohol policy, such as the relaxation of liquor licensing laws, which has led to the proliferation of outlets in many Australian jurisdictions; changes to the tax rate on wine, which has encouraged the production and harmful consumption of cheap wine; and, since 1997, the inability of states and territories in Australia to collect levies on the sale of alcohol products.

The recent review of alcohol policies in 30 OECD nations rated Australia as fifth overall, behind Norway (1st), Poland, Iceland and Sweden.(93) The study rated the state of alcohol policy in each of the 30 countries by creating a composite score based on the extent to which the country had adopted policies in various policy domains such as the physical availability of alcohol, prices, drinking context, alcohol advertising and road safety.



The study also examined the relationship between each country's score and per capita alcohol consumption, and found a strong negative correlation that implied a decrease in consumption of 1 litre of alcohol per year for each 10-point increase in the score. In other words, as alcohol policies increased in strength (i.e. effectiveness), alcohol consumption decreased.

Since the late 1980s, Australia has adopted several national strategies to tackle the harmful consumption of alcohol. Australia's first national alcohol strategy was completed in 1989 (95) followed by subsequent iterations in 1996, (96) 2001, (97) and most recently in 2006.(6) If the success of these strategies is to be measured on the basis of any change in rates of overall per capita drinking, rates of adult binge drinking, rates of underage drinking, and outcomes such as hospitalisations and crime, then these strategies appear to have had only modest success. One Australian commentator has said that 'while these documents provide the basis for a coherent and legitimate national approach to alcohol there has been poor follow-through on implementation'.(98) A recent summary of the state of alcohol policy in Australia reported that 'what is needed now is not so much an understanding of *what* works, but an appreciation of **how to make it work** in the various contexts in which it is implemented'(43) (emphasis added). Essentially, even the most effective strategies in the world will not be effective if they are not properly implemented as intended.

5.2 The best mix of interventions

While some interventions are more effective than others, there is no single strategy that can offer a 'quick fix' or 'silver bullet' to the prevention of harmful consumption of alcohol. The review undertaken by Babor *et al.* (2003) (13) concludes that an integrated approach is required that includes a combination of the strategies that are known to be effective and suitable for the particular context in which they are to be implemented. The NDRI emphasises(36) that it is important to consider the *quality*, rather than the *quantity*, of interventions. For example, 'a single targeted restriction (for example, hotel closing at midnight) may be more effective than an entire suite of half-heartedly implemented, watered-down or ill-considered restrictions'.(36) Importantly, choosing high-quality interventions does not mean choosing the most expensive. In fact, many of the most effective strategies are the cheapest.

A recent analysis of studies into the cost effectiveness of various alcohol-prevention measures found that there are very substantial differences in costs and effects, both between interventions and between world regions. See Table 10.(99) Random breath testing (due to the need for regular sobriety checkpoints administered by police) and brief advice in primary care (the intervention itself, plus costs associated with training) are the most costly interventions to achieve equivalent savings in years of health, expressed as disability-adjusted life years (DALYs) With regard to taxation, cost effectiveness appears to depend in part on the efficiency of the tax system and the degree of anti-drinking sentiment. In the Americas and Europe, where like Australia, the prevalence of heavy drinking is high, taxation was the most effective and cost-efficient strategy. However, by contrast, tax is actually least effective and least efficient in South East Asia, where low rates of heavy drinking appear to favour more targeted approaches such as random breath testing and brief physician advice.(99)



Table 10: Cost-effectiveness (average cost per DALY) of interventions for reducing the burden of alcohol in three WHO sub-regions (at different levels of economic development)

INTERVENTION	AMERICAS	EUROPE	SOUTH EAST ASIA
Brief physician advice	776	2,612	856
Random breath testing	1,919	2,741	701
Excise tax (current)	364	370	5,420
Excise tax (current + 20%)	326	321	7,414
Excise tax (current + 50%)	297	287	9,418
Reduced retail access	484	1,208	1,406
Comprehensive ad ban	536	660	1,807

Source: Chisholm *et al.* (2006)(99)

A more recent, Australian-based study has identified the interventions for which strong Australian or international evidence exists as to their potential benefits, and has attempted to evaluate these benefits in terms of the reduction in the social costs of alcohol-related harm it would be possible to achieve.(100) Interventions identified as being effective and for which benefits are quantifiable, include:

- Higher alcohol taxation, including differential tax rates on forms of alcohol that are particularly subject to abuse
- Partial or complete bans on the advertising and promotion of alcohol
- Measures to reduce drink driving: more intensive enforcement of random breath testing and lowering the legal blood alcohol concentration (BAC) level
- Brief interventions by primary care physicians to reduce hazardous alcohol consumption.

The study estimates that through the adoption of these interventions it would be possible to achieve a 48% reduction in alcohol-attributable deaths, along with significant reductions in the social costs of alcohol-related harm. These include a \$5.94 billion saving from higher alcohol taxation, a \$5.83 billion saving from brief interventions, a \$2.45 billion saving from partial advertising and marketing controls, and a \$0.94 billion saving from greater enforcement of drink-drive laws.



5.3 Challenges in implementation

Australia's international score card in the area of alcohol policy appears to be quite impressive, as the reviews mentioned above testify, and many would argue that incremental policy change, rather than radical approaches, is the most appropriate way to proceed. However, some have cautioned against taking comfort in this approach because of the 'cultural inertia' surrounding alcohol policy in Australia, which can be a formidable barrier to meaningful policy changes. 'Drinking forms part of the Australian legend, and there is good precedent in Australian history to suggest that a radical alcohol reform agenda could provoke community backlash – beware the 'wowsers' label'.(98) An example of radical policy change that has been successful is the introduction of

random breath testing, thanks in part to the accompanying social marketing campaigns that have highlighted both the seriousness of the problem and the effectiveness of the policy response. The level of public support in Australia for new alcohol policy interventions and/or the extension of existing interventions is encouraging in some areas (see Fig. 14); for example, the level of public support for measures known to be effective, such as the strict monitoring of late-night licensed premises (75%), is relatively high. While support for measures such as increasing tax on alcohol to pay for health, education and the treatment of alcohol-related problems is relatively lower (41%), it is a reasonably sufficient base of public support on which to build through public education and social marketing about the rationale and potential benefits of such a measure.

Figure 14. Support for alcohol measures, proportion of the population aged 14+ years, Australia, 2007

Source: AIHW 2008(2)





There are some specific challenges that go beyond public understanding and attitudes. These have been raised throughout this paper and include:

- National Competition Policy, as it relates to liquor licensing systems, regulating alcohol prices and restricting alcohol promotions
- The division of responsibilities between levels of governments for key alcohol policy areas and the historic complexity in achieving coordinated action
- The economic and political importance, and thus influence, of the alcohol beverage and related industries.

These challenges arise in the context of broad, community-wide changes in the nature of work, education and social connectedness, and occur at a time when:

- Alcohol sponsorship of sporting and cultural activities has replaced and is now prominent in many areas previously occupied by the tobacco industry.
- Alcohol consumption is symbolically associated with positive and pleasurable life in portrayals of Australia's history and culture, including the ongoing promotion of alcohol as a necessary ingredient of entertainment, celebration and all 'rite of passage' life course transitions.
- The 'menu' of psychoactive and performance-enhancing substances is increasing in scope and complexity within a society that is encouraged to focus on pleasure and performance, and where alcohol is seen, comparatively, as the 'known' commodity and thus 'unchallengeable' (or at least acceptable).

- The debate regarding the positive health benefits of small doses of alcohol makes forthright messages for social marketing purposes awkward and less memorable, and where compromise is extracted in every effort to implement effective alcohol harm prevention measures.
- Intoxicated behaviour is regarded by many community members as 'normal' and by many young people as desirable.
- The significantly lower life expectancy of Indigenous people is intrinsically linked to layered aetiology, including historic and structural issues, social and service exclusion, patterns of alcohol consumption, where there is great sensitivity to progressing evidence-based approaches in some communities and where the consequent immobilisation and inaction from the broader society is the most ready response. There is a parallel dilemma of too much too fast, and the possibility of even greater broad dysfunction if not managed carefully.
- 'Consumer' is a complex concept in this field. It can include both alcohol consumers (who generally seek liberal access to their favoured drug) and service users who are very often extremely reluctant to seek 'help'. Those who experience the 'second-hand' effects of harmful consumption of alcohol are a somewhat untapped group (including parents, who are the most identifiable group, but extending well beyond this sub-category).
- The extent and level of detail of data available precludes the evaluation of the outcomes of the incremental and planned changes to the levers that influence alcohol-consumption patterns, and patterns of related harm over the past decades, and similarly make effective modelling or assessment of the likely impact of future directed changes incomplete and thus less reliable.



- While there are few well-qualified specialists, there are many middle-managing health and welfare personnel implementing interventions that they sometimes have little faith in, and the concomitant low expectations of success with patients or clients can be self-fulfilling. In this context there is now good evidence of what works and we know that treatment, for example, can be successful. Although many will agree with this statement, few in the responding industry seem to believe it or lack the skills to utilise the most effective means to achieve it.
- The views of community members tend to be closer to the alcohol beverage industries' preferred preventative approaches, such as advocating for measures including school-based alcohol education, the responsible service of alcohol training, parent support and information, and education programs for specific target populations on fetal alcohol effects.

5.4 Opportunities for action

Reflecting on the evidence regarding the determinants of harmful consumption of alcohol, as gleaned from the review of interventions earlier in this paper, is perhaps a starting point for considering what the priorities for action should be. In general:


- When alcohol availability increases, alcohol-related harms are likely to increase
- When alcohol availability decreases, alcohol-related harms are likely to decrease
- When alcohol prices decrease in real terms, alcohol-related harms are likely to increase
- When alcohol prices increase in real terms, alcohol-related harms are likely to decrease.

In summary, changing the physical and economic availability of alcohol is probably the most effective and reliable way of reducing the harmful consumption of alcohol.

As the NDRI (2007) suggests, 'where the ultimate aim of decision makers is to minimise or reduce the negative impact of alcohol on the public health, safety and amenity of a population, best practice is that which is evidence-based and at very least, avoids implementing changes likely to increase overall availability above the current status quo'.

Government decision making relating to the availability in Australia, whether it be liquor licensing decisions or changes to the excise rates of particular alcohol products, tends to be reactionary. As an alternative, NDRI (2007) suggests that 'authorities and decision makers might consider adopting a pro-active style – one which acknowledges the links between alcohol availability and harms and which plans accordingly. Optimally, such an approach would: include policy and strategies based on sound research evidence for efficacy and/or have a solid theoretical grounding; include processes which support the ongoing, systematic collection of detailed objective data for monitoring and evaluation purposes; employ evaluation findings to inform and support future evidence-based decisions and reliable monitoring of community sentiment.'

Of course, 'supply reduction' measures that restrict availability are not the single solution to addressing the harmful consumption of alcohol – harm reduction and demand reduction measures are also important and very necessary. Maintaining and building on Australia's impressive track record in drink-driving countermeasures is an obvious element to include in an overall preventative strategy, but it should not be taken for granted, especially given the powerful cultural forces surrounding alcohol in Australia that could undermine, stall or, worse still, reverse the gains made in preventing and reducing alcohol-related road injuries and fatalities. Brief interventions are known to be one of the most effective preventative measures and more work is needed to examine the most appropriate setting for such an approach. Along with the usual health settings considered, workplaces provide a window of opportunity for reaching



thousands of Australians at the early stages of problematic drinking. This also opens an opportunity for novel partnerships. The success of prevention in other areas of public health, such as tobacco control, tells us that social marketing is a key element that is necessary to inform target audiences, shift attitudes and positively reinforce behaviour changes being driven by other complementary measures, such as restrictions on availability, regulation and enforcement.

5.5 Priorities

The intent of this paper has been to provide background information about alcohol-related harm in Australia, and summarise international best practice in alcohol-prevention policies and programs, rather than to articulate a particular course of action. However, some priorities for preventative policies and programs, and for research, are most important and most urgent, and should be singled out, because they represent a gap in current practice or knowledge in Australia or because they would enhance and/or inform existing and new practices. In the first instance, the major imperatives for Australia are to:

1. Reshape consumer demand towards safer drinking through:

- Managing both the physical availability (access) and economic availability (price). The high accessibility of alcohol – in terms of outlet opening hours, density of alcohol outlets and discounting of alcohol products – is an issue in many Australian communities.
- Addressing the cultural place of alcohol. Carefully planned, targeted and research-based social marketing and public education are required, and will be more effective if the marketing of alcoholic beverages is restricted, including curbing advertising and sponsorship of cultural and sporting events.

2. Reshape supply towards lower-risk products through:

- Changes to the current taxation regime to stimulate the production and consumption of low-alcohol products.
- Improved enforcement of current legislative and regulatory measures (such as Responsible Serving of Alcohol or bans on serving intoxicated persons and minors, or continuing to lower the blood alcohol content in drink-driving laws).

3. Strengthen, skill and support primary health care to help people in making healthy choices:

- Supporting brief interventions as part of routine practice by health professionals and other health workers in primary healthcare settings can assist changes in drinking behaviour and attitudes to alcohol consumption. This support should include consideration of building appropriate reimbursements and other incentives into health system funding.

4. Close the gap for disadvantaged communities:

- There is a need for tailored approaches and services to reach Indigenous and other disadvantaged groups.

5. Improve the evaluation of interventions through:

- Monitoring and evaluation of regulatory measures and other programs to underpin the further evolution of prevention strategies directed at inappropriate alcohol consumption.
- Developing effective models of safer patterns of alcohol consumption in different communities through changes to alcohol taxation arrangements, and an understanding of the impact of different types of alcohol outlets and their density on hospitalisation, violence and crime rates.






References

1. Australian Institute of Health and Welfare. 2007 National Drug Strategy Household Survey: State and territory supplement. Drug Statistics Series No. 21, Cat. no. PHE 102. Canberra: Australian Institute of Health and Welfare 2008. Available from: www.aihw.gov.au/publications/index.cfm/title/10670
2. Australian Institute of Health and Welfare. 2007 National Drug Strategy Household Survey: first results. Drug Statistics Series, Number 20. Canberra: Australian Institute of Health and Welfare, 2008a. Available from: www.aihw.gov.au/publications/phe/ndshs07-fr/ndshs07-fr-no-questionnaire.pdf
3. Begg S, Vos T, Barker DC, Stanley L and Lopez A. Burden of disease and injury in Australia in the new millennium: measuring health loss from diseases, injuries and risk factors. Medical Journal of Australia. 2007; 188:36–40. Available from: www.mja.com.au/public/issues/188_01_070108/beg10596_fm.html
4. Collins D and Lapsley H. The costs of tobacco, alcohol and illicit drug abuse to Australian society in 2004/05. P3 2625. Canberra: Department of Health and Ageing, 2008. Available from: [www.nationaldrugstrategy.gov.au/internet/drugstrategy/publishing.nsf/Content/mono64/\\$File/mono64.pdf](http://www.nationaldrugstrategy.gov.au/internet/drugstrategy/publishing.nsf/Content/mono64/$File/mono64.pdf)
5. Australian National Council on Drugs. Of substance. April 2008.
6. Ministerial Council on Drug Strategy. Towards safer drinking cultures: national alcohol strategy 2006–2009. Canberra: Ministerial Council on Drug Strategy, 2006.
7. Loxley W, Toumbourou JW, Stockwell T, Haines B, Scott K, Godfrey C, *et al.* The prevention of substance use, risk and harm in Australia: a review of the evidence. Canberra: Commonwealth of Australia, 2004. Available from: <http://espace.lis.curtin.edu.au/archive/00000284/>
8. Hadfield P. Bar Wars. Oxford: Oxford University Press, 2007.
9. Rudd K. National binge drinking strategy – media release. Canberra, 2008. Available from: www.pm.gov.au/media/Release/2008/media_release_0126.cfm
10. Council of Australian Governments. Communiqué – 21st Meeting of the Council of Australian Governments, 23 March 2008. Council of Australian Governments, 2008, (viewed). Available from: www.coag.gov.au/meetings/260308/index.htm
11. Ministerial Council on Drug Strategy. 23 May 2008 communiqué. Canberra: Ministerial Council on Drug Strategy, 2008.
12. Hall W, Chikritzhs T, d’Abbs P and Room R. Alcohol sales data are essential for good public policies towards alcohol. The Medical Journal of Australia. 2008; 189:188–9. Available from: www.mja.com.au/public/issues/189_04_180808/hal10593_fm.html
13. Babor T, Caetano R, Casswell S, Edwards G, Giesbrecht G, Grube J, *et al.* Alcohol: no ordinary commodity. New York: World Health Organization and Oxford University Press, 2003.
14. World Health Organization. World Health Organisation Statistical Information System (WHOSIS) 2008. Available from: www.who.int/whosis/whostat/2008/en/index.html
15. Australian Institute of Health and Welfare. Submission to Inquiry into Ready-to-Drink Alcohol Beverages, Senate Community Affairs Committee. Drug Statistics Series, Number 20. Canberra: Australian Institute of Health and Welfare, 2008b. Available from: www.aihw.gov.au/publications/phe/ndshs07-fr/ndshs07-fr-no-questionnaire.pdf
16. Stockwell T, Zhao J, Chikritzhs T and Greenfield T. What did you drink yesterday? Public health relevance of a recent recall method used in the 2004 Australian National Drug Strategy Household Survey. Addiction. 2008; 103:919–28.
17. Australian Bureau of Statistics and Australian Institute of Health and Welfare. The health and welfare of Australia’s Aboriginal and Torres Strait Islander People’s 2005. Cat No. 4704.0. Canberra: Australian Bureau of Statistics and Australian Institute of Health and Welfare, 2005. Available from: www.aihw.gov.au/publications/index.cfm/title/10172
18. National Health and Medical Research Council. Australian alcohol guidelines for low-risk drinking. Canberra: National Health and Medical Research Council, 2007. Available from: www.nhmrc.gov.au/guidelines/_files/draft_australian_alcohol_guidelines.pdf
19. Begg S, Vos T, Barker B, Stevenson C, Stanley L and Lopez A. The burden of disease and injury in Australia 2003. PHE 82. Canberra: Australian Institute of Health and Welfare, 2007. Available from: www.aihw.gov.au/publications/index.cfm/title/10317
20. Connor J, Broad J and Rehm J. The burden of death, disease, and disability due to alcohol in New Zealand. The New Zealand Medical Journal. 2005; 118:U1412. Available from: www.nzma.org.nz/journal/118-1213/1412/



21. Chikritzhs T, Catalano P, Stockwell T, Donath S, Ngo H, Young D, *et al.* Australian alcohol indicators, 1990–2001: patterns of alcohol use and related harms for Australian states and territories. National Drug Research Institute, Curtin University of Technology and Turning Point Alcohol and Drug Centre Inc., 2003. Available from: www.ndri.curtin.edu.au/pdfs/naip/naipaaexecsumm.pdf
22. Jackson R, Broad J, Connor J and Wells S. Alcohol and ischaemic heart disease: probably no free lunch. *The Lancet*. 2005; 366:1911–2. Available from: www.thelancet.com/journals/lancet/article/PIIS0140673605677707/abstract
23. Fillmore K, Kerr W and Stockwell T. Moderate alcohol use and reduced mortality risk: systematic error in prospective studies. *Addiction Research & Theory*. 2006; 14:101–32. Available from: www.ingentaconnect.com/content/tandf/gart/2006/00000014/00000002/art00002
24. Royal College of Obstetricians and Gynaecologists (RCOG). Alcohol consumption and the outcomes of pregnancy. Statement No. 5. Royal College of Obstetricians and Gynaecologists (RCOG), 2006. Available from: www.rcog.org.uk/index.asp?PageID=1477
25. O’Leary CM, Heuzenroeder L and Elliott EJ. A review of policies on alcohol use during pregnancy in Australia and other English speaking countries. *The Medical Journal of Australia*. 2007; 186:466–71. Available from: www.mja.com.au/public/issues/186_09_070507/ole11155_fm.html
26. Dawe S, Harnett P and Frye S. Improving outcomes for children living in families with parental substance misuse: What do we know and what should we do. *Child Prevention Issues*. Melbourne: Australian Institute of Family Studies, 2008. Available from: www.aifs.gov.au/nch/pubs/issues/issues29/issues29.html
27. Government of Victoria Department of Human Services. An integrated strategy for child protection and placement services. Melbourne: Community Care Division 2002. Available from: www.cyf.vic.gov.au/policy-planning-funding/library/publications/integrated_strategy
28. English DR, Holman CDJ and Milne E. The quantification of drug caused morbidity and mortality in Australia, 1995. Canberra: Commonwealth Department of Human Services and Health, 2005.
29. Steering Committee for the Review of Government Service Provision. Overcoming indigenous disadvantage key indicators 2005 report. Melbourne: Productivity Commission, 2005. Available from: http://papers.ssrn.com/sol3/papers.cfm?abstract_id=925776
30. Matthews S, Chikritzhs T, Catalano P, Stockwell T and Donath S. Trends in alcohol-related violence in Australia, 1991/92–1999/00. National Alcohol Indicators Bulletin No.5. Melbourne: National Drug Research Institute and Turning Point Alcohol and Drug Centre, 2002.
31. Doherty S and Roche A. Alcohol and licensed premises: best practice in policing. A monograph for police and policy makers. Adelaide: Australasian Centre for Policing Research, 2003. Available from: www.nceta.flinders.edu.au/pdf/licensed-premises/licenced-premises.pdf
32. Briscoe S and Donnelly N. Assaults on Licensed Premises in Inner- Urban Areas. Sydney: New South Wales Bureau of Crime Statistics and Research, 2001.
33. BOCSAR. Estimating the short-term cost of police time spent dealing with alcohol-related crime in NSW. Monograph No. 25. Canberra: National Drug Law Enforcement Research Fund, 2008.
34. Chikritzhs T and Brady M. Fact or fiction? A critique of the National Aboriginal and Torres Strait Islander Social Survey 2002. *Drug and Alcohol Review*. 2006; 25:277–87. Available from: www.informaworld.com/smpp/content-db=all?content=10.1080/09595230600644715
35. Australian Institute of Health and Welfare. National Drug Strategy Household Survey 2004 – detailed findings. AIWH Cat. No. PHE 66. Canberra: Australian Institute of Health and Welfare, 2005. Available from: www.aihw.gov.au/publications/index.cfm/title/10190
36. National Drug Research Institute. Restrictions on the sale and supply of alcohol: evidence and outcomes. Perth: National Drug Research Institute, Curtin University of Technology, 2007. Available from: www.ndri.curtin.edu.au/pdfs/publications/R207.pdf
37. Chikritzhs T, Stockwell T, Heale P, Dietze P and Webb M. Trends in alcohol-related road injury in Australia, 1990–1997. National Alcohol Indicators Bulletin No. 2. Perth and Melbourne: National Drug Research Institute and Turning Point Alcohol and Drug Centre, 2000.
38. Chikritzhs T and Pascal R. Trends in youth alcohol consumption and related harms in Australian jurisdictions 1990–2002. National Alcohol Indicators Bulletin No. 6. Perth: National Drug Research Institute, Curtin University of Technology, 2004. Available from: www.ndri.curtin.edu.au/pdfs/naip/naip006.pdf
39. Room R and Livingston M. Variation by age in the harm per drinking volume and heavier drinking occasion. Melbourne: AER Centre for Alcohol Policy Research, Turning Point Alcohol and Drug Centre, 2007.
40. Livingston M. Recent trends in risky alcohol consumption and related harm against young people in Victoria, Australia. *Australian and New Zealand Journal of Public Health*. 2008; 32:266–27.

- 
41. Toumbourou J, Lyons Z, Loxley W and Bauld C. Research needs analysis and action plan for drug prevention research in Victoria. Department of Human Services, Victoria, Premier's Drug Prevention Council, 2007.
 42. Stockwell T. Australian alcohol policy and the public interest: a brief report card. *Drug and Alcohol Review*. 2004; 23:377–9. Available from: www.informaworld.com/smpp/content~db=all?content=10.1080/09595230412331324491
 43. Loxley W, Gray D, Wilkinson C, Chikritzhs T, Midford R and Moore D. Alcohol policy and harm reduction in Australia. *Drug and Alcohol Review*. 2005; 24:559–68. Available from: www.informaworld.com/smpp/content~db=all?content=10.1080/09595230500404137
 44. Chikritzhs T and Stockwell T. The impact of later trading hours for hotels on levels of impaired driver road crashes and driver breath alcohol levels. *Addiction*. 2006; 1254–64.
 45. Chikritzhs T, Catalano P, Pascal R and Henrickson N. Predicting alcohol-related harms from licensed outlet density: a feasibility study. Monograph Series No. 28. Hobart: National Drug Law Enforcement Research Fund, 2007. Available from: www.ndlerf.gov.au/pub/Monograph_28.pdf
 46. Donnelly N, Poynton S, Weatherburn D, Bamford E and Nottage J. Liquor outlet concentrations and alcohol-related neighbourhood problems. *Alcohol Studies Bulletin*. Sydney: NSW Bureau of Crime Statistics and Research, 2006. Available from: [www.lawlink.nsw.gov.au/lawlink/bocsar/ll_bocsar.nsf/vwFiles/ab08.pdf/\\$file/ab08.pdf](http://www.lawlink.nsw.gov.au/lawlink/bocsar/ll_bocsar.nsf/vwFiles/ab08.pdf/$file/ab08.pdf)
 47. Livingston M. Alcohol outlet density and assault: a spatial analysis. *Addiction*. 2008; 103:619–28. Available from: www3.interscience.wiley.com/journal/119411938/abstract
 48. Livingston M. A longitudinal analysis of alcohol outlet density and assault. *Alcohol: Clinical and Experimental Research*. 2008; 32:1074–9. Available from: www3.interscience.wiley.com/journal/120084012/abstract
 49. Livingstone M. Recent trends in risky alcohol consumption and related harm amongst young people in Victoria. submitted for publication. 2008.
 50. Weitzman E, Folkman A, Folkman K and Wechsler H. The relationship of alcohol outlet density to heavy and frequent drinking and drinking-related problems among college students at eight universities. *Health Place*. 2003; 9:1–6.
 51. Gruenewald P and Ponicki W. The relationship of the retail availability of alcohol and alcohol sales to alcohol-related traffic crashes. *Accid Anal Prev*. 1995; 27.
 52. Cohen D, Ghosh-Dastidar B, Scribner RA, Miu A, Scott M and Robinson P. Alcohol outlets, gonorrhoea, and the Los Angeles civil unrest: a longitudinal analysis. *Soc Sci Med* 2006; 62.
 53. LaScala E, Johnson F and Gruenewald P. Neighborhood characteristics of alcohol-related pedestrian injury collisions: a geostatistical analysis. *Prev Sci*. 2001; 2:123–34.
 54. Freisthler B, Midanik L and Gruenewald P. Alcohol outlets and child physical abuse and neglect: applying routine activities theory to the study of child maltreatment. *J Stud Alcohol*. 2004; 65:586–92.
 55. Wechsler H, Lee J, Hall J, Wagenaar A and Lee H. Secondhand effects of student alcohol use reported by neighbors of colleges: the role of alcohol outlets. *Soc Sci Med*. 2002; 55:425–35.
 56. Stockwell T, Masters L, Phillips M, Daly A, Gahegan M, Midford R, *et al*. Consumption of different alcoholic beverages as predictors of local rates of night-time assault and acute alcohol-related morbidity. *Australia and New Zealand Journal of Public Health*. 1998; 22:237–42.
 57. Drugs and Crime Prevention Committee (DCPC). Inquiry into strategies to reduce harmful consumption of alcohol – discussion paper. Melbourne: Parliament of Victoria, 2006.
 58. Parliament of Victoria. Drugs and Crime Prevention Committee (DCPC) Inquiry into Strategies to Reduce Harmful Alcohol Consumption – Final Report. Melbourne, 2006.
 59. Kypri K. The health impacts and politics of changes in the minimum purchase age for alcohol in New Zealand. Perth: National Drug Research Institute, Curtin University, 2006.
 60. Ward B and Snow P. The role of families in preventing alcohol-related harm among young people. *Prevention Research Quarterly*. West Melbourne: DrugInfo Clearinghouse, 2008.
 61. White V and Hayman J. Smoking behaviours of Australian secondary students in 2005. Canberra: Drug Strategy Branch, Australian Government Department of Health and Ageing, 2006. Available from: www.nationaldrugstrategy.gov.au/internet/drugstrategy/publishing.nsf/Content/mono59
 62. World Health Organization. Global strategy on diet, physical activity and health. Fifty-Seventh World Health Assembly, World Health Organization, 2004. Available from: www.who.int/dietphysicalactivity/goals/en/index.html



63. Gruenewald P, Freisthler B and Remer L. Ecological Models of Alcohol Outlets and Violent Assaults: Crime Potentials and Geospatial Analysis. Alcohol Taxation in the Western Pacific Region. WHO Collaborating Centre for Research and Training in Alcohol and Drug Abuse World Health Organization, 2006.
64. Chaloupka FJ, Hyland A, Laux FL, Higbee C, Hastings G, Ross H, *et al.* Cigarette purchase patterns in four countries and the relationship with cessation: findings from the International Tobacco Control (ITC) Four Country Survey. *Tobacco Control*. 2006; 15:iii59–64. Available from: http://tc.bmjournals.com/cgi/content/abstract/15/suppl_3/iii59
65. Kenkel DS and Manning WG. Perspectives on alcohol taxation. *Alcohol Health & Research World*. 1996; 20:230–8.
66. Osterberg E. Do alcohol prices affect consumption and related problems? Alcohol Taxation in the Western Pacific Region. World Health Organization, 2006.
67. Econotech Pty Ltd. Modelling health-related reforms to taxation of alcoholic beverages. 2004.
68. Distilled Spirits Industry Council of Australia Incorporated (DSICA). Pre-budget submissions 2008–09. Distilled Spirits Industry Council of Australia Incorporated, 2008.
69. Doran C, M., Gascoigne MB, Shakeshaft AP and Petrie D. The consumption of alcohol by Australian adolescents: A comparison of revenue and expenditure. *Addictive Behaviours*. 2006; 31:1919–28.
70. Stockwell T and Crosbie D. Supply and demand for alcohol in Australia: relationships between industry structures, regulation and the marketplace. *International Journal of Drug Policy*. 2001; 12:139–52. Available from: www.ncbi.nlm.nih.gov/pubmed/11399417
71. Gray D, Siggers S, Sputor B and Bourbon D. What works? A review of evaluated alcohol misuse interventions among Aboriginal Australians. *Addiction*. 2000; 95:11–22. Available from: www3.interscience.wiley.com/journal/120190664/abstract?CRETRY=1&SRETRY=0
72. Stockwell T. Working with the alcohol industry on alcohol policy: should we sometimes sit at the same table. *Addiction*. 2007; 102:1–3. Available from: www3.interscience.wiley.com/journal/117967514/abstract
73. Chikritzhs T, Loxley W, Gray D, Wilkinson C, Midford R and Moore D. Alcohol policy and harm reduction in Australia. *Drug and Alcohol Review*. 2005; 24:559–68. Available from: www.informaworld.com/smpp/content~db=all?content=10.1080/09595230500404137
74. Distilled Spirits Industry Council of Australia Incorporated (DSICA). Alcohol tax in Australia. Distilled Spirits Industry Council of Australia Incorporated, 2006.
75. Havard A, Shakeshaft A and Sanson-Fisher R. Systematic review and meta-analyses of strategies targeting alcohol problems in emergency departments: interventions reduce alcohol-related injuries. *Addiction*. 2008; 103:368–76. Available from: www3.interscience.wiley.com/journal/119411900/abstract
76. Roche AM, Pidd K, Berry JG and Harrison JE. Workers' drinking patterns: the impact on absenteeism in the Australian work-place. *Addiction*. 2008; 103:738–48. Available from: www.ingentaconnect.com/content/bsc/add/2008/00000103/00000005/art00013
77. LaMontagne AD, Ostry A and Shaw A. Workplace stress in Victoria: developing a systems approach. Victorian Health Promotion Foundation, 2006.
78. Harper CG, Sheedy DL, Lara AI, Garrick TM, Hilton JM and Raisanen J. Prevalence of Wernicke--Korsakoff syndrome in Australia: has thiamine fortification made a difference? *The Medical Journal of Australia*. 1998; 168:542–5. Available from: www.mja.com.au/public/issues/jun1/harper/harper.html
79. Gray D, Pulver LJ, Siggers S and Waldon J. Addressing indigenous substance misuse and related harms. *Drug and Alcohol Review*. 2006; 25:183–8. Available from: www.informaworld.com/smpp/content~db=all?content=10.1080/09595230600644616
80. Brady M, Nicholls R, Henderson G and Byrne J. The role of a rural sobering-up centre in managing alcohol-related harm to Aboriginal people in South Australia. *Drug and Alcohol Review*. 2006; 25:201–6.
81. Mosher J, Toomey T, Harwood E and Wagenaar A. State laws mandating or promoting training programs for alcohol servers and establishment managers: An assessment of statutory and administrative procedures *Journal of Public Health Policy*. 2002; 23:90–113.
82. Mosher J and Jernigan D. New directions in alcohol policy. *Annual Review of Public Health*. 1989; 10:245–79.
83. Wiggers J, Joancey M, Considine R, Daly J, Kingsland M, Purss K, *et al.* Strategies and outcomes in translating alcohol harm reduction research into practice: the Alcohol Linking Program. *Drug and Alcohol Review*. 2004; 23:355–64. Available from: www.informaworld.com/smpp/content~db=all?content=10.1080/09595230412331289518
84. Jones S and Donovan R. Messages in alcohol advertising targeted to youth. *Australian & New Zealand Journal of Public Health*. 2001; 25:126–31.
85. Alcohol Beverages Advertising Code. Annual report 2006–07. Alcohol Beverages Advertising Code, 2008. Available from: www.abac.org.au/files/ABAC2006AnnualReport.pdf



86. King E, Taylor J and Carroll T. Australian alcohol beverage advertising in mainstream Australian media 2003 to 2005: expenditure, exposure and related issues. Research and Marketing Group, Department of Health and Ageing, 2005. Available from: [www.alcohol.gov.au/internet/alcohol/publishing.nsf/content/BD9ED91EDC948718CA2571E30023FAD3/\\$File/aust-mainstream.pdf](http://www.alcohol.gov.au/internet/alcohol/publishing.nsf/content/BD9ED91EDC948718CA2571E30023FAD3/$File/aust-mainstream.pdf)
87. King E, Taylor J and Carroll T. Consumer perceptions of alcohol advertising and the revised Alcohol Beverages Advertising Code. Research and Marketing Group, Department of Health and Ageing, 2005b. Available from: www.alcohol.gov.au/internet/alcohol/publishing.nsf/Content/consum-percept
88. Senate. Inquiry into Alcohol Toll Reduction Bill 2007. Senate Community Affairs Committee, Parliament of Australia, 2008a. Available from: www.aph.gov.au/senate/committee/clac_ctte/alcohol_reduction/index.htm
89. Woolcott Research. Formative research for the development of a national alcohol social marketing initiative. Australian Government Department of Health and Ageing, 2007. Available from: [www.alcohol.gov.au/internet/alcohol/publishing.nsf/Content/7C6B70D6091A3E4ACA25739A0082EFA5/\\$File/aaa-woolcott-rep.pdf](http://www.alcohol.gov.au/internet/alcohol/publishing.nsf/Content/7C6B70D6091A3E4ACA25739A0082EFA5/$File/aaa-woolcott-rep.pdf)
90. Bond L, Patton G, Glover S, Carlin JB, Butler H, Thomas L, *et al*. The Gatehouse Project: can a multi-level school intervention affect emotional wellbeing and health risk behaviours? *Journal of Epidemiology and Community Health*. 2004; 58:997–1003. Available from: <http://jech.bmj.com/cgi/content/full/58/12/997>
91. National Health and Medical Research Council. Australian alcohol guidelines: health risk and benefits. Canberra: National Health and Medical Research Council, 2001. Available from: www.nhmrc.gov.au/publications/synopses/_files/ds9.pdf
92. Wilkinson C and Room R. Informational and warning labels on alcohol containers, sales places and advertisements: experience internationally and evidence on effects (Report submitted to the Victorian Department of Human Services, 15 January 2008). AER Centre for Alcohol Policy Research, Turning Point Alcohol and Drug Centre, 2007.
93. Brand DA, Saisana M, Rynn LA, Pennoni F and Lowenfels AB. Comparative analysis of alcohol control policies in 30 countries. *PLoS Medicine*. 2007; 4:e151. Available from: <http://medicine.plosjournals.org/perlserv/?request=get-document&doi=10.1371/journal.pmed.0040151>
94. Babor TF and Winstanley EL. The world of drinking: national alcohol control experiences in 18 countries. *Addiction*. 2008; 103:721–5. Available from: www3.interscience.wiley.com/journal/119411977/abstract
95. Ministerial Council on Drug Strategy. National health policy on alcohol in Australia. Canberra: Ministerial Council on Drug Strategy, 1989.
96. Department of Health and Family Services (DHFS). National Alcohol Action Plan 1995–1997. Canberra: Commonwealth Department of Health and Family Services, 1996.
97. Ministerial Council on Drug Strategy. National alcohol strategy: a plan for action 2001 to 2003/04. Canberra: Commonwealth Department of Health and Aged Care, 2001.
98. Midford R. Australia and alcohol: living down the legend. *Addiction*. 2005; 100:891–6. Available from: www3.interscience.wiley.com/journal/118739423/abstract
99. Chisholm D, Doran C, Shibuya K and Rehm J. Comparative cost-effectiveness of policy instruments for reducing the global burden of alcohol, tobacco and illicit drug use. *Drug and Alcohol Review*. 2006; 25:553–65. Available from: www.informaworld.com/smpp/content~content=a762363140~db=all~tab=content~order=page
100. Collins D and Lapsley H. The avoidable costs of alcohol abuse in Australia and the potential benefits of effective policies to reduce the social costs of alcohol. Canberra: Department of Health and Ageing, 2008. Available from: www.nationaldrugstrategy.gov.au/internet/drugstrategy/publishing.nsf/Content/mono70





Addendum for October 2008 to June 2009

Contents

Introduction	53
1. Alcohol consumption and alcohol-related harm	54
Consumption patterns	54
Binge drinking	55
Disease	56
Injury	57
Violence and anti-social behaviour	57
2. Indigenous Australians and at-risk populations	59
Indigenous Australians	59
Young people	60
Students	61
Pregnancy (including fetal alcohol spectrum disorder)	62
Alcohol dependence	64
Comorbidity	65
Other drugs and poly drug use	66
Homeless	66
Socioeconomic differences	66
Parents (including genetics)	67
Older people	68
Gender and sexuality	68
Culturally & linguistically diverse populations	69
Geographic differences	69
Sports people	70
3. Regulating physical availability	71
Liquor licensing laws and enforcement	71
Opening hours	71
Outlet density	72



Age restrictions	72
Alcohol beverage and related industries	72
4. Taxation and pricing	74
Taxation	74
Price effects	74
Alcopops	75
Economic studies	75
5. Drink driving counter-measures	76
6. Treatment and early intervention	78
Primary healthcare	78
Maternal, child and family	78
Treatment for alcohol dependence	79
Workplaces	80
New technology-based interventions	80
7. Altering the drinking context	82
Licensed venues	82
Social contexts	82
Local communities	83
Sport settings	83
8. Regulating promotion	84
Advertising	84
Promotions in diverse media	84
Sport settings	85
9. Education and persuasion	86
Youth & family	86
School and university settings	87
Product labelling	87
Drinking guidelines	87
Community attitudes	88



Introduction

This report is an update addendum of Technical Report No. 3 – Preventing Alcohol-Related Harm in Australia: A window of opportunity, published in September 2008.

This update comprises a summary listing of selected references to relevant data, research and policy-related publications that have become available since the September 2008 report was prepared.

References in this update addendum are presented in categories which reflect the structure of the September 2008 report, including:

1. Alcohol consumption and alcohol-related harm
2. Indigenous Australians and at-risk populations
3. Regulating physical availability
4. Taxation and pricing
5. Drink driving counter-measures
6. Treatment and early intervention
7. Altering the drinking context
8. Regulating promotion
9. Education and persuasion



1. Alcohol consumption and alcohol-related harm.

Consumption patterns

Ahnquist, J., Lindstrom, M., & Wamala, S. P. 'Institutional trust and alcohol consumption in Sweden: the Swedish National Public Health Survey 2006', *BMC Public Health*, vol. 8, 2008. pp. 283.

Australian Bureau of Statistics (ABS) 'Apparent Consumption of Alcohol, Australia, 2007-08'. Canberra. 6 May 2009.

Australian Bureau of Statistics (ABS) *National Health Survey: Summary of Results, Australia 2007-8* (cat. no 4364.0). Canberra. 2009.

Australian Institute of Health and Welfare. '2007 National Drug Strategy Household Survey: detailed findings'. Drug statistics series no. 22. Cat. no. PHE 107. Canberra: AIHW.

Australian Institute of Health and Welfare. '2007 National Drug Strategy Household Survey: State and territory supplement'. Drug statistics series no. 21. Cat. no. PHE 102. Canberra: AIHW.

Babor, T. F., & Caetano, R. 'The trouble with alcohol abuse: what are we trying to measure, diagnose, count and prevent?(comment)', *Addiction*, vol. 103, no. 7, Jul 2008. pp. 1057-1059.

Degenhardt, L., Chiu, W. T., Sampson, N., Kessler, R. C., Anthony, J. C., Angermeyer, M., et al. (2008). *Toward a global view of alcohol, tobacco, cannabis, and cocaine use: findings from the WHO World Mental Health Surveys*. *Plos Medicine*, 5(7), 1053-1067.

DiMaggio C., Galea S., & Guohua L. 'Substance use and misuse in the aftermath of terrorism. A Bayesian meta-analysis'. *Addiction* 2009. 104(6):894-904.

Hall, W. D., Chikritzhs, T. N., d'Abbs, P. H., & Room, R. G. 'Alcohol sales data are essential for good public policies towards alcohol', *Medical Journal of Australia*, vol. 189, no. 4, 18 Aug 2008. pp. 188-189.

Homish, G. G., & Leonard, K. E. 'The social network and alcohol use', *Journal of Studies on Alcohol & Drugs*, vol. 69, no. 6, Nov 2008. pp. 906-914.

Kerr, William C.; Greenfield, Thomas K.; Bond, Jason; Ye, Yu; Rehm, Jurgen. (January 2009) *Age-period-cohort modelling of alcohol volume and heavy drinking days in the US National Alcohol Surveys: divergence in younger and older adult trends*, *Addiction* 104:1, pp. 27-37.

Nelson, D. E., Naimi, T. S., Brewer, R. D., & Nelson, H. A. 'State alcohol-use estimates among youth and adults, 1993-2005', *American Journal of Preventive Medicine*, vol. 36, no. 3, Mar 2009. pp. 218-224.

Smith, G. W., & Shevlin, M. 'Patterns of alcohol consumption and related behaviour in Great Britain: a latent class analysis of the alcohol use disorder identification test (AUDIT)', *Alcohol & Alcoholism*, vol. 43, no. 5, Sep 2008. pp. 590-594.

Stockwell, T., Zhao, J., Chikritzhs, T., & Greenfield, T. K. 'What did you drink yesterday? Public health relevance of a recent recall method used in the 2004 Australian National Drug Strategy Household Survey', *Addiction*, vol. 103, no. 6, Jun 2008. pp. 919-928.



Stockwell, Tim; Zhao, Jinhui; Thomas, Gerald. (April 2009) *Should alcohol policies aim to reduce total alcohol consumption?: new analyses of Canadian drinking patterns*, *Addiction Research & Theory* 17:2, pp. 135–151.

Valencia–Martin, J. L., Galan, I., & Rodriguez–Artalejo, F. 'Alcohol and self-rated health in a Mediterranean country: the role of average volume, drinking pattern, and alcohol dependence', *Alcoholism: Clinical & Experimental Research*, vol. 33, no. 2, Feb 2009. pp. 240–246.

Binge drinking

Afitska, K., Plant, M. A., Weir, I., Miller, P., & Plant, M. L. (June 2008) *The relationship between teenage 'binge' drinking, age of first alcohol consumption and intoxication*, *Journal of Substance Use* 13:3, pp. 205–218.

Garretsen, H. F., Rodenburg, G., van de Goor, L. A., & van den Eijnden, R. J. 'Alcohol consumption in The Netherlands in the last decade: sharp decreases in binge drinking, especially among youngsters', *Alcohol & Alcoholism*, vol. 43, no. 4, Jul 2008. pp. 477–480.

Gilbertson, Rebecca; Ceballos, Natalie A.; Prather, Robert; Nixon, Sara Jo. (March 2009) *Effects of acute alcohol consumption in older and younger adults: perceived impairment versus psychomotor performance*, *Journal of Studies on Alcohol and Drugs* 70:2, pp. 242–252.

Gmel, Gerhard; Gaume, Jacques; Faouzi, Mohamed; Kulling, Jean–Pierre; Daepfen, Jean–Bernard. (November/December 2008) *Who drinks most of the total alcohol in young men: risky single occasion drinking as normative behaviour*, *Alcohol and Alcoholism* 43:6, pp. 692–697.

Hasin, Deborah S.; Beseler, Cheryl L. (April 2009) *Dimensionality of lifetime alcohol abuse, dependence and binge drinking*, *Drug and Alcohol Dependence* 101:1–2, pp. 53–61.

Herring, R., Berridge, V., & Thom, B. 'Binge drinking: an exploration of a confused concept', *Journal of Epidemiology & Community Health*, vol. 62, no. 6, Jun 2008. pp. 476–479.

Herring, Rachel; Berridge, Virginia; Thom, Betsy. (October 2008) *Binge drinking today: learning lessons from the past*, *Drugs: Education, Prevention and Policy* 15:5, pp. 475–786

Kaariainen, J., Aalto, M., Kaariainen, M., & Seppa, K. 'Audit questionnaire as part of community action against heavy drinking', *Alcohol & Alcoholism*, vol. 43, no. 4, Jul 2008. pp. 442–445.

Kraus, Ludwig; Baumeister, Sebastian E.; Pabst, Alexander; Orth, Boris. (May/June 2009) *Association of average daily alcohol consumption, binge drinking and alcohol-related social problems: results from the German epidemiological surveys of substance abuse*, *Alcohol and Alcoholism* 44:3, pp. 314–320

Lemon, J. (2008). *Residual effects of alcohol on skilled performance*. *Alcohol and Alcoholism*, 43(4), pp. 498–498

Levitt, Ash; Sher, Kenneth J.; Bartholow, Bruce D. (March 2009) *The language of intoxication: preliminary investigations*, *Alcoholism: Clinical and Experimental Research* 33:3, pp. 448–454

Livingston, M., & Room, R. 'Variations by age and sex in alcohol-related problematic behaviour per drinking volume and heavier drinking occasion', *Drug and Alcohol Dependence*, vol. 101, no. 3, 2009. pp. 169–175.

Parker, Lycia L. C.; Penton–Voak, Ian S.; Attwood, Angela S.; Munafo, Marcus R. (November/December 2008) *Effects of acute alcohol consumption on ratings of attractiveness of facial stimuli: evidence of long-term encoding*, *Alcohol and Alcoholism* 43:6, pp. 636–640

Rose, Abigail Katherine; Grunsell, Laura. (2008) *The subjective, rather than the disinhibiting, effects of alcohol are related to binge drinking*, *Alcoholism: Clinical and Experimental Research*, 32:6, pp. 1094–1104



Rutledge, Patricia C.; Park, Aesoon; Sher, Kenneth J. (2008) *21st birthday celebratory drinking: extremely extreme*, *Journal of Consulting and Clinical Psychology* 76:3, pp. 511–516

Szmigin, I., Griffin, C., Mistral, W., Bengry–Howell, A., Weale, L., & Hackley, C. 'Re-framing 'binge drinking' as calculated hedonism: empirical evidence from the UK', *International Journal of Drug Policy*, vol. 19, no. 5, Oct 2008. pp. 359–366.

Disease

Allen, N. E., Beral, V., Casabonne, D., Wan Kan, S., Reeves G. K., Brown, A., & Green, J. 'Moderate Alcohol Intake and Cancer Incidence in Women'. *J Natl Cancer Inst* 2009. 101: 296–305

Beulens, J. W., Kruidhof, J. S., Grobbee, D. E., Chaturvedi, N., Fuller, J. H., & Soedamah–Muthu, S. S. 'Alcohol consumption and risk of microvascular complications in type 1 diabetes patients: the EURODIAB Prospective Complications Study', *Diabetologia*, vol. 51, no. 9, Sep 2008. pp. 1631–1638.

Ceccanti, M., Sasso, G. F., Nocente, R., Balducci, G., Prastaro, A., Ticci, C., Bertazzoni, G., Santini, P., & Attilia, M. L. (2006) *Hypertension in early alcohol withdrawal in chronic alcoholics*, *Alcohol and Alcoholism* 41:1, pp. 5–10.

Chao, C., Slezak, J. M., Caan, B. J., & Quinn, V. P. 'Alcoholic beverage intake and risk of lung cancer: the California Men's Health Study', *Cancer Epidemiology, Biomarkers & Prevention*, vol. 17, no. 10, Oct 2008. pp. 2692–2699.

Chikritzhs, T., Fillmore, K., & Stockwell, T. R. The persistent, alternative argument to apparent cardio-protective effects of alcohol. *Addiction*, 103, (5), pp. 855–56. 2008.

Collins, Michael A.; Neafsey, Edward J.; Mukamal, Kenneth J.; Gray, Mary O.; Parks, Dale A.; Das, Dipak K.; Korhuis, Ronald J. (February 2009) *Alcohol in moderation, cardioprotection, and neuroprotection: epidemiological considerations and mechanistic studies*, *Alcoholism: Clinical and Experimental Research* 33:2, pp. 206–219.

Conen, D., Tedrow, U. B., Cook, N. R., Moorthy, M. V., Buring, J. E., & Albert, C. M. 'Alcohol consumption and risk of incident atrial fibrillation in women', *JAMA*, vol. 300, no. 21, 3 Dec 2008. pp. 2489–2496.

Fillmore, K., Chikritzhs, T., Stockwell, T. R., Bostrom, A., & Pascal, R. 'Alcohol Use and Prostate Cancer: a meta-analysis'. *Molecular Nutrition and Food Research*, 53, pp. 240–255. 2009.

Greenfield, T. K., & Kerr, W. C. 'Alcohol measurement methodology in epidemiology: recent advances and opportunities. (Review)', *Addiction*, vol. 103, no. 7, Jul 2008. pp. 1082–1099.

Gulbinat, W. 'Alcohol and the burden of disease', *Addiction Research & Theory* 2008,16:6, 541–552.

Hatton, J., Burton, A., Nash, H., Munn, E., Burgoyne, L., & Sheron, N. *Drinking patterns, dependency and life-time drinking history in alcohol-related liver disease*. *Addiction* 2009; 104: 587–592.

Hvidtfeldt, U. A., Frederiksen, M. E., Thygesen, L. C., Kamper–Jorgensen, M., Becker, U., & Gronbaek, M. 'Incidence of cardiovascular and cerebrovascular disease in Danish men and women with a prolonged heavy alcohol intake', *Alcoholism: Clinical & Experimental Research*, vol. 32, no. 11, Nov 2008. pp. 1920–1924.

Lachenmeier, D. W., Kanteres, F., & Rehm, J. Carcinogenicity of acetaldehyde in alcoholic beverages: risk assessment outside ethanol metabolism. *Addiction* 2009; 104: 533–550.

Mukamal, K. J., & Rimm, E. B. 'Alcohol consumption: risks and benefits. (Review)', *Current Atherosclerosis Reports*, vol. 10, no. 6, Dec 2008. pp. 536–543.

Pelucchi, C., & La Vecchia, C. 'Alcohol, coffee, and bladder cancer risk: a review of epidemiological studies. (Review)', *European Journal of Cancer Prevention*, vol. 18, no. 1, Feb 2009. pp. 62–68.



Poikolainen, K. 'The magic to make the 'preventive effect' of alcohol disappear and reappear.(comment)', *Addiction*, vol. 103, no. 11, Nov 2008. pp. 1905–1907.

Sheron, N., Olsen, N., & Gilmore, I. 'An evidence-based alcohol policy', *Gut*, vol. 57, no. 10, Oct 2008. pp. 1341–1344.

Sullivan, E. V., & Pfefferbaum, A. (2009) *Neuroimaging of the Wernicke–Korsakoff syndrome*, *Alcohol and Alcoholism* 44:2, pp. 155–165.

Verrill, C., Markham, H., Templeton, A., Carr, N. J., & Sheron, N. (2009) *Alcohol-related cirrhosis – early abstinence is a key factor in prognosis, even in the most severe cases*, *Addiction* 104:5, pp. 768–774.

Xu, G., Liu, X., Yin, Q., Zhu, W., Zhang, R., & Fan, X. 'Alcohol consumption and transition of mild cognitive impairment to dementia', *Psychiatry & Clinical Neurosciences*, vol. 63, no. 1, Feb 2009. pp. 43–49.

Injury

Cash, Richard; Philactides, Amanda. Turning Point Alcohol and Drug Centre (2008) 'Co-occurring alcohol and other drug use issues in the context of acquired brain injury or cognitive impairment: a review of the literature'. Melbourne: Department of Human Services. Mental Health and Drugs Division.

Cherpitel, C. J., & Ye, Y. 'Alcohol and injury in the United States general population: a risk function analysis from the 2005 National Alcohol Survey', *American Journal on Addictions*, vol. 18, no. 1, Jan 2009. pp. 29–35.

French, Michael T.; Gumus, Gulcun; Turner, Heather L. (2008) *The role of alcohol use in emergency department episodes*, *Substance Use & Misuse* 43:14, pp. 2074–2088.

Harper, Clive. (March/April 2009) *The neuropathology of alcohol-related brain damage*, *Alcohol and Alcoholism* 44:2, pp. 136–140.

Taylor, B., Rehm, J., Room, R., Patra, J., & Bondy, S. 'Determination of lifetime injury mortality risk in Canada in 2002 by drinking amount per occasion and number of occasions', *American Journal of Epidemiology*, vol. 168, no. 10, 15 Nov 2008. pp. 1119–1125.

Violence and anti-social behaviour

Branas, Charles C.; Elliott, Michael R.; Richmond, Therese S.; Culhane, Dennis P.; Wiebe, Douglas J. (May 2009) *Alcohol consumption, alcohol outlets, and the risk of being assaulted with a gun*, *Alcoholism: Clinical and Experimental Research* 33:5, pp. 906–915.

Chikritzhs, T. 'Australian night-life and crime' in *Nightlife and Crime: Social Order and Governance in International Perspective*. Cambridge Press. 2009.

Eckersley, R., & Reeder L. 'Violence in public places: explanations and solutions'. A report on an expert roundtable for Victoria Police. Weston: Australia 21. 2008.

Grant, Marcus; Fox, Anne; Leonard, Kenneth E.; O'Connor, Courtney Mireille; West, K. (2008) *Alcohol and violence: exploring patterns and responses*, Washington DC: International Center for Alcohol Policies.

Hill, Terrence D.; Nielsen, Amie L.; Angel, Ronald J. (2009) *Relationship violence and frequency of intoxication among low-income urban women*, *Substance Use & Misuse* 44:5, pp. 684–701.

Hingson, Ralph W.; Edwards, Erika M.; Heeren, Timothy; Rosenbloom, David. (May 2009) *Age of drinking onset and injuries, motor vehicle crashes, and physical fights after drinking and when not drinking*, *Alcoholism: Clinical and Experimental Research* 33:5, pp. 783–790.

Holder, H. 'Alcohol and violence: a complex nexus of drinking environment and drinking pattern'. *Addiction* 2008, 103, 78–79.

McCauley, J. L.; Calhoun, K. S. *Faulty perceptions? The impact of binge drinking history on college women's perceived rape resistance efficacy*, *Addictive Behaviors* 2008. 33:12, pp. 1540–1545.



Mitchell, I. J., Rutherford, V., Wrinch, K. A. J., & Egan, V.(2008) 'Paradoxical effects of alcohol intake in a convivial social setting on attitudes to violence', *Addiction Research & Theory*,16:5, 503–513.

Olszewski, Deborah. (February 2009) *Sexual assaults facilitated by drugs or alcohol*, *Drugs: Education, Prevention and Policy* 16:1, 39–52.

Ray, J. G., Moineddin, R., Bell, C. M., Thiruchelvam, D., Creatore, M. I., Gozdyra, P., Cusimano, M., & Redelmeier, D. A. 'Alcohol sales and risk of serious assault.(see comment)', *PLoS Medicine / Public Library of Science*, vol. 5, no. 5, 13 May 2008. p. e104.

Ullman, Sarah E.; Najdowski, Cynthia J. (January 2009) *Revictimization as a moderator of psychosocial risk factors for problem drinking in female sexual assault survivors*, *Journal of Studies on Alcohol and Drugs* 70:1, pp. 41–49.



2. Indigenous Australians and at-risk populations

Indigenous Australians

Australian Institute of Health and Welfare (November 2008). *Aboriginal and Torres Strait Islander Health Performance Framework 2008 report: detailed analyses*, Canberra: Australian Institute of Health and Welfare.

Boffa J., Tilton E., Legge D., et al., 'Reducing the harm from alcohol, tobacco and obesity in Indigenous communities: key approaches and actions'. 2009, Paper produced for the Preventative Health Taskforce: Canberra.

Brady, Maggie. (2008) *First taste: how Indigenous Australians learned about grog*, Deakin ACT: Alcohol Education and Rehabilitation Foundation (AERF).

Couzos, S., & Murray R. 'Aboriginal primary health care: an evidence based approach', 3rd edn, Melbourne: Oxford University Press. 2008.

de Plevitz, L. R., Gould, J. S., & Smith, T. M. 'Fetal alcohol syndrome and fetal alcohol spectrum disorder in indigenous schoolchildren', *Medical Journal of Australia*, vol. 190, no. 5, 2009. pp. 286–287.

Jiwa, A., Kelly, L., & Pierre-Hansen, N. 'Healing the community to heal the individual: literature review of aboriginal community-based alcohol and substance abuse programs.(see comment). (Review) (40 refs)', *Canadian Family Physician*, vol. 54, no. 7, Jul 2008. p. 1000.

Lee, K. S., Conigrave, K. M., Clough, A. R., Wallace, C., Silins, E., & Rawles, J. (2008) *Evaluation of a community-driven preventive youth initiative in Arnhem Land, Northern Territory, Australia*, *Drug and Alcohol Review*, 27:1, pp. 75–82.

Milward K. 'Prevention of alcohol-related harms in Victoria's Koori communities'. *Prevention Research Quarterly – DrugInfo Clearinghouse*, West Melbourne: Australian Drug Foundation. 2009.

Nicholas, Roger. *Australasian Centre for Policing Research (2007) Alcohol and other drug problems among Indigenous Australians from rural and remote regions: a policing perspective*, Payneham SA: Australasian Centre for Policing Research.

Pascal, Richard; Chikritzhs, Tanya; Gray, Dennis. (March 2009) *Estimating alcohol-attributable mortality among Indigenous Australians: towards indigenous-specific alcohol aetiologic fractions*, *Drug and Alcohol Review* 28:2, pp. 196–200.

Pink, B., & Allbon, P. 'The health and welfare of Australia's Aboriginal and Torres Strait Islander peoples: 2008', Canberra: Australian Bureau of Statistics. 2008.

Teasdale, K. E., Conigrave, K. M., Kiel, K. A., Freeburn, B., Long, G., & Becker, K. 'Improving services for prevention and treatment of substance misuse for Aboriginal communities in a Sydney Area Health Service', *Drug and Alcohol Review* 2008. 27:2, pp. 152–9.

Thompson, S. C., Bonar, M., Greville, H., Bessarab, D., Gilles, M. T., D'Antoine, H., & Maycock, B. R. "'Slowed right down": insights into the use of alcohol from research with Aboriginal Australians living with HIV', *International Journal of Drug Policy*, vol. 20, no. 2, Mar 2009. pp. 101–110.



Young people

Access Economics. Trends in alcohol related hospital use by young people. Report by Access Economics Pty Limited for Distilled Spirits Industry Council of Australia. 20 January 2009.

Batty, G. D., Deary, I. J., Schoon, I., Emslie, C., Hunt, K., & Gale, C. R. 'Childhood mental ability and adult alcohol intake and alcohol problems: the 1970 British cohort study', *American Journal of Public Health*, vol. 98, no. 12, Dec 2008. pp. 2237–2243.

Chikritzhs, T., & Allsop, S. Review: trends in alcohol related hospital use by young people by Access Economics. Perth: National Drug Research Institute, Curtin University of Technology. 2009.

Diemen, Lisia Von; Bassani, Diego Garcia; Fuchs, Sandra Costa; Szobot, Claudia Maciel; Pechansky, Flavio. (July 2008) Impulsivity, age of first alcohol use and substance use disorders among male adolescents: a population based case-control study, *Addictive* 103:7, pp. 1198–1205.

Ennett, S. T., Foshee, V. A., Bauman, K. E., Hussong, A., Cai, L., Reyes, H. L., Faris, R., Hipp, J., & Durant, R. 'The social ecology of adolescent alcohol misuse', *Child Development*, vol. 79, no. 6, Nov 2008. pp. 1777–1791.

Higgs, Suzanne; Stafford, Lorenzo D.; Attwood, Angela S.; Walker, Stephanie C.; Terry, Phil. (November/December 2008) Cues that signal the alcohol content of a beverage and their effectiveness at altering drinking rates in young social drinkers, *Alcohol and Alcoholism* 43:6, pp. 630–635.

Jefferis, B. J., Manor, O., & Power, C. 'Cognitive development in childhood and drinking behaviour over two decades in adulthood', *Journal of Epidemiology & Community Health*, vol. 62, no. 6, Jun 2008. pp. 506–512.

Kendler, K. S., Schmitt, E., Aggen, S. H., & Prescott, C. A. 'Genetic and environmental influences on alcohol, caffeine, cannabis, and nicotine use

from early adolescence to middle adulthood', *Archives of General Psychiatry*, vol. 65, no. 6, Jun 2008. pp. 674–682.

Kiene, S. M., Barta, W. D., Tennen, H., & Armeli, S. 'Alcohol, helping young adults to have unprotected sex with casual partners: findings from a daily diary study of alcohol use and sexual behavior', *Journal of Adolescent Health*, vol. 44, no. 1, Jan 2009. pp. 73–80.

Lavikainen, H., Ahlstrom, S., Metso, L., Nevalainen, J., & Lintonen, T. 'Relationship between negative experiences and drinking experience among 15- to 16-year-old adolescents in Finland', *European Addiction Research*, vol. 14, no. 3, 2008. pp. 169–178.

Lindsay, Jo; Kelly, Peter; Harrison, Lun; Hickey, Christopher; Advocat, Jenny; Cormack, Sue. ((2009)) 'What a great night': the cultural drivers of drinking practices among 14–24 year-old Australians, Melbourne: Drinkwise.

Livingston, M. 'Recent trends in risky alcohol consumption and related harm among young people in Victoria, Australia', *Australian & New Zealand Journal of Public Health*, vol. 32, no. 3, Jun 2008. pp. 266–271.

Livingston, M., Laslett, A. M., & Dietze, P. 'Individual and community correlates of young people's high-risk drinking in Victoria, Australia', *Drug & Alcohol Dependence*, vol. 98, no. 3, 1 Dec 2008. pp. 241–248.

McArdle, P. 'Alcohol abuse in adolescents. (Review) (45 refs)', *Archives of Disease in Childhood*, vol. 93, no. 6, Jun 2008. pp. 524–527.

Mushquash, C. J., Stewart, S. H., Comeau, M. N., & McGrath, P. J. 'The structure of drinking motives in First Nations adolescents in Nova Scotia', *American Indian & Alaska Native Mental Health Research (Online)*, vol. 15, no. 1, 2008. pp. 33–52.

Odgers, C. L., Caspi, A., Nagin, D. S., Piquero, A. R., Slutske, W. S., Milne, B. J., Dickson, N., Poulton, R., & Moffitt, T. E. 'Is it important to prevent early exposure to drugs and alcohol among adolescents?', *Psychological Science*, vol. 19, no. 10, Oct 2008. pp. 1037–1044.



Osaki, Yoneatsu; Tanihata, Takeo; Ohida, Takashi; Kanda, Hideyuki; Suzuki, Kenji; Higuchi, Susumu; Kaneita, Yoshitaka; Minowa, Masumi; Hayashi, Kenji. (February 2009) *Decrease in the prevalence of adolescent alcohol use and its possible causes in Japan: periodical nationwide cross-sectional surveys*, *Alcoholism: Clinical and Experimental Research* 33:2, pp. 247–254.

Ostergaard, J. (February 2009) *Learning to become an alcohol user: adolescents taking risks and parents living with uncertainty*, *Addiction Research & Theory* 17:1, pp. 30–53.

Redmond, G., & Spooner, C. 'Alcohol and other drug related deaths among young people in CIS countries: proximal and distal causes and implications for policy', *International Journal of Drug Policy*, vol. 20, no. 1, Jan 2009. pp. 38–47.

Rothman, E. F., Edwards, E. M., Heeren, T., & Hingson, R. W. 'Adverse childhood experiences predict earlier age of drinking onset: results from a representative US sample of current or former drinkers', *Pediatrics*, vol. 122, no. 2, Aug 2008. pp. e298–e304.

Schuckit, M. A., Smith, T. L., Trim, R., Heron, J., Horwood, J., Davis, J. M., Hibbeln, J. R., & ALSPAC Study Team. 'The performance of elements of a 'level of response to alcohol'-based model of drinking behaviors in 13-year-olds', *Addiction*, vol. 103, no. 11, Nov 2008. pp. 1786–1792.

Shin, Sunny Hyucksun; Edwards, Erika M.; Heeren, Timothy. (March 2009) *Child abuse and neglect: relations to adolescent binge drinking in the National longitudinal study of Adolescent Health (AddHealth) Study*, *Addictive Behaviors* 34:3, pp. 277–280.

Song, Eun-Young; Reboussin, Beth A.; Foley, Kristie Long; Kaltenbach, Lisa A.; Wagoner, Kimberly G.; Wolfson, Mark. (2009) *Selected community characteristics and underage drinking*, *Substance Use & Misuse* 44:2, pp. 179–194.

Staff, J., Patrick, M. E., Loken, E., & Maggs, J. L. 'Teenage alcohol use and educational attainment', *Journal of Studies on Alcohol & Drugs*, vol. 69, no. 6, Nov 2008. pp. 848–858.

van de, L. J., Thush, C., Wiers, R. W., & Knibbe, R. A. 'Prevention of alcohol problems in Dutch youth: missed opportunities and new developments', *Evaluation & the Health Professions*, vol. 31, no. 2, Jun 2008. pp. 167–181.

Students

Araas, T. E., & Adams, T. B. 'Protective behavioral strategies and negative alcohol-related consequences in college students', *Journal of Drug Education*, vol. 38, no. 3, 2008. pp. 211–224.

Bewick, B. M., Mulhern, B., Barkham, M., Trusler, K., Hill, A. J., & Stiles, W. B. 'Changes in undergraduate student alcohol consumption as they progress through university', *BMC Public Health*, vol. 8, 2008. p. 163.

Fabian, L. E., Toomey, T. L., Lenk, K. M., & Erickson, D. J. 'Where do underage college students get alcohol?', *Journal of Drug Education*, vol. 38, no. 1, 2008. pp. 15–26.

Frank, E., Elton, L., Naimi, T., & Brewer, R. 'Alcohol consumption and alcohol counselling behaviour among US medical students: cohort study.(see comment)', *BMJ*, vol. 337, 2008. pp. a2155.

Hibell, Bjorn; Guttormsson, Ulf; Ahlstrom, Salme; Balakireva, Olga; Bjarnason, Thoroddur; Kokkevi, Anna; Kraus, Ludwig. (2009) *The 2007 ESPAD report: Substance Use Among Students in 35 European Countries*, Stockholm: The Swedish Council for Information on Alcohol and Other Drugs, CAN; Council of Europe, Co-operation Group to Combat Drug Abuse and Illicit Trafficking in Drug (Pompidou Group).

Huang, J. H., DeJong, W., Towvim, L. G., & Schneider, S. K. 'Sociodemographic and psychobehavioral characteristics of US college students who abstain from alcohol', *Journal of American College Health*, vol. 57, no. 4, Jan 2009. pp. 395–410.



Kypri, K., Paschall, M. J., Langley, J., Baxter, J., Cashell-Smith, M., & Bourdeau, B. 'Drinking and alcohol-related harm among New Zealand university students: findings from a national Web-based survey', *Alcoholism: Clinical & Experimental Research*, vol. 33, no. 2, Feb 2009. pp. 307–314.

LaBrie, J. W., Hummer, J. F., & Neighbors, C. (December 2008) *Self-consciousness moderates the relationship between perceived norms and drinking in college students*, *Addictive Behaviors* 33:12, pp. 1529–1539.

LaBrie, J. W., & Pedersen, E. R. 'Prepartying promotes heightened risk in the college environment: an event-level report', *Addictive Behaviors*, vol. 33, no. 7, Jul 2008. pp. 955–959.

Lavigne, A. M., Witt, C. F., Wood, M. D., Laforge, R., & DeJong, W. 'Predictors of college student support for alcohol control policies and stricter enforcement strategies', *American Journal of Drug & Alcohol Abuse*, vol. 34, no. 6, 2008. pp. 749–759.

Lewis, Melissa A.; Lindgren, Kristen P.; Fossos, Nicole; Neighbors, Clayton; Oster-Aaland, Laura. (May 2009) *Examining the relationship between typical drinking behavior and 21st birthday drinking behavior among college students: implications for event-specific prevention*, *Addiction* 104:5, pp. 760–767.

Neighbors, C., O'Connor, R. M., Lewis, M. A., Chawla, N., Lee, C. M., & Fossos, N. 'The relative impact of injunctive norms on college student drinking: the role of reference group', *Psychology of Addictive Behaviors*, vol. 22, no. 4, Dec 2008. pp. 576–581.

Rothman, E. F., DeJong, W., Palfai, T., & Saitz, R. 'Relationship of age of first drink to alcohol-related consequences among college students with unhealthy alcohol use', *Substance Abuse*, vol. 29, no. 1, 2008. pp. 33–41.

Usdan, Stuart; Martin, Ryan; Mays, Darren; Cremeens, Jennifer; Weitzel, Jessica Aungst; Bernhardt, Jay. (2008) *Self-reported consequences of intoxication among college*

students: implications for harm reduction approaches to high-risk drinking, *Journal of Drug Education* 38:4, pp. 377–387.

Voas, R. B., Johnson, M., Turrisi, R. J., Taylor, D., Honts, C. R., & Nelsen, L. 'Bringing alcohol on campus to raise money: impact on student drinking and drinking problems', *Addiction*, vol. 103, no. 6, Jun 2008. pp. 940–950.

Wechsler, H., & Nelson, T. F. 'What we have learned from the Harvard School Of Public Health College Alcohol Study: focusing attention on college student alcohol consumption and the environmental conditions that promote it', *Journal of Studies on Alcohol & Drugs*, vol. 69, no. 4, Jul 2008. pp. 481–490.

Pregnancy (Including Fetal Alcohol Spectrum Disorder)

Alati, R., Clavarino, A., Najman, J. M., O'Callaghan, M., Bor, W., Mamun, A. A., & Williams, G. M. 'The developmental origin of adolescent alcohol use: findings from the Mater University Study of Pregnancy and its outcomes', *Drug & Alcohol Dependence*, vol. 98, no. 1–2, 1 Nov 2008. pp. 136–143.

Armstrong, M. A., Kaskutas, L. A., Witbrodt, J., Taillac, C. J., Hung, Y. Y., Osejo, V. M., & Escobar, G. J. 'Using drink size to talk about drinking during pregnancy: a randomized clinical trial of Early Start Plus', *Social Work in Health Care*, vol. 48, no. 1, Jan 2009. pp. 90–103.

Binns, C. W., & Giglia, R. *Alcohol, pregnancy and breastfeeding: an analysis of the 1995 and 2001 National Health Survey data*. *Breastfeeding Review* 2008, 16, (1), pp. 17–24.

Chazeron, Ingrid de; Llorca, Pierre-Michel; Ughetto, Sylvie; Vendittelli, Françoise; Boussiron, Didier; Sapin, Vincent; Coudore, François; Lemery, Didier. (May 2008) *Is pregnancy the time to change alcohol consumption habits in France?* *Alcoholism: Clinical and Experimental Research* 32:5, pp. 868–873.

Coyne, K. L., de Costa, C. M., Heazlewood, R. J., & Newman, H. C. 'Pregnancy characteristics of women giving birth to children with fetal



- alcohol syndrome in Far North Queensland', Australian & New Zealand Journal of Obstetrics & Gynaecology, vol. 48, no. 3, Jun 2008. pp. 240–247.
- Delpisheh, A., Topping, J., Reyad, M., Tang, A., & Brabin, B. J. 'Prenatal alcohol exposure, CYP17 gene polymorphisms and fetal growth restriction', European Journal of Obstetrics, Gynecology, & Reproductive Biology, vol. 138, no. 1, May 2008. pp. 49–53.
- Disney, E. R., Iacono, W., McGue, M., Tully, E., & Legrand, L. 'Strengthening the case: prenatal alcohol exposure is associated with increased risk for conduct disorder', Pediatrics, vol. 122, no. 6, Dec 2008. pp. e1225–e1230.
- Elliott, Lisa; Coleman, Kristina; Suebwongpat, Arsupol; Norris, Sarah (2008) *Fetal Alcohol Spectrum Disorders (FASD): systematic reviews of prevention, diagnosis and management*, Christchurch: Health Services Assessment Collaboration.
- Giglia, R., & Binns, C. W. The effect of alcohol intake on breastfeeding duration in Australian women. *Acta Paediatrica* 2008, 97, pp. 624–629.
- Giglia, R. C., & Binns, C. W. 'Alcohol, pregnancy and breastfeeding; a comparison of the 1995 and 2001 National Health Survey data', *Breastfeeding Review*, vol. 16, no. 1, Mar 2008. pp. 17–24.
- Grant, T. M., Huggins, J. E., Sampson, P. D., Ernst, C. C., Barr, H. M., & Streissguth, A. P. 'Alcohol use before and during pregnancy in western Washington, 1989–2004: implications for the prevention of fetal alcohol spectrum disorders', *American Journal of Obstetrics & Gynecology*, vol. 200, no. 3, Mar 2009. p. 278.
- Guerri, Consuelo; Baxinet, Alissa; Riley, Edward P. (March/April 2009) *Foetal alcohol spectrum disorders and alterations in brain and behaviour*, *Alcohol and Alcoholism* 44:2, pp. 108–114.
- Havens, Jennifer R.; Simmons, Leigh Ann; Shannon, Lisa M.; Hansen, Wendy F. (January 2009) *Factors associated with substance use during pregnancy: results from a national sample*, *Drug and Alcohol Dependence* 99:1–3, pp. 89–95.
- Hotham, E., Ali, R., White, J., & Robinson, J. 'Pregnancy-related changes in tobacco, alcohol and cannabis use reported by antenatal patients at two public hospitals in South Australia', Australian & New Zealand Journal of Obstetrics & Gynaecology, vol. 48, no. 3, Jun 2008. pp. 248–254.
- Hutchinson, D. M., Alati, R., Najman, J. M., Mattick, R. P., Bor, W., O'Callaghan, M., et al. *Maternal attitudes in pregnancy predict drinking initiation in adolescence*. *Australian and New Zealand Journal of Psychiatry* 2008, 42(4), 324–334.
- Kelly, Yvonne; Sacker, Amanda; Gray, Ron; Kelly, John; Wolke, Dieter; Quigley, Maria A. (October 2008) *Light drinking in pregnancy, a risk for behavioural problems and cognitive deficits at 3 years of age?* *International Journal of Epidemiology* Advance Access pp. 1–12.
- Lui S et al. 'Psychosocial interventions for women enrolled in alcohol treatment during pregnancy'. *Cochrane Database of Systematic Reviews* 2008, Issue 3.
- McBride, N., Carruthers, S. J., & Hutchinson, D. *Alcohol Use During Pregnancy. Formative Intervention Research. Final Report*. National Drug Research Institute, Curtin University of Technology, Perth. 2008.
- Nayak, R. B., & Murthy, P. 'Fetal alcohol spectrum disorder. (Review) (38 refs)', *Indian Pediatrics*, vol. 45, no. 12, Dec 2008. pp. 977–983.
- Ondersma, Steven J.; Winhusen, Theresa; Erickson, Sarah J.; Stine, Susan M.; Wang, Yun. (April 2009) *Motivation enhancement therapy with pregnant substance-abusing women: does baseline motivation moderate efficacy?* *Drug and Alcohol Dependence* 101:1–2, pp. 74–79.
- Sun, Yuelian; Strandberg-Larsen, Katrine; Vestergaard, Mogens; Christensen, Jakob; Andersen, Nybo; Gronbaek, Morten; Olsen, Jorn. (2008) *Binge drinking during pregnancy*



and risk of seizures in childhood: a study based on the Danish National Birth cohort, *American Journal of Epidemiology* 169:3, pp. 313–322.

Sayal, K. 'Commentary: Light drinking in pregnancy: can a glass or two hurt?(comment)', *International Journal of Epidemiology*, vol. 38, no. 1, Feb 2009. pp. 140–142.

Sayal, K., Heron, J., Golding, J., Alati, R., Smith, G. D., Gray, R., & Emond, A. 'Binge pattern of alcohol consumption during pregnancy and childhood mental health outcomes: longitudinal population-based study', *Pediatrics*, vol. 123, no. 2, Feb 2009. pp. e289–e296.

Usman Khalafzai, R. 'Fetal alcohol spectrum disorders', *Chisholm Health Ethics Bulletin*, vol. 14, no. 2, 2008. pp. 9–12.

Vahidnia, F., Eskenazi, B., & Jewell, N. 'Maternal smoking, alcohol drinking, and febrile convulsion', *Seizure*, vol. 17, no. 4, Jun 2008. pp. 320–326.

Alcohol dependence

Behrendt, S.; Wittchen, H.-U.; Hofler, M.; Lieb, R.; Beesdo, K. (January 2009) *Transitions from first substance use to substance use disorders in adolescence: is early onset associated with a rapid escalation?* *Drug and Alcohol Dependence* 99:1–3, pp. 68–78.

Caselli, Gabrielle; Bortolai, Chiara; Leoni, Mauro; Rovetto, Francesco; Spada, Marcantonio M. (December 2008) *Rumination in problem drinkers*, *Addiction Research & Theory* 16:6, pp. 564–571.

Dawson, Deborah A.; Goldstein, Rise B.; Chou, S. Patricia; Ruan, W. June; Grant, Bridget F. (December 2008) *Age at first drink and the first incidence of adult-onset DSM-IV alcohol use disorders*, *Alcoholism: Clinical and Experimental Research* 32:12, pp. 2149–2160.

Dawson, Deborah A.; Li, Ting-Kai; Chou, S. Patricia; Grant, Bridget F. (January/February 2009) *Transitions in and out of alcohol use disorders: their associations with conditional changes in quality of life over a 3-year follow-up interval*, *Alcohol and Alcoholism* 44:1, pp. 84–92.

Farris, Suzan R.; Ostafin, Brian D. (2008) *Alcohol consumption primes automatic alcohol-approach associations*, *American Journal of Drug and Alcohol Abuse* 34:6, pp. 703–711.

Feil, Jodie; Hasking, Penelope. (October 2008) *The relationship between personality, coping strategies and alcohol use*, *Addiction Research & Theory* 16:5, pp. 526–537.

Flensburg-Madsen, Trine; Knop, Joachim; Mortensen, Erik Lykke; Becker, Ulrik; Makhija, Nita; Sher, Leo; Gronbaek, Morten. (May 2008) *Beverage preference and risk of alcohol-use disorders: a Danish prospective cohort study*, *Journal of studies on Alcohol and Drugs* 69:3, pp. 3371–3377.

Greenfield, T. K., Harford, T. C., & Tam, T. W. 'Modeling cognitive influences on drinking and alcohol problems', *Journal of Studies on Alcohol & Drugs*, vol. 70, no. 1, Jan 2009. pp. 78–86.

Grucza, Richard A.; Bucholz, Kathleen K.; Rice, John P.; Bierut, Laura J. (May 2008) *Secular trends in the life time prevalence of alcohol dependence in the United States: a re-evaluation*, *Alcoholism: Clinical and Experimental Research* 32:5, pp. 763–770.

Schuckit, Marc A. (2009) *Alcohol use disorders*, *Lancet* 373, pp. 492–501.

Shand, Fiona L.; Mattick, Richard L. (2008) *Clients of treatment service agencies: May 2001 census findings*, Canberra: Department of Health and Ageing.

Slade, Tim; Grove, Rachel; Teesson, Maree. (May 2009) *A taxometric study of alcohol abuse and dependence in a general population sample: evidence of dimensional latent structure and implications for DSM-V*, *Addiction* 104:5, pp. 742–751.

Waldron, M., Heath, A. C., Bucholz, K. K., Madden, P. A., & Martin, N. G. 'Alcohol dependence and reproductive onset: findings in two Australian twin cohorts', *Alcoholism: Clinical & Experimental Research*, vol. 32, no. 11, Nov 2008. pp. 1865–1874.



Comorbidity

Allsop, S. (ed) *Drug use and mental health: effective responses to co-occurring drug and mental health problems*. IP Communications, Melbourne, 2008.

Buckner, Julia D.; Turner, R. Jay. (February 2009) *Social anxiety disorder as a risk factor for alcohol use disorders: a prospective examination of parental and peer influences*, *Drug and Alcohol Dependence* 100:1–2, pp. 128–137.

Chen, Chuan-Yu; Storr, Carla L.; Tang, Gung-Mong; Huang, Su-Ling; Hsiao, Chuhsing Kate; Chen, Wei J. (June 2008) *Early alcohol experiences and adolescent mental health: a population-based study in Taiwan*, *Drug and Alcohol Dependence* 95:3, pp. 209–218.

Cleary, Michelle; Hunt, Glenn E.; Matheson, Sandra; Walter, Garry. (March 2009) *Views of Australian mental health stakeholders on clients' problematic drug and alcohol use*, *Drug and Alcohol Review* 28:2, pp. 122–128.

Dunn, Erin C.; Neighbors, Clayton; Fossos, Nicole; Larimer, Mary E. (January 2009) *A cross-lagged evaluation of eating disorder symptomatology and substance-use problems*, *Journal of Studies on Alcohol and Drugs* 70:1, pp. 106–116.

Esterberg, Michelle L.; Goulding, Sandra M.; McClure-Tone, Erin B.; Compton, Michael T. (April 2009) *Schizotypy and nicotine, alcohol and cannabis use in a non-psychiatric sample*, *Addictive Behaviors* 34:4, pp. 374–379.

Harrell, Zaje A. T.; Slane, Jennifer D.; Klump, Kelly L. (March 2009) *Predictors of alcohol problems in college women: the role of depressive symptoms, disordered eating, and family history of alcoholism*, *Addictive Behaviors* 34:3, pp. 252–257.

Knop, Joachim; Penick, Elizabeth C.; Nickel, Elizabeth J.; Mortensen, Erik L.; Sullivan, Margaret A.; Murtaza, Syed; Jensen, Per; Manzardo, Ann M.; Gabrielli, William F. (March 2009) *Childhood ADHD and conduct disorder as independent predictors of male alcohol dependence at age 40*, *Journal of Studies on Alcohol and Drugs* 70:2, pp. 169–177.

Lai, Harr Man Xiong; Huang, Qi Rong. (May 2009) *Comorbidity of mental disorders and alcohol and drug use disorders: analysis of New South Wales inpatient data*, *Drug and Alcohol Review* 28:3, pp. 235–242.

Lubman, D. I.; Hides, L.; Scaffidi, A.; Elkins, K.; Stevens, M.; Marks, R. (October 2008) *Implementing mental health screening within a youth alcohol and other drugs service*, *Mental Health and Substance Use: Dual Diagnosis* 1:3, pp. 254–261.

Malat, J.; Leszcz, M.; Negrete, J. C.; Turner, N.; Collins, J.; Liu, E.; Toneatto, T. (September – October 2008) *Interpersonal group psychotherapy for comorbid alcohol dependence and non-psychotic psychiatric disorders*, *American Journal on Addictions* 17:5, pp. 402–407.

Marmorstein, Naomi R. (January 2009) *Longitudinal associations between alcohol problems and depressive symptoms: early adolescence through early adulthood*, *Alcoholism: Clinical and Experimental Research* 33:1, pp. 49–59.

Miranda, Robert; MacKillop, James; Meyerson, Lori A.; Justus, Alicia; Lovallo, William R. (May 2009) *Influence of antisocial and psychopathic traits on decision-making biases in alcoholics*, *Alcoholism: Clinical and Experimental Research* 33:5, pp. 817–825.

Ogle, R. L., & Clements, C. M. 'Deliberate self-harm and alcohol involvement in college-aged females: a controlled comparison in a nonclinical sample', *American Journal of Orthopsychiatry*, vol. 78, no. 4, Oct 2008, pp. 442–448.

Sher, Leo; Stanley, Barbara H.; Harkavy-Friedman, Jill M.; Carballo, Juan J.; Arendt, Mikkel; Brent, David A.; Sperling, Dahlia; Lizardi, Dana; Mann, John; Oquendo, Maria A. (June 2008) *Depressed patients with co-occurring alcohol use disorders: a unique patient population*, *Journal of Clinical Psychiatry* 69:6, pp. 907–915.



Other drugs and poly drug use

Colpaert, Kathy; Vanderplasschen, Wouter; Hal, Guido Van; Broekaert, Eric; Schuyten, Gilberte. (Spring 2008) *Dual substance abusers seeking treatment: demographic, substance-related, and treatment utilization characteristics*, *Journal of Drug Issues* 38:2, pp. 559–584.

Fillmore, Mark T.; Ostling, Erik W.; Martin, Catherine A.; Kelly, Thomas H. (February 2009) *Acute effects of alcohol on inhibitory control and information processing in high and low sensation-seekers*, *Drug and Alcohol Dependence* 100:1–2, pp. 91–99.

Moore, David (ed); Dietze, Paul (ed) (2008) *Drugs and public health: Australian perspectives on policy and practice*, South Melbourne: Oxford University Press.

O’Grady, Kevin E.; Arria, Amelia M.; Fitzelle, Dawn M. B.; Wish, Eric D. (Spring 2008) *Heavy drinking and polydrug use among college students*, *Journal of Drug Issues* 38:2, pp. 445–466.

Pakula, Basia; Macdonald, Scott; Stockwell, Tim; Sharma, Richa. (April 2009) *Simultaneous use of alcohol and cocaine : a qualitative investigation*, *Journal of Substance Use* 14:2, pp. 101–112.

Pape, Hilde; Rossow, Ingeborg; Storvoll, Elisabet E. (April 2009) *Under double influence: assessment of simultaneous alcohol and cannabis use in general youth populations*, *Drug and Alcohol Dependence* 101:1–2, pp. 69–73.

Penacoba, Puente C.; Gonzalez Gutierrez, J. L.; Abellan, C.; Lopez, A. (2008) *Sensation seeking, attitudes toward drug use, and actual use among adolescents: testing a model for alcohol and ecstasy use*, *Substance Use & Misuse* 43, pp. 1615–1627.

Homeless

Australian National Council on Drugs ((2008)) *Alcohol and other drug use among those who are homeless*, Civic Square ACT: Australian National Council on Drugs.

Karper, Laurence; Kaufmann, Michael; Millsbaugh, Gary; Vega, Evett; Stern, Glenn; Stern, Gail; Ezrow, D. James; Giansante, Shirley; Lynch, Mary. (2008) *Coordination of care for homeless individuals with comorbid severe mental disorders and substance-related disorders*, *Journal of Dual Diagnosis* 4:2, pp. 142–157.

Larimer, M. E., Malone, D. K., Garner, M. D., Atkins, D. C., Burlingham, B., Lonczak, H. S., Tanzer, K., Ginzler, J., Clifasefi, S. L., Hobson, W. G., & Marlatt, G. A. ‘Health care and public service use and costs before and after provision of housing for chronically homeless persons with severe alcohol problems’, *JAMA*, vol. 301, no. 13, 1 Apr 2009, pp. 1349–1357.

Socioeconomic differences

Andersen, A., Holstein, B. E., & Due, P. ‘Large-scale alcohol use and socioeconomic position of origin: longitudinal study from ages 15 to 19 years’, *Scandinavian Journal of Public Health*, vol. 36, no. 3, May 2008, pp. 326–329.

Batty, G. D., Lewars, H., Emslie, C., Benzeval, M., & Hunt, K. ‘Problem drinking and exceeding guidelines for ‘sensible’ alcohol consumption in Scottish men: associations with life course socioeconomic disadvantage in a population-based cohort study’, *BMC Public Health*, vol. 8, 2008, p. 302.

Bloomfield, K., Grittner, U., Rasmussen, H. B., & Petersen, H. C. ‘Socio-demographic correlates of alcohol consumption in the Danish general population’, *Scandinavian Journal of Public Health*, vol. 36, no. 6, Aug 2008, pp. 580–588.

Caldwell, T. M.; Rodgers, B.; Clark, C.; Jefferis, B. J. M. H.; Stansfeld, S. A.; Power, C. (June 2008) *Lifecourse socioeconomic predictors of midlife drinking patterns, problems and abstention: findings from the 1958 British Birth Cohort Study*, *Drug and Alcohol Dependence* 95:3, pp. 269–278.



Centers for Disease Control and Prevention (CDC) 'Sociodemographic differences in binge drinking among adults – 14 States, 2004', *MMWR – Morbidity & Mortality Weekly Report*, vol. 58, no. 12, 3 Apr 2009. pp. 301–304.

Dietze, P. M., et al. Income inequality and alcohol attributable harm in Australia. *BMC Public Health*, 9: 70, 25 Feb 2009.

Kuendig, H., Plant, M. L., Plant, M. A., Kuntsche, S., Miller, P., Gmel, G., Ahlstrom, S., Bergmark, K. H., Olafsdottir, H., Elekes, Z., Csemy, L., & Knibbe, R. 'Beyond drinking: differential effects of demographic and socioeconomic factors on alcohol-related adverse consequences across European countries', *European Addiction Research*, vol. 14, no. 3, 2008. pp. 150–160.

Lemstra, M., Bennett, N. R., Neudorf, C., Kunst, A., Nannapaneni, U., Warren, L. M., Kershaw, T., & Scott, C. R. 'A meta-analysis of marijuana and alcohol use by socio-economic status in adolescents aged 10–15 years. (Review) (70 refs)', *Canadian Journal of Public Health*, vol. 99, no. 3, May 2008. pp. 172–177.

Makela, P., & Paljarvi, T. 'Do consequences of a given pattern of drinking vary by socioeconomic status? A mortality and hospitalisation follow-up for alcohol-related causes of the Finnish Drinking Habits Surveys', *Journal of Epidemiology & Community Health*, vol. 62, no. 8, Aug 2008. pp. 728–733.

Parents (including genetics)

Abar, Caitlin; Turrisi, Robert. (October 2008) How important are parents during the college years? A longitudinal perspective on indirect influences parents yield on their college teens' alcohol use, *Addictive Behaviors* 33:10, pp. 1360–1368.

Chawla, Neharika; Neighbors, Clayton; Logan, Diane; Lewis, Melissa A.; Fossos, Nicole. (January 2009) Perceived approval of friends and parents as mediators of the relationship between self-determination and drinking, *Journal of Studies on Alcohol and Drugs* 70:1, pp. 92–100.

Ducci, F., & Goldman, D. Genetic approaches to addiction: genes and alcohol, *Addiction* 2008 103:9, pp. 1414–1428.

Macleod, J., Hickman, M., Bowen, E., Alati, R., Tilling, K., & Smith, G. D. 'Parental drug use, early adversities, later childhood problems and children's use of tobacco and alcohol at age 10: birth cohort study', *Addiction*, vol. 103, no. 10, Oct 2008. pp. 1731–1743.

Morean, Meghan E.; Corbin, William R.; Sinha, Rajita; O'Malley, Stephanie. (March 2009) Parental history of anxiety and alcohol-use disorders and alcohol expectancies as predictors of alcohol-related problems, *Journal of Studies on Alcohol and Drugs* 70:2, pp. 227–236.

Slutske, W. S., D'Onofrio, B. M., Turkheimer, E., Emery, R. E., Harden, K. P., Heath, A. C., & Martin, N. G. 'Searching for an environmental effect of parental alcoholism on offspring alcohol use disorder: a genetically informed study of children of alcoholics', *Journal of Abnormal Psychology*, vol. 117, no. 3, Aug 2008. pp. 534–551.

Schuckit, Marc A. (January 2009) An overview of genetic influences in alcoholism, *Journal of Substance Abuse Treatment* 36:1, pp. S5 – S14.

Thompson, R. G., Jr., Lizardi, D., Keyes, K. M., & Hasin, D. S. 'Childhood or adolescent parental divorce/separation, parental history of alcohol problems, and offspring lifetime alcohol dependence', *Drug & Alcohol Dependence*, vol. 98, no. 3, 1 Dec 2008. pp. 264–269.

Tildesley, E. A., & Andrews, J. A. 'The development of children's intentions to use alcohol: direct and indirect effects of parent alcohol use and parenting behaviors', *Psychology of Addictive Behaviors*, vol. 22, no. 3, Sep 2008. pp. 326–339.

van der Zwaluw, C. S., Scholte, R. H., Vermulst, A. A., Buitelaar, J. K., Verkes, R. J., & Engels, R. C. 'Parental problem drinking, parenting, and adolescent alcohol use', *Journal of Behavioral Medicine*, vol. 31, no. 3, Jun 2008. pp. 189–200.



Older people

Ferreira, M. P., & Weems, M. K. 'Alcohol consumption by aging adults in the United States: health benefits and detriments. (Review) (105 refs)', *Journal of the American Dietetic Association*, vol. 108, no. 10, Oct 2008. pp. 1668–1676.

Steunenberg, Bas; Yagmur, Senay; Cuijpers, Pim. (October 2008) *Depression and alcohol use among the Dutch residential home elderly: is there a shared vulnerability?* *Addiction Research & Theory* 16:5, pp. 514–525.

Tucker, K. L., Jugdaohsingh, R., Powell, J. J., Qiao, N., Hannan, M. T., Sripanyakorn, S., Cupples, L. A., & Kiel, D. P. 'Effects of beer, wine, and liquor intakes on bone mineral density in older men and women.(see comment)', *American Journal of Clinical Nutrition*, vol. 89, no. 4, Apr 2009. pp. 1188–1196.

Gender and sexuality

Chaplin, Tara M.; Hong, Kwangik; Bergquist, Keri; Sinha, Rajita. (July 2008) *Gender differences in response to emotional stress: an assessment across subjective, behavioral, and physiological domains and relations to alcohol craving*, *Alcoholism: clinical and experimental research* 32:7, pp. 1242–1250.

Eldridge, Adam; Roberts, Marion. (June 2008) *Hen parties: bonding or brawling?* *Drugs: Education, Prevention and Policy* 15:3, pp. 323–328.

Gruzca, Richard A.; Norbery, Karen; Bucholz, Kathleen K.; Bierut, Laura J. (August 2008) *Correspondence between secular changes in alcohol dependence and age of drinking onset among women in the United States*, *Alcoholism: Clinical and Experimental Research* 32:8, pp. 1493–1501.

Hutton, Heidi E.; McCaul, Mary E.; Santora, Patricia B.; Erbelding, Emily J. (2008) *The relationship between recent alcohol use and sexual behaviors: gender differences among*

sexually transmitted disease clinic patients, *Alcoholism: Clinical & Experimental Research* 32:11, pp. 2008–2015.

Keogh, Peter; Reid, David; Bourne, Adam; Weatherburn, Peter; Hickson, Ford; Jessup, Kathie; Hammond, Gary. (February 2009) *Wasted opportunities: problematic alcohol and drug use among gay men and bisexual men*, London: Sigma Research.

LaBrie, Joseph W.; Cail, Jessica; Hummer, Justin F.; Lac, Andrew; Neighbors, Clayton. (March 2009) *What men want: the role of reflective opposite-sex normative preferences in alcohol use among college women*, *Psychology of Addictive Behaviors* 23:1, pp. 157–162.

Lemke, S., Schutte, K. K., Brennan, P. L., & Moos, R. H. 'Gender differences in social influences and stressors linked to increased drinking', *Journal of Studies on Alcohol & Drugs*, vol. 69, no. 5, Sep 2008. pp. 695–702.

Leyshon, Michael. (June 2008) 'We're stuck in the corner': young women, embodiment and drinking in the countryside, *Drugs: Education, Prevention and Policy* 15:3, pp. 267–289.

Morgen, Camilla Schmidt; Bove, Kira Bang; Larsen, Katrine Strandberg; Kjaer, Susanne Kruger; Gronbaek, Morten. (May/June 2008) *Association between smoking and the risk of heavy drinking among young women: a prospective study*, *Alcohol and Alcoholism* 43:3, pp. 371–375.

Plany, M. L. (June 2008) *The role of alcohol in women's lives: a review of issue and responses*, *Journal of Substance Use* 13:3, pp. 155–191.

Powers, J. R., & Young, A. F. *Longitudinal analysis of alcohol consumption and health of middle-aged women in Australia*, *Addiction* 2008, 103, 424–432.

Randolph, Mary E.; Torres, Hector; Gore-Felton, Cheryl. (2009) *Alcohol use and sexual risk behavior among college students: understanding gender and ethnic differences*, *American Journal of Drug and Alcohol Abuse* 35:2, pp. 80–84.



Sugarman, Dawn E.; DeMartini, Kelly S.; Carey, Kate B. (May – June 2009) *Are women at greater risk? An examination of alcohol-related consequences and gender*, *American Journal on Addictions* 18:3, pp. 194–197.

Trocki, K., & Drabble, L. 'Bar patronage and motivational predictors of drinking in the San Francisco Bay Area: gender and sexual identity differences', *Journal of Psychoactive Drugs*, vol. Suppl 5, Nov 2008. pp. 345–356.

Tsai, James; Floyd, R. Louise; O'Connor, Mary J.; Velasquez, Mary M. (February 2009) *Alcohol use and serious psychological distress among women of childbearing age*, *Addictive Behaviours* 34:2, pp. 146–153.

Withnall, Janice; Hill, Stuart B.; Bourgeois, Sharon. (April 2009) *Alcohol, women and midlife*, *Of Substance* 7:2, pp. 14–15.

Culturally & linguistically diverse populations

Beauvais, F., Jumper-Thurman, P., & Burnside, M. 'The changing patterns of drug use among American Indian students over the past 30 years', *American Indian & Alaska Native Mental Health Research* (Online), vol. 15, no. 2, 2008. pp. 15–24.

Drug and Alcohol Multicultural Education Centre (DAMEC) AER Foundation ((2008)) *Alcohol and drug use in culturally diverse communities: overall summary*, (Redfern): Drug and Alcohol Multicultural Education Centre (DAMEC).

Ebbett, Erin; Clarke, Dave. (2009) *Maori identification, alcohol behaviour and mental health: a review*, *International Journal of Mental Health and Addiction* (online edition).

Friese, B., & Grube, J. 'Differences in drinking behavior and access to alcohol between Native American and white adolescents', *Journal of Drug Education*, vol. 38, no. 3, 2008. pp. 273–284.

Nyaronga, D., Greenfield, T. K., & McDaniel, P. A. 'Drinking context and drinking problems among black, white, and Hispanic men and women in

the 1984, 1995, and 2005 US National Alcohol Surveys', *Journal of Studies on Alcohol & Drugs*, vol. 70, no. 1, Jan 2009. pp. 16–26.

Zhang, Y., Guo, X., Saitz, R., Levy, D., Sartini, E., Niu, J., & Ellison, R. C. 'Secular trends in alcohol consumption over 50 years: the Framingham Study', *American Journal of Medicine*, vol. 121, no. 8, Aug 2008. pp. 695–701.

Geographic differences

Bell, D. 'Destination drinking: toward a research agenda on alcotourism', *Drugs: education, prevention and policy* 2008,15:3, 291–304.

Hughes, C., Julian, R., Richman, M., Mason, R., & Long, G. 'Harnessing the power of perception: reducing alcohol-related harm among rural teenagers', *Youth Studies Australia*, vol. 27, no. 2, Jun 2008. pp. 26–35.

Jayne, M., Valentine, G., & Holloway, S. L. 'The place of drink: geographical contributions to alcohol studies. *Drugs: education, prevention and policy*', June 2008; 15(3): 219–232.

Kendrick, S. F., & Stewart, S. F. 'Reducing the harm caused by alcohol: a coordinated European response', *Clinical Medicine*, vol. 8, no. 5, Oct 2008. pp. 522–524.

Khaltourina, D. A., & Korotayev, A. V. 'Potential for alcohol policy to decrease the mortality crisis in Russia', *Evaluation & the Health Professions*, vol. 31, no. 3, Sep 2008. pp. 272–281.

Kneale, James; French, Shaun (2008) 'Mapping alcohol: health, policy and the geographies of problem drinking in Britain'. *Drugs: education, prevention and policy*,15:3, 233–249.

Petrie, D., Doran, C., Shakeshaft, A., & Sanson-Fisher, R. 'The relationship between alcohol consumption and self-reported health status using the EQ5D: evidence from rural Australia', *Social Science & Medicine*, vol. 67, no. 11, Dec 2008. pp. 1717–1726.



Sports people

Dietze, P. M., Fitzgerald, J. L., & Jenkinson, R. A. 'Drinking by professional Australian Football League (AFL) players: prevalence and correlates of risk', *Medical Journal of Australia*, vol. 189, no. 9, 3 Nov 2008. pp. 479–483.

Elliot, Diane L.; Goldberg, Linn; Moe, Esther, L.; DeFrancesco, Carol A.; Durham, Melissa B.; McGinnis, Wendy; Lockwood, Chondra. (August 2008) Long-term outcomes of the ATHENA (Athletes Targeting Health Exercise & Nutrition Alternatives) program for female high school athletes, *Journal of Alcohol and Drug Education* 52:2, pp. 73–92.

Glassman, Travis; Dodd, Virginia; Sheu, Jiunn-Jye; Miller, Maureen; Arthur, Ashley. (August 2008) Winning isn't everything: a case study of high-risk drinking the night of the 2006 national championship football game, *Journal of Alcohol and Drug Education* 52:2, pp. 31–48.

Grossbard, Joel R.; Geisner, Irene M.; Mastroleo, Nadine R. (April 2009) Athletic identity, descriptive norms, and drinking among athletes transitioning to college, *Addictive Behaviors* 34:4, pp. 352–359.

Lecoultre, Virgile; Schultz, Yves. (May/June 2009) Effect of a small dose of alcohol on the endurance performance of trained cyclists, *Alcohol and Alcoholism* 44:3, pp. 278–283.

Martens, M. P., LaBrie, J. W., Hummer, J. F., & Pedersen, E. R. 'Understanding sport-related drinking motives in college athletes: psychometric analyses of the Athlete Drinking Scale', *Addictive Behaviors*, vol. 33, no. 7, Jul 2008. pp. 974–977.

Martha, C., Grelot, L., & Peretti-Watel, P. 'Participants' sports characteristics related to heavy episodic drinking among French students', *International Journal of Drug Policy*, vol. 20, no. 2, Mar 2009. pp. 152–160.

Mays, Darren; Thompson, Nancy J. (2009) Alcohol-related risk behaviors and sports participation among adolescents: an analysis of 2005 Youth Risk Behavior Survey data, *Journal of Adolescent Health* 44:1, pp. 87–89.

O'Brien, Kerry; Hunter, Jackie; Kypri, Kypros; Ali, Ajmol. (November 2008) Gender equality in university sportspeople's drinking, *Drug and Alcohol Review* 27:6, pp. 659–665.

Wichstrom, Tove; Wichstrom, Lars. (January 2009) Does sport participation during adolescence prevent later alcohol, tobacco and cannabis use? *Addiction* 104:1, pp. 138–149.

Yusko, D. A., Buckman, J. F., White, H. R., & Pandina, R. J. 'Alcohol, tobacco, illicit drugs, and performance enhancers: a comparison of use by college student athletes and nonathletes', *Journal of American College Health*, vol. 57, no. 3, Nov 2008. pp. 281–290

Yusko, D. A., Buckman, J. F., White, H. R., & Pandina, R. J. (December 2008) Risk for excessive alcohol use and drinking-related problems in college student athletes, *Addictive Behaviors* 33:12, pp. 1546–1556

3. Regulating physical availability

Liquor licensing laws and enforcement

Bennetts, R., & Seabrook, R. 'Retail sales of alcohol and the risk of being a victim of assault. (comment)', *PLoS Medicine / Public Library of Science*, vol. 5, no. 5, 13 May 2008. p. e108.

Dobson, R. 'Government must get tough on alcohol misuse, public health experts warn', *BMJ*, vol. 336, no. 7656, 7 Jun 2008. pp. 1266–1267.

Durnford, A. J., Perkins, T. J., & Perry, J. M. 'An evaluation of alcohol attendances to an inner city emergency department before and after the introduction of the UK Licensing Act 2003', *BMC Public Health*, vol. 8, 2008. p. 379.

El Maaytah, M., Smith, S. F., Jerjes, W., Upile, T., Petrie, A., Kalavrezos, N., Ayliffe, P., Newman, L., Hopper, C., & Lloyd, T. 'The effect of the new "24 hour alcohol licensing law" on the incidence of facial trauma in London', *British Journal of Oral & Maxillofacial Surgery*, vol. 46, no. 6, Sep 2008. pp. 460–463.

Lipperman-Kreda, S., Paschall, M. J., & Grube, J. W. 'Perceived local enforcement, personal beliefs, and underage drinking: an assessment of moderating and main effects', *Journal of Studies on Alcohol & Drugs*, vol. 70, no. 1, Jan 2009. pp. 64–69.

Tobin, H. 'How long until our pubs have no beer? (Federal and state anti-alcohol policies are unlikely to be effective.)', *Institute of Public Affairs Review*, vol. 60, no. 3, Jul 2008. pp. 24–26.

Toomey, T. L., Erickson, D. J., Lenk, K. M., & Kilian, G. R. 'Likelihood of illegal alcohol sales at professional sport stadiums', *Alcoholism: Clinical & Experimental Research*, vol. 32, no. 11, Nov 2008. pp. 1859–1864.

Wilson, T. 'Cops, not liquor regulations, reduce street violence (The emphasis on lockouts and alcohol laws is a distraction from tackling late night violence.)', *Institute of Public Affairs Review*, vol. 60, no. 5, Nov 2008. p. 29.

Young, T. 'The cost of liquor reform in Queensland', *Local Government Reporter*, vol. 7, no. 3, Nov 2008. pp. 30–32.

Zajdow, G. 'The free market in alcohol', *Arena Magazine (Fitzroy no. 95, Jun 2008. pp. 25–29.*

Opening hours

Carpenter, C. S., & Eisenberg, D. 'Effects of Sunday sales restrictions on overall and day-specific alcohol consumption: evidence from Canada', *Journal of Studies on Alcohol & Drugs*, vol. 70, no. 1, Jan 2009. pp. 126–133.

KPMG. Evaluation of the Temporary Late Night Entry Declaration ("2.00am lockout") Final Report. Report prepared by KPMG for the Victorian Department of Justice. November 2008.

Midford, R., Young, D., Chikritzhs, T., Playford, D., Kite, E., & Pascal, R. 'The effect of alcohol sales and advertising restrictions on a remote Australian community', *Drugs: education, prevention and policy* no. Published online 30 Jan 2009, 2009.

van Hoof, J., van Noordenburg, M., & de Jong, M. 'Happy hours and other alcohol discounts in cafes: prevalence and effects on underage adolescents', *Journal of Public Health Policy*, vol. 29, no. 3, Sep 2008. pp. 340–352.

Vingilis, E., Mcleod, A. I., Mann, R. E., & Seeley, J. 'A tale of two cities: the effect of extended drinking hours in licensed establishments on impaired driving and assault charges', *Traffic Injury Prevention*, vol. 9, no. 6, Dec 2008. pp. 527–533.



Outlet density

Gruenewald, P. 'Why do alcohol outlets matter anyway? A look into the future', *Addiction*, vol. 103, no. 10, Oct 2008. pp. 1585–1587.

Huckle, T., Huakau, J., Sweetsur, P., Huisman, O., & Casswell, S. 'Density of alcohol outlets and teenage drinking: living in an alcogenic environment is associated with higher consumption in a metropolitan setting', *Addiction*, vol. 103, no. 10, Oct 2008. pp. 1614–1621.

Kuntsche, E., Kuendig, H., & Gmel, G. 'Alcohol outlet density, perceived availability and adolescent alcohol use: a multilevel structural equation model', *Journal of Epidemiology & Community Health*, vol. 62, no. 9, Sep 2008. pp. 811–816.

Livingston, M. 'A longitudinal analysis of alcohol outlet density and assault', *Alcoholism: Clinical & Experimental Research*, vol. 32, no. 6, Jun 2008. pp. 1074–1079.

Pasch, K. E., Hearst, M. O., Nelson, M. C., Forsyth, A., & Lytle, L. A. 'Alcohol outlets and youth alcohol use: exposure in suburban areas', *Health & Place*, vol. 15, no. 2, Jun 2009. pp. 642–646.

Pearce, J., Day, P., & Witten, K. 'Neighbourhood provision of food and alcohol retailing and social deprivation in urban New Zealand', *Urban Policy and Research*, vol. 26, no. 2, Jun 2008. pp. 213–227.

Age restrictions

Cagney, Paula; Palmer, Shane. *Research New Zealand (2007) The sale and supply of alcohol to under 18 year olds in New Zealand: a systematic overview of international and New Zealand literature*, Wellington: Research New Zealand.

Fell, James C.; Fisher, Deborah A.; Voas, Robert B.; Blackman, Kenneth; Tippetts, A. Scott. (2008) *The relationship of underage drinking laws to reduction in drinking drivers in fatal crashes in the United States*, *Accident Analysis and Prevention* 40:4, pp. 1430–40.

Kypri, K. 'The health impacts and politics of changes in the minimum purchase age for alcohol in New Zealand'. 2008, National Drug Research Institute, Curtin University: Perth.

Rossow, I., Karlsson, T., & Raitasalo, K. 'Old enough for a beer? Compliance with minimum legal age for alcohol purchases in monopoly and other off-premise outlets in Finland and Norway', *Addiction*, vol. 103, no. 9, Sep 2008. pp. 1468–1473.

Toomey, T. L., Komro, K. A., Oakes, J. M., & Lenk, K. M. 'Propensity for illegal alcohol sales to underage youth in Chicago', *Journal of Community Health*, vol. 33, no. 3, Jun 2008. pp. 134–138.

Treno, A. J., Ponicki, W. R., Remer, L. G., & Gruenewald, P. J. 'Alcohol outlets, youth drinking, and self-reported ease of access to alcohol: a constraints and opportunities approach', *Alcoholism: Clinical & Experimental Research*, vol. 32, no. 8, Aug 2008. pp. 1372–1379.

Alcohol beverage and related industries

Anderson, P., Drummond, C., Hellman, M., & Rosenqvist, P. 'Introduction to the issue – the alcohol industry and alcohol policy', *Addiction*, vol. 104 Suppl 1, Feb 2009. pp. 1–2.

Babor, T. F. 'Alcohol research and the alcoholic beverage industry: issues, concerns and conflicts of interest', *Addiction*, vol. 104 Suppl 1, Feb 2009. pp. 34–47.

Baumberg, Ben; Anderson, Peter. (December 2008) *Trade and health: how World Trade Organization (WTO) law affects alcohol and public health*, *Addiction* 103:12, pp. 1952–1958.

Bond, Laura; Daube, Mike; Chikritzhs, Tanya. (2009) *Access to confidential alcohol industry documents: from "big tobacco" to "big booze"*. *Australasian Medical Journal* 1:3, pp. 1–26.

Caetano, R. 'The alcohol industry's smoke and mirrors.(comment)', *Addiction*, vol. 103, no. 7, Jul 2008. pp. 1231–1232.



Casswell, S. 'Alcohol industry and alcohol policy – the challenge ahead', *Addiction*, vol. 104 Suppl 1, Feb 2009. pp. 3–5.

Charles, E. 'Drink up? (Corporate social responsibility and international drinks companies.)', *Intheblack* (Pahran, vol. 78, no. 6, Jul 2008. pp. 34–37.

Jernigan, D. H. 'The global alcohol industry: an overview', *Addiction*, vol. 104 Suppl 1, Feb 2009. pp. 6–12.

Kahler, C. W., Borland, R., Hyland, A., McKee, S. A., Thompson, M. E., & Cummings, K. M. 'Alcohol consumption and quitting smoking in the International Tobacco Control (ITC) Four Country Survey', *Drug and Alcohol Dependence*, vol. 100, no. 3, 2009. pp. 214–220.

Miller, P. G., Kypri, K., Chikritzhs, T. N., Skov, S. J., & Rubin, G. 'Health experts reject industry backed funding for alcohol research'. *Medical Journal of Australia*, 11 May 2009.

Mosher, J. F. (January 2009) *Litigation and alcohol policy: lessons from the US tobacco wars*, *Addiction* 104:Suppl 1, pp. 27–33.

Room, R., Schmidt, L., Rehm, J., & Makela, P. 'International regulation of alcohol', *BMJ*, vol. 337, 2008. p. a2364.

Zeigler, D. W. 'The alcohol industry and trade agreements: a preliminary assessment', *Addiction*, vol. 104 Suppl 1, Feb 2009. pp. 13–26.



4. Taxation and pricing

Taxation

Australia's Future Tax System Review Panel, 'Australia's Future Tax System: Consultation Paper'. 2009, Commonwealth of Australia: Canberra.

Australian Tax Office (ATO), 'Australian Taxation Statistics 2006–07'. March 2009, Australian Taxation Office: Canberra.

Australian Tax Office (ATO), 'Excise Tariff Working Pages Schedule (2 February 2009)'. March 2009, Australian Taxation Office: Canberra.

Diane Brown Consulting Pty Ltd. 'What's in a Word: what is meant by the term "volumetric" taxation'. May 2009.

Kmietowicz, Z. 'MPs call for end to cheap alcohol promotions to reduce crime', *BMJ*, vol. 337, 2008. p. a2499.

Makela, P.; Osterberg, E. (April 2009) *Weakening of one more alcohol control pillar: a review of the effects of the alcohol tax cuts in Finland in 2004*, *Addiction* 104:4, pp. 554–563.

Segal, David S.; Stockwell, Tim. (March 2009) *Low alcohol alternatives: a promising strategy*, *International Journal of Drug Policy* 20:2, pp. 183–187.

Skov, S. J. 'Alcohol taxation policy in Australia: public health imperatives for action'. *Medical Journal of Australia* 16 March 2009. pp. 1–3.

Vandenberg, B., Livingston, M., & Hamilton, M. 'Beyond cheap shots: reforming alcohol taxation in Australia', *Drug and Alcohol Review*, vol. 27, no. 6, Nov 2008. pp. 579–583.

Wagenaar, Alexander C.; Salois, Matthew J.; Komro, Kelli A. (February 2009) *Effects of beverage alcohol price and tax levels on drinking: a meta-analysis of 1003 estimates from 112 studies*, *Addiction* 104:2, pp. 179–190.

Price effects

Booth, A., Brennan, A., Meier, P. S., O'Reilly, D. T., Purshouse, R., Stockwell, T., Sutton, A, Taylor, K. B., Wilkinson, A., & Wong, R. (June 2008) *Independent review of the effects of alcohol pricing and promotion: summary of evidence to accompany report on phase 1: systematic reviews*, Sheffield: University of Sheffield.

Herttua, K., Makela, P., & Martikainen, P. 'Changes in alcohol-related mortality and its socioeconomic differences after a large reduction in alcohol prices: a natural experiment based on register data', *American Journal of Epidemiology*, vol. 168, no. 10, 15 Nov 2008. pp. 1110–1118.

Herttua, K., Makela, P., Martikainen, P., & Siren, R. 'The impact of a large reduction in the price of alcohol on area differences in interpersonal violence: a natural experiment based on aggregate data', *Journal of Epidemiology & Community Health*, vol. 62, no. 11, Nov 2008. pp. 995–1001.


Jamison, J., & Myers, L. B. 'Peer-group and price influence students drinking along with planned behaviour.(erratum appears in *Alcohol Alcohol*. 2008 Sep–Oct;43(5):608)', *Alcohol & Alcoholism*, vol. 43, no. 4, Jul 2008. pp. 492–497.

Kmietowicz, Z. 'Target cheap drinking as we did passive smoking, says chief medical officer', *BMJ*, vol. 338, 2009. p. b1124.

McKee, M., Belcher, P., & Hervey, T. 'Reducing harm from alcohol', *BMJ*, vol. 338, 2009. p. b1191.

Rossow, I. 'Alcohol consumption and discounting'. *Addiction Research & Theory* 2008,16:6,572–584.

Thombs, Dennis L.; O'Mara, Ryan; Dodd, Virginia J.; Hou, Wei; Merves, Michele L.; Weiler, Robert M.; Pokorny, Steven B.; Goldberger, Bruce A.; Reingle, Jennifer; Werch, Chudley (Chad)



(March 2009) A field study of bar-sponsored drink specials and their associations with patron intoxication, *Journal of Studies on Alcohol and Drugs* 70:2, pp. 206–214.

Alcopops

Chikritzhs, T. N., Dietze, P. M., Allsop, S. J., Daube, M. M., Hall, W. D., & Kypri, K. '(Editorial) The "alcopops" tax: heading in the right direction'. *Medical Journal of Australia*. 2 March 2009, pp. 293–294.

Doran, C. M., & Shakeshaft, A. P. 'Using taxes to curb drinking in Australia', *Lancet*, vol. 372, no. 9640, 30 Aug 2008. pp. 701–702.

Huckle, T., Sweetsur, P., Moyes, S., & Casswell, S. 'Ready to drinks are associated with heavier drinking patterns among young females', *Drug & Alcohol Review*, vol. 27, no. 4, Jul 2008. pp. 398–403.

Reissig, Chad J.; Strain, Eric C.; Griffiths, Roland R. (January 2009) Caffeinated energy drinks – a growing problem, *Drug and Alcohol Dependence* 99:1–3, pp. 1–10.

Senate Community Affairs Committee. 'Inquiry into Excise Tariff Amendment (2009 Measures No. 1) Bill 2009 and Customs Tariff Amendment (2009 Measures No. 1) Bill 2009 (provisions) and the impact of the tax on ready-to-drink alcoholic beverages Final Report'. Commonwealth of Australia. 16 March 2009.

Senate Community Affairs Committee. 'Inquiry into Ready-to-drink alcohol beverages Final Report'. Commonwealth of Australia. 24 June 2008.

Skov, S. J. National alcohol policy after "alcopops": what next? *Medical Journal of Australia* 27 May 2009. pp. 662–663.

Woodward, S. 'Little Aussie drinkers: how alcopops are grooming the next generation', *Ethical Investor* (Maroubra no. 77, Jun 2008. pp. 26–28.

Economic studies

Bolam, B., & Coast, J. 'Comparison of methods for estimating the subnational cost of alcohol misuse', *Public Health*, vol. 122, no. 3, Mar 2008. pp. 307–312.

Doran, C. M., Shakeshaft, A. P., Halb, W., & Petrie, D. 'Alcohol industry and government revenue derived from underage drinking by Australian adolescents 2005', *Addictive Behaviors*, vol. 34, no. 1, Jan 2009. pp. 75–81.

Doran, Christopher; Vos, Theo; Cobiac, Linda; Hall, Wayne; Asamoah, Isaac; Wallace, Angela; Naidoo, Shamesh; Byrnes, Joshua. (2008) *Identifying cost-effective interventions to reduce the burden of harm associated with alcohol misuse in Australia*, Deakin ACT: Alcohol Education and Rehabilitation Foundation (AERF).

Jarl, J., Johansson, P., Eriksson, A., Eriksson, M., Gerdtham, U. G., Hemstrom, O., Selin, K. H., Lenke, L., Ramstedt, M., & Room, R. 'The societal cost of alcohol consumption: an estimation of the economic and human cost including health effects in Sweden, 2002', *European Journal of Health Economics*, vol. 9, no. 4, Nov 2008. pp. 351–360.

Ramful, P., & Zhao, X. 'Individual heterogeneity in alcohol consumption: the case of beer, wine and spirits in Australia', *Economic Record*, vol. 84, no. 265, Jun 2008. pp. 207–222.

Rosen, S. M., Miller, T. R., & Simon, M. 'The cost of alcohol in California', *Alcoholism: Clinical & Experimental Research*, vol. 32, no. 11, Nov 2008. pp. 1925–1936.

Srivastava, P. *Does bingeing affect earnings?* Melbourne: Centre for Health Economics. Monash University 2008.

van den, B. M., van Baal, P. H., Tariq, L., Schuit, A. J., de Wit, G. A., & Hoogenveen, R. T. 'The cost-effectiveness of increasing alcohol taxes: a modelling study', *BMC Medicine*, vol. 6, 2008. p. 36.



5. Drink driving counter-measures

Ahlm, K., Bjornstig, U., & Ostrom, M. 'Alcohol and drugs in fatally and non-fatally injured motor vehicle drivers in northern Sweden', *Accident Analysis & Prevention*, vol. 41, no. 1, Jan 2009. pp. 129–136.

Allen, Allyssa J.; Meda, Shashwath A.; Skudlarski, Pawel; Calhoun, Vince D.; Astur, Robert; Ruopp, Kathryn C.; Pearlson, Godfrey D. (April 2009) *Effects of alcohol on performance on a distraction task during simulated driving*, *Alcoholism: Clinical and Experimental Research* 33:4, pp. 617–625.

Asbridge, Mark; Mann, Robert E.; Smart, Reginald G.; Stoduto, Gina; Beirness, Douglas; Lambie, Robert; Vingilis, Evelyn. (April 2009) *The effects of Ontario's administrative driver's licence suspension law on total driver fatalities: a multiple time series analysis*, *Drugs, Education, Prevention and Policy* 16:2, pp. 140–151.

Bernhoff, I. M., Hels, T., & Hansen, A. S. 'Trends in drink driving accidents and convictions in Denmark', *Traffic Injury Prevention*, vol. 9, no. 5, Oct 2008. pp. 395–403.

Bjerre, B., & Kostela, J. 'Primary prevention of drink driving by the large-scale use of alcolocks in commercial vehicles', *Accident Analysis & Prevention*, vol. 40, no. 4, Jul 2008. pp. 1294–1299.

Cashman, C. M., et al. *Alcohol and drug screening of occupational drivers for preventing injury*. *Cochrane Database of Systematic Reviews* 2009, Issue 2.

Fell, J. C., Compton, C., & Voas, R. B. 'A note on the use of passive alcohol sensors during routine traffic stops', *Traffic Injury Prevention*, vol. 9, no. 6, Dec 2008. pp. 534–538.

Fell, J. C., Fisher, D. A., Voas, R. B., Blackman, K., & Tippetts, A. S. 'The relationship of underage drinking laws to reductions in drinking drivers in fatal crashes in the United States', *Accident Analysis & Prevention*, vol. 40, no. 4, Jul 2008. pp. 1430–1440.

Goss, C. W., Van Bramer, L. D., Gliner, J. A., Porter, T. R., Roberts, I. G., & Diguiseppi, C. 'Increased police patrols for preventing alcohol-impaired driving. (Review) (127 refs)', *Cochrane Database of Systematic Reviews* no. 4, 2008. p. CD005242.

Jewell, Jeremy D.; Hupp, Stephen D. A.; Segrist, Daniel J. (July 2008) *Assessing DUI risk: examination of the behaviors & attitudes drinking & driving scale (BADDs)* *Addictive Behaviors* 33:7, pp. 853–865.

Liang, L., & Huang, J. 'Go out or stay in? The effects of zero tolerance laws on alcohol use and drinking and driving patterns among college students', *Health Economics*, vol. 17, no. 11, Nov 2008. pp. 1261–1275.

Marczinski, Cecile A.; Harrison, Emily L. R.; Fillmore, Mark T. (July 2008) *Effects of alcohol on simulated driving and perceived driving impairment in binge drinkers*, *Alcoholism: Clinical and Experimental Research* 32:7, pp. 1329–1337.



Matthews, Allison; Bruno, Raimondo; Johnston, Jennifer; Black, Emma; Degenhardt, Louisa; Dunn, Matthew. (February 2009) *Factors associated with driving under the influence of alcohol and drugs among an Australian sample of regular ecstasy users*, *Drug and Alcohol Dependence* 100:1-2, pp. 24-31.

Peck, R. C., Gebers, M. A., Voas, R. B., & Romano, E. 'The relationship between blood alcohol concentration (BAC), age, and crash risk', *Journal of Safety Research*, vol. 39, no. 3, 2008. pp. 311-319.

Santa, A. F., & Cochran, B. N. 'Does the impact of anti-drinking and driving Public Service Announcements differ based on message type and viewer characteristics?', *Journal of Drug Education*, vol. 38, no. 2, 2008. pp. 109-129.

Tin, S. T., Ameratunga, S., Robinson, E., Crengle, S., Schaaf, D., & Watson, P. 'Drink driving and the patterns and context of drinking among New Zealand adolescents', *Acta Paediatrica*, vol. 97, no. 10, Oct 2008. pp. 1433-1437.



6. Treatment and early interventions

Primary healthcare

Cayley, W. E., Jr. 'Effectiveness of brief alcohol interventions in primary care. (Review) (6 refs)', *American Family Physician*, vol. 79, no. 5, 1 Mar 2009. pp. 370–371.

Clough, Alan R.; Lee, Kylie Kim San; Conigrave, Katherine M. (July 2008) *Promising performance of a juvenile justice diversion programme in remote Aboriginal communities, Northern Territory, Australia*, *Drug and Alcohol Review* 27:4, pp. 433–438.

Copello, Alex; Templeton, Lorna; Orford, Jim; Velleman, Richard; Patel, Asmita; Moore, Laurence; Macleod, John; Godfrey, Christine. (January 2009) *The relative efficacy of two levels of a primary care intervention for family members affected by the addiction problem of a close relative: a randomized trial*, *Addiction* 104:1, pp. 49–58.

Delany, P. J., Shields, J. J., Willenbring, M. L., & Huebner, R. B. 'Expanding the role of health services research as a tool to reduce the public health burden of alcohol use disorders', *Substance Use & Misuse*, vol. 43, no. 12–13, 2008. pp. 1729–1746.

Duffin, C. 'Targeting the drinking culture', *Emergency Nurse*, vol. 16, no. 7, Nov 2008. pp. 4–5.

Merrick, E. L., Hodgkin, D., Garnick, D. W., Horgan, C. M., Panas, L., Ryan, M., Saitz, R., & Blow, F. C. 'Unhealthy drinking patterns and receipt of preventive medical services by older adults', *Journal of General Internal Medicine*, vol. 23, no. 11, Nov 2008. pp. 1741–1748.

Riper, H., van Straten, A., Keuken, M., Smit, F., Schippers, G., & Cuijpers, P. 'Curbing problem drinking with personalized-feedback

interventions: a meta-analysis. (Review) (84 refs)', *American Journal of Preventive Medicine*, vol. 36, no. 3, Mar 2009. pp. 247–255.

Saitz, R., Horton, N. J., Cheng, D. M., & Samet, J. H. 'Alcohol counseling reflects higher quality of primary care', *Journal of General Internal Medicine*, vol. 23, no. 9, Sep 2008. pp. 1482–1486.

Sheridan, J., Wheeler, A., Ju-Hsing, C. L., Chen-Yun, H. A., Nga-Yee, L., I, & Yow-Chyi, T. K. 'Screening and brief interventions for alcohol: attitudes, knowledge and experience of community pharmacists in Auckland, New Zealand', *Drug & Alcohol Review*, vol. 27, no. 4, Jul 2008. pp. 380–387.

Maternal, child and family

Jeffreys, H., Hirte, C., Rogers, N., et al., 'Parental substance misuse and children's entry into alternative care in South Australia'. 2009, South Australian Department of Families and Communities: Adelaide.

Lier, Pol A. C. van; Huizink, Anja; Crijnen, Alfons. (March 2009) *Impact of a preventive intervention targeting childhood disruptive behavior problems on tobacco and alcohol initiation from age 10 to 13 years*, *Addictive Behaviors* 34:3, pp. 228–233.

May, P. A., Miller, J. H., Goodhart, K. A., Maestas, O. R., Buckley, D., Trujillo, P. M., & Gossage, J. P. 'Enhanced case management to prevent fetal alcohol spectrum disorders in Northern Plains communities', *Maternal & Child Health Journal*, vol. 12, no. 6, Nov 2008. pp. 747–759.

Stade, B. C., et al. *Psychological and/or educational interventions for reducing alcohol consumption in pregnant women and women planning pregnancy*. *Cochrane Database of Systematic Reviews* 2009, Issue 2.



Ward, B., & Verrinder, G. 'Young people and alcohol misuse: how can nurses use the Ottawa Charter for Health Promotion?', *Australian Journal of Advanced Nursing* (Online), vol. 25, no. 4, Jun 2008. pp. 114–119.

Treatment for alcohol dependence

Adamson, Simon J.; Sellman, J. Douglas. (July 2008) *Five-year outcomes of alcohol-dependent persons treated with motivational enhancement*, *Journal of Studies on Alcohol and Drugs* 69:4, pp. 589–593.

Chenhall, R. (2007) *Benelong's Haven: recovery from alcohol and drug abuse within an Aboriginal Australian residential treatment centre*, Carlton Vic: Melbourne University Publishing.

Garbutt, James C. (January 2009) *The state of pharmacotherapy for the treatment of alcohol dependence*, *Journal of Substance Abuse Treatment* 36:1, pp. S15–S23.

Hadland, Scott E.; Kerr, Thomas; Li, Kathy; Montaner, Julio S.; Wood, Evan. (April 2009) *Access to drug and alcohol treatment among a cohort of street-involved youth*, *Drug and Alcohol Dependence* 101:1–2, pp. 1–7.

Hillemacher, Thomas; Bleich, Stephen. (May/June 2008) *Neurobiology and treatment in alcoholism – recent findings regarding Lesch's typology of alcohol dependence*, *Alcohol and Alcoholism* 43:3, pp. 341–346.

Imel, Zac E.; Wampold, Bruce E.; Miller, Scott D. (December 2008) *Distinctions without a difference: direct comparisons of psychotherapies for alcohol use disorders*, *Psychology of Addictive Behaviors* 22:4, pp. 533–543.

Indig, Devon; Copeland, Jan; Conigrave, Katherine M. (2008) *Young people who attend specialist alcohol treatment: who are they and do they need special treatment?* *Australian and New Zealand Journal of Public Health* 32:4, pp. 336–340.

Kelly, John Francis; Magill, Molly; Stout, Robert Lauren. (June 2009) *How do people recover from alcohol dependence? A systematic review of the research on mechanisms of behavior change in Alcoholics Anonymous*, *Addiction Research & Theory* 17:3, pp. 236–259.

Leeman, Robert F.; Palmer, Rebekka S.; Corbin, William R.; Romano, Denise M.; Meandzija, Boris; O'Malley, Stephanie S. (August 2008) *A pilot study of naltrexone and BASICS for heavy drinking young adults*, *Addictive Behaviors* 33:8, pp. 1048–1054.

Lieberman, Daniel Z.; Huang, Suena W. (March 2008) *A technological approach to reaching a hidden population of problem drinkers*, *Psychiatric Services* 59:3, pp. 297–303.

Neto, Domingos; Lambaz, Rita; Aguiar, Pedro; Chick, Jonathan. (November/December 2008) *Effectiveness of sequential combined treatment in comparison with treatment as usual in preventing relapse in alcohol dependence*, *Alcohol and Alcoholism* 43:6, pp. 661–668.

Silins, Edmund; Sannibale, Claudia; Larney, Sarah; Wodak, Alex; Mattick, Richard. (July 2008) *Residential detoxification: essential for marginalised, severely alcohol-and drug-dependent individuals*, *Drug and Alcohol Review* 27:4, pp. 414–419.

Simpson, M., Copeland, J., & Lawrinson, P. *The Australian Alcohol Treatment Measure (AATOM-C): findings of the 12-month feasibility study*. Sydney: National Drug and Alcohol Research Centre. 2008.

Spooner, Catherine; Dadich, Ann. (April 2008) *Non-government organisations in the alcohol and other drugs sector: issues and options for sustainability*, Civic Square: Australian National Council on Drugs.

Thush, Carolien; Wiers, Reinout W.; Moerbeek, Mirjam; Ames, Susan L.; Grenard, Jerry L.; Sussman, Steve; Stacy, Alan W. (March 2009) *Influence of motivational interviewing on explicit and implicit alcohol-related cognition and alcohol use in at-risk adolescents*, *Psychology of Addictive Behaviors* 23:1, pp. 146–151.



Tucker, J. A., Foushee, H. R., & Simpson, C. A. 'Increasing the appeal and utilization of services for alcohol and drug problems: what consumers and their social networks prefer', *International Journal of Drug Policy*, vol. 20, no. 1, Jan 2009. pp. 76–84.

Workplaces

Heiler, Kathryn. (2008) *Drugs and alcohol management and testing standards in Australian workplaces: avoiding that "morning after" feeling*, (Sydney): Australian Centre for Industrial Relations Research and Training (ACIRRT).

Marchand, A. 'Alcohol use and misuse: what are the contributions of occupation and work organization conditions?', *BMC Public Health*, vol. 8, 2008. p. 333.

Webb, G., Shakeshaft, A., Sanson–Fisher, R., & Havard, A. (2009) *A systematic review of work-place interventions for alcohol-related problems*, *Addiction*, 104:3, pp. 365–377.

New technology based interventions

Bewick, B. M., Trusler, K., Barkham, M., Hill, A. J., Cahill, J., & Mulhern, B. 'The effectiveness of web-based interventions designed to decrease alcohol consumption – a systematic review. (Review) (42 refs)', *Preventive Medicine*, vol. 47, no. 1, Jul 2008. pp. 17–26.

Bewick, B. M., Trusler, K., Mulhern, B., Barkham, M., & Hill, A. J. 'The feasibility and effectiveness of a web-based personalised feedback and social norms alcohol intervention in UK university students: a randomised control trial', *Addictive Behaviors*, vol. 33, no. 9, Sep 2008. pp. 1192–1198.

Croom, K., Lewis, D., Marchell, T., Lesser, M. L., Reyna, V. F., Kubicki–Bedford, L., Feffer, M., & Staiano–Coico, L. 'Impact of an online alcohol education course on behavior and harm for incoming first-year college students: short-term evaluation of a randomized trial', *Journal of American College Health*, vol. 57, no. 4, Jan 2009. pp. 445–454.

Cunningham, John A.; Mierlo, Trevor Van. (January 2009) *Methodological issues in the evaluation of Internet-based interventions for problem drinking*, *Drug and Alcohol Review* 2:1, pp. 12–17.

Doumas, D. M., McKinley, L. L., & Book, P. 'Evaluation of two Web-based alcohol interventions for mandated college students', *Journal of Substance Abuse Treatment*, vol. 36, no. 1, Jan 2009. pp. 65–74.

Elliott, J. C., Carey, K. B., & Bolles, J. R. 'Computer-based interventions for college drinking: a qualitative review. (Review) (41 refs)', *Addictive Behaviors*, vol. 33, no. 8, Aug 2008. pp. 994–1005.

Hallett, J., Maycock, B., Kypri, K., Howat, P., & McManus, A. 'Development of a Web-based alcohol intervention for university students: processes and challenges', *Drug and Alcohol Review*, vol. 28, no. 1, Jan 2009. pp. 31–39.

Kauer, S. D., Reid, S. C., Sanci, L., & Patton, G. C. (January 2009) *Investigating the utility of mobile phones for collecting data about adolescent alcohol use and related mood, stress and coping behaviours: lessons and recommendations*, *Drug and Alcohol Review* 28:1, pp. 25–35.

Kay–Lambkin, Frances J.; Baker, Amanda L.; Lewin, Terry J.; Carr, Vaughan J. (March 2009) *Computer-based psychological treatment for comorbid depression and problematic alcohol and/or cannabis use: a randomized controlled trial of clinical efficacy*, *Addiction* 104:3, pp. 378–388.

Kypri, K., & Lee, N. 'New technologies in the prevention and treatment of substance use problems. -editorial-', *Drug and Alcohol Review*, vol. 28, no. 1, Jan 2009. pp. 1–2.

LaBrie, J. W., Hummer, J. F., Huchting, K. K., & Neighbors, C. 'A brief live interactive normative group intervention using wireless keypads to reduce drinking and alcohol consequences in college student athletes', *Drug and Alcohol Review*, vol. 28, no. 1, Jan 2009. pp. 40–47.



Schinke, S. P., Cole, K. C., & Fang, L. 'Gender-specific intervention to reduce underage drinking among early adolescent girls: a test of a computer-mediated, mother-daughter program', *Journal of Studies on Alcohol & Drugs*, vol. 70, no. 1, Jan 2009. pp. 70–77.

Swan, Amy J.; Tyssen, Eric G. (January 2009) Enhancing treatment access: evaluation of an Australian web-based alcohol and drug counselling initiative, *Drug and Alcohol Review* 2:1, pp. 48–53.

Vogl, Laura; Teeson, Maree; Andrews, Gavin; Bird, Kevin; Steadman, Bronwyn; Dillon, Paul. (April 2009) A computerized harm minimization prevention program for alcohol misuse and related harms: randomized controlled trial, *Addiction* 104:4, pp. 564–575.



7. Altering the drinking context

Licensed Venues

Clapp, John D.; Reed, Mark B.; Min, Jong W.; Shillington, Audrey M.; Croff, Julie M.; Holmes, Megan R.; Trim, Ryan S. (May 2009) *Blood alcohol concentrations among bar patrons: a multi-level study of drinking behavior*, *Drug and Alcohol Dependence* 101:3, pp. 41–48.

French, Michael T.; Maclean, Johanna Catherine; Ettner, Susan L. (July 2008) *Drinkers and bettors: investigating the complementarity of alcohol consumption and problem gambling*, *Drug and Alcohol Dependence* 96:1–2, pp. 155–164.

Goodsite, Billie; Klear, Lacey; Rosenberg, Harold. (2008) 'The impact of behavioral signs of intoxication on bartender service'. *Drugs: education, prevention and policy*, 15:6, 545–551.

Graham, Kathryn. (March 2009) *They fight because we let them! Applying a situational crime prevention model to barroom violence*, *Drug and Alcohol Review* 28:2, pp. 103–109.

Greenaway, J. 'Agendas, venues and alliances: new opportunities for the alcohol control movement in England', *Drugs: education, prevention and policy* 2008, 15:5, 487–501.

Hawkins, Nathan; Sanson–Fisher, Rob; Shakeshaft, Anthony; Webb, Gloria. (2009) *Differences in licensee, police and public opinions regarding interventions to reduce alcohol-related harm associated with licensed premises*, *Australian and New Zealand Journal of Public Health* 33:2, pp. 160–166.

Kerr, K., & Chinnock, P. *Interventions in the alcohol server setting for preventing injuries*. *Cochrane Database of Systematic Reviews* 2008, Issue 3.

Lee, Juliet P.; Antin, Tamar M. J.; Moore, Roland S. (Spring 2008) *Social organization in bars: implications for tobacco control policy*, *Contemporary Drug Problems* 35:1, pp. 59–98.

McIlwain, G., & Homel, R. 'Sustaining a reduction of alcohol related harms in the licensed environment: a practical experiment to generate new evidence' Griffith University, 2009.

Quigley, P., Lynch, D. M., Little, M., Murray, L., Lynch, A.-M., & O'Halloran, S. J. (2009) *Prospective study of 101 patients with suspected drink spiking*, *Emergency Medicine Australasia* 21, pp. 222–228.

Social Contexts

Carrigan, Maureen H.; Ham, Lindsay S.; Thomas, Suzanne E.; Randall, Carrie L. (September 2008) *Alcohol outcome expectancies and drinking to cope with social situations*, *Addictive Behaviors* 33:9, pp. 1162–1166.

Gueguen, N., Jacob, C., Le Guellec, H., Morineau, T., & Lourel, M. (2008) *Sound level of environmental music and drinking behaviour: a field experiment with beer drinkers*, *Alcoholism: Clinical and Experimental Research*.

Homish, Gregory G.; Leonard, Kenneth E. (November 2008) *The social network and alcohol use*, *Journal of Studies on Alcohol and Drugs* 69:6, pp. 906–914.

Room, R., & Livingston, M. 'Does it matter where the drinking is, when the object is getting drunk?(comment)', *Addiction*, vol. 104, no. 1, Jan 2009. pp. 10–11.

Wells, S., Graham, K., & Purcell, J. 'Policy implications of the widespread practice of 'pre-drinking' or 'pre-gaming' before going to public drinking establishments: are current prevention strategies backfiring?(see comment)', *Addiction*, vol. 104, no. 1, Jan 2009. pp. 4–9.



Local Communities

Rossmannith, A. 'Local Government: cleaning up alcohol's mess'. *Of Substance* 2009. Vol 7(1) pp. 10–12.

Theall, K. P., Scribner, R., Cohen, D., Bluthenthal, R. N., Schonlau, M., & Farley, T. A. 'Social capital and the neighborhood alcohol environment', *Health & Place*, vol. 15, no. 1, Mar 2009. pp. 323–332.

Truong, K. D., & Sturm, R. 'Alcohol environments and disparities in exposure associated with adolescent drinking in California', *American Journal of Public Health*, vol. 99, no. 2, Feb 2009. pp. 264–270.

Sport Settings

Grace, J., Moore, D., & Northcote, J. *Alcohol, risk and harm reduction: Drinking among young adults in recreational settings in Perth*. National Drug Research Institute, Curtin University of Technology, Perth. 2009.

Priest, N., et al. *Policy interventions implemented through sporting organisations for promoting healthy behaviour change*. *Cochrane Database of Systematic Reviews* 2008, Issue 3.



8. Regulating promotions

Advertising

Ad News, 'Australia's Top Advertisers 2008', in Ad News. 2009, Nielsen Research Pty Ltd: Sydney.

Alcohol Beverages Advertising Code, 'Annual report 2006–07'. 2008, Alcohol Beverages Advertising Code.

Anderson, P., de Bruijn, A., Angus, K., Gordon, R., & Hastings, G. 'Impact of Alcohol Advertising and Media Exposure on Adolescent Alcohol Use: A Systematic Review of Longitudinal Studies' *Alcohol and Alcoholism* 2009 44: 229–243.

Cousins, K., & Kypri, K. 'Alcohol advertising in the New Zealand university student press', *Drug & Alcohol Review*, vol. 27, no. 5, Sep 2008. pp. 566–569.

Fielder, L., Donovan, R. J., & Ouschan, R. 'Exposure of children and adolescents to alcohol advertising on Australian metropolitan free-to-air television'. *Addiction* 2009, 104, 1157–1165.

Gunter, Barrie; Hansen, Anders; Touri, Maria. (January 2008) *The representation and reception of meaning in alcohol advertising and young people's drinking*, Leicester: University of Leicester.

Jernigan, D. H. '(Commentary) Alcohol advertising regulation: where to from here?' *Addiction* 2009. 104, 1166–1167.

Jones, S. C., Hall, D., & Munro, G. 'How effective is the revised regulatory code for alcohol advertising in Australia?', *Drug & Alcohol Review*, vol. 27, no. 1, Jan 2008. pp. 29–38.

Kwate, N., & Meyer, I. H. Association between residential exposure to outdoor alcohol advertising and problem drinking among African American women in New York City *American Journal of Public Health*, 99 (2) : 228–230, Spring 2009.

Scott, M. M., Cohen, D. A., Schonlau, M., Farley, T. A., & Bluthenthal, R. N. 'Alcohol and tobacco marketing: evaluating compliance with outdoor advertising guidelines', *American Journal of Preventive Medicine*, vol. 35, no. 3, Sep 2008. pp. 203–209.

Ministerial Council on Drug Strategy (MCDS). 'Communiqué 24 April 2009'. Canberra: MCDS.

Senate Community Affairs Committee. 'Inquiry into Alcohol Toll Reduction Bill 2007 (2008) Final Report'. Commonwealth of Australia 2008. 18 June 2008.

Simon, M. 'Reducing youth exposure to alcohol ads: targeting public transit', *Journal of Urban Health*, vol. 85, no. 4, Jul 2008. pp. 506–516.

Smith, LA., & Foxcroft, D. R. The effect of alcohol advertising, marketing and portrayal on drinking behaviour in young people: a systematic review of prospective cohort studies. *BMC Public Health*, 9: 51, 6 Feb.

Winter, M. V., Donovan, R. J., & Fielder, L. J. 'Exposure of children and adolescents to alcohol advertising on television in Australia', *Journal of Studies on Alcohol & Drugs*, vol. 69, no. 5, Sep 2008. pp. 676–683.

Promotions In Diverse Media

Cin, Sonya Dal; Worth, Keilah A.; Dalton, Madeline A.; Sargent, James D. (December 2008) Youth exposure to alcohol use and brand appearances in popular contemporary movies, *Addiction* 103:12, pp. 1925–1932.

Clegg Smith, K., Twum, D., & Carlson, Gielen A. 'Media Coverage of Celebrity DUIs: teachable moments or problematic social modeling?' *Alcohol and Alcoholism* 2009 44: 256–260.



Donovan, Robert J.; Fielder, Lynda; Donovan, Patrick; Handley, Claire. (May 2009)

Is trivialisation of alcohol consumption a laughing matter?: alcohol incidence in a metropolitan daily newspaper's comic strips, *Drug and Alcohol Review* 28:3, pp. 257–262.

Engels, R. C. M. E., Hermans, R., van Baaren, R. B., et al. 'Alcohol Portrayal on Television Affects Actual Drinking Behaviour'. *Alcohol and Alcoholism*, 2009. 44(3): pp. 244–249.

Henriksen, Lisa; Feighery, Ellen C.; Schleicher, Nina C.; Fortmann, Stephen P. Receptivity to alcohol marketing predicts initiation of alcohol use, *Journal of Adolescent Health* 2008. 42:1, pp. 28–35.

Jernigan, D. *Intoxicating brands* *Multinational Monitor*, 29 (1) : 23–27, Jul/Aug 2008.

Jernigan, D. H. 'Alcohol-branded merchandise: the need for action.(comment)', *Archives of Pediatrics & Adolescent Medicine*, vol. 163, no. 3, Mar 2009. pp. 278–279.

McClure, A., Stoolmiller, M., Tanski, S., et al., 'Alcohol-Branded Merchandise and Its Association With Drinking Attitudes and Outcomes in US Adolescents'. *Archives of Pediatrics & Adolescent Medicine*, 2009. 163(3): pp. 211–217.

McCreanor, T., Barnes, H. M., Kaiwai, H., Borell, S., & Gregory, A. 'Creating intoxicogenic environments: marketing alcohol to young people in Aotearoa New Zealand', *Social Science & Medicine*, vol. 67, no. 6, Sep 2008. pp. 938–946.

Russell, C. A., & Russell, D. W. *Alcohol messages in prime-time television series* *Journal of Consumer Affairs*, 43 (1) : 108–128, Spring 2009.

Engels, Rutger, C. M. E.; Hermans, Roe; van Baaren, Rick B.; Hollenstein, Tom; Bot, Sander M. 'Alcohol Portrayal on Television Affects Actual Drinking Behaviour'. *Alcohol and Alcoholism*. 2009 44: 244–249.

Science Group of the European Alcohol and Health Forum ((2008)) *Does marketing communication impact on the volume and patterns of consumption of alcoholic beverages, especially by young people? – a review of longitudinal studies*, (Brussels); European Alcohol and Health Forum.

Van Den, B. H., Simons, N., & Gorp, B. V. 'Let's drink and be merry: the framing of alcohol in the prime-time American youth series *The OC*', *Journal of Studies on Alcohol & Drugs*, vol. 69, no. 6, Nov 2008. pp. 933–940.

Sport Settings

Jones, S. C., Phillipson, L., & Lynch, M. Centre for Health Behaviour & Communication Research. University of Wollongong (2006) *Alcohol and sport: can we have one without the other?* Wollongong: University of Wollongong.

Nicholson, M., & Hoye, R. 'Reducing adolescents' exposure to alcohol advertising and promotion during televised sports', *JAMA*, vol. 301, no. 14, 8 Apr 2009. pp. 1479–1482.

O'Brien, K. S., & Kypri, K. 'Alcohol industry sponsorship and hazardous drinking among sportspeople'. *Addiction*, 2008. 103: pp. 1961–1966.

Rehm, J., & Kanteres, F. 'Alcohol and sponsorship in sport: some much needed evidence in an ideological discussion'. *Addiction* 2008, 103, 1967–1968.



9. Education and persuasion

Youth & Family

Beatty, Shelley E.; Cross, Donna S.; Shaw, Therese M. (November 2008) *The impact of a parent-directed intervention on parent-child communication about tobacco and alcohol*, *Drug and Alcohol Review* 27:6, pp. 591–601.

Dillon, Paul. (2009) *Teenagers, alcohol and drugs: what your kids really want and need to know about alcohol and drugs*, Crows Nest NSW: Allen & Unwin.

Eden, Rina D.; Colder, Craig; Edwards, Ellen P.; Leonard, Kenneth E. (March 2009) *A longitudinal study of social competence among children of alcoholic and nonalcoholic parents: role of parental psychopathology, parental warmth, and self-regulation*, *Psychology of Addictive Behaviors* 23:1, pp. 36–46.

Epstein, Jennifer A.; Griffin, Kenneth W.; Botvin, Gilbert J. (May 2008) *A social influence model of alcohol use for inner-city adolescents: family drinking, perceived drinking norms, and perceived social benefits of drinking*, *Journal of studies on Alcohol and Drugs* 69:3, pp. 397–405.

Fleming, M. F., Lund, M. R., Wilton, G., Landry, M., & Scheets, D. 'The Healthy Moms Study: the efficacy of brief alcohol intervention in postpartum women', *Alcoholism: Clinical & Experimental Research*, vol. 32, no. 9, Sep 2008. pp. 1600–1606.

Hanewinkel, R., Morgenstern, M., Tanski, S. E., & Sargent, J. D. 'Longitudinal study of parental movie restriction on teen smoking and drinking in Germany', *Addiction*, vol. 103, no. 10, Oct 2008. pp. 1722–1730.

Hawkins, J. David; Brown, Eric C.; Oesterle, Sabrina; Arthur, Michael W.; Abbott, Robert D.; Catalano, Richard F. (2008) *Early effects of*

Communities that Care on targeted risks and initiation of delinquent behavior and substance use, *Journal of Adolescent Health* 43:3, pp. 15–22.

Hutchinson, D., Maloney, E., Vogl, L., & Mattick, R. 'Adolescent drinking: the influence of parental attitudes, modeling and alcohol supply', *In-Psych*, vol. 30, no. 5, Oct 2008. pp. 12–13.

Johnson, Patrick; Stone, Rachel. (2009) *Parental alcoholism and family functioning: effects on differentiation levels of young adults*, *Alcoholism Treatment Quarterly* 27:1, pp. 3–18.

Keller, Peggy S.; El-Sheikh, Mona; Keiley, Margaret; Liao, Pei-Ju. (March 2009) *Longitudinal relations between marital aggression and alcohol problems*, *Psychology of Addictive Behaviors* 23:1, pp. 2–13.

King, Serena M.; Keyes, Margaret; Malone, Stephen M.; Elkins, Irene; Legrand, Lisa N.; Iacono, William G.; McGue, Matt. (April 2009) *Parental alcohol dependence and the transmission of adolescent behavioral disinhibition: a study of adoptive and non-adoptive families*, *Addiction* 104:4, pp. 578–586.

Koutakis, N., Stattin, H., & Kerr, M. 'Reducing youth alcohol drinking through a parent-targeted intervention: the Orebro Prevention Program', *Addiction*, vol. 103, no. 10, Oct 2008. pp. 1629–1637.

Smit, E., Verdurmen, J., Monshouwer, K., & Smit, F. 'Family interventions and their effect on adolescent alcohol use in general populations: a meta-analysis of randomized controlled trials', *Drug & Alcohol Dependence*, vol. 97, no. 3, 1 Oct 2008. pp. 195–206.

Tucker, J. S., Ellickson, P. L., & Klein, D. J. 'Growing up in a permissive household: what deters at-risk adolescents from heavy drinking?', *Journal of Studies on Alcohol & Drugs*, vol. 69, no. 4, Jul 2008. pp. 528–534.



School And University Settings

McBride, N. (October 2008) *The School Health and Alcohol Harm Reduction Project (SHAHRP). An evidence-based program to reduce alcohol related harm in young people*, Perth: National Drug Research Institute.

Newton, N. C., Vogl, L. E., Teesson, M., & Andrews, G. 'CLIMATE Schools: alcohol module: cross-validation of a school-based prevention programme for alcohol misuse', *Australian and New Zealand Journal of Psychiatry*, vol. 43, no. 3, Mar 2009. pp. 201–207.

Stafstrom, M., & Ostergren, P. O. 'A community-based intervention to reduce alcohol-related accidents and violence in 9th grade students in southern Sweden: the example of the Trelleborg project', *Accident Analysis & Prevention*, vol. 40, no. 3, May 2008. pp. 920–925.

Turner, J., Perkins, H. W., & Bauerle, J. 'Declining negative consequences related to alcohol misuse among students exposed to a social norms marketing intervention on a college campus', *Journal of American College Health*, vol. 57, no. 1, Jul 2008. pp. 85–94.

White, H. R., Fleming, C. B., Kim, M. J., Catalano, R. F., & McMorris, B. J. 'Identifying two potential mechanisms for changes in alcohol use among college-attending and non-college-attending emerging adults', *Developmental Psychology*, vol. 44, no. 6, Nov 2008. pp. 1625–1639.

Zakocs, R. C., Tiwari, R., Vehige, T., & DeJong, W. 'Roles of organizers and champions in building campus-community prevention partnerships', *Journal of American College Health*, vol. 57, no. 2, Sep 2008. pp. 233–241.

Product Labelling

Australia and New Zealand Food Regulation Ministerial Council (ANZFRMC), 'Joint Communique 1 May 2009': Canberra.

Jones, S. C., & Gregory, P. 'The impact of more visible standard drink labelling on youth alcohol consumption: helping young people drink (ir) responsibly?' *Drug and Alcohol Review* 2009, 28, pp. 230–234.

Drinking Guidelines

Heather, N. 'The Importance of Keeping Regular: accurate guidance to the public on low-risk drinking levels'. *Alcohol Alcohol*. 2009 44: 226–228.

Martin, G. 'Truth in drink?: lobbying on alcohol guidelines and labelling', *Ethical Investor* (Maroubra no. 77, Jun 2008. pp. 30–33.

Moore, E., Coffey, C., Carlin, J., et al., 'Assessing alcohol guidelines in teenagers: results from a 10-year prospective study'. *Australia and New Zealand Journal of Public Health*, 2009. 33(2): pp. 154–159.

National Health and Medical Research Council. 'Australian guidelines to reduce health risks from drinking alcohol'. 2009, National Health and Medical Research Council: Canberra.

Rehm, J. T., Room, R., & Taylor, B. 'Method for moderation: measuring lifetime risk of alcohol-attributable mortality as a basis for drinking guidelines', *International Journal of Methods in Psychiatric Research*, vol. 17, no. 3, 2008. pp. 141–151.

Roche, A. M. 'Making sense of Australia's alcohol guidelines'. National Centre for Education and Training on Addiction (NCETA) at Flinders University. Adelaide. 2009.

Whittingham, J. R., Ruiters, R. A., Castermans, D., Huiberts, A., & Kok, G. 'Designing effective health education materials: experimental pre-testing of a theory-based brochure to increase knowledge', *Health Education Research*, vol. 23, no. 3, Jun 2008. pp. 414–426.



Community Attitudes

Houben, Katrijn; Wiers, Reinout W. (August 2008) *Implicitly positive about alcohol? Implicit positive associations predict drinking behavior*, *Addictive Behaviors* 33:8, pp. 979–986.

Skager, R. 'Having fun and defying adults: speculations on why most young people ignore information on the dangers of drinking alcohol'. *Addiction* 2009, 104 (4): 576–577.

Social Research Centre (April 2008) *National Drugs Campaign: evaluation of phase three*, North Melbourne: The Social Research Centre.

Stead, M., Gordon, R., Holme, I., Moodie, C., Hastings, G., & Angus, K. 'Changing attitudes, knowledge and behaviour: a review of successful initiatives'. York: Joseph Rowntree Foundation. 2009.

Wilkinson, C., Room, R., & Livingston, M. 'Mapping Australian public opinion on alcohol policies in the new millennium', *Drug & Alcohol Review* no. Published online 11 Feb 2009, 2009.

