

Ministerial Drug and Alcohol Forum
Department of Health
By email: nationaldrugstrategy@health.gov.au

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Consultation on Draft National Alcohol Strategy 2018-2026

Alcohol Beverages Australia (ABA) welcomes the opportunity to provide input into the online submission process to help inform the revision of the Draft National Alcohol Strategy 2018-2026 (Draft NAS).

While there are elements of the Draft NAS that are strongly supported by industry, the research and evidence base throughout the document is academically inadequate and requires comprehensive re-examination. The Draft NAS neglects to provide evidence for some of the most important premises, presented in the document to establish the policy context also fails to reflect Australia is already exceeding its obligations under World Health Organisation guidelines.

ABA recognises that grossly excessive alcohol consumption can lead to harm. However, as outlined by ABA's submission, the key indicators related to alcohol consumption in Australia have been continuing on a positive trajectory of increasingly moderate consumption for well over a decade. Australians are drinking less frequently and when they do drink are doing so in more sensibly. There has also been consistent improvement in key indicators when it comes to both underage and overall alcohol consumption in Australia. The evidence shows that Australia has established a significant shift in attitudes when it comes to alcohol and the Draft NAS appears to have overlooked this.

Industry stakeholders look forward to seeing the evidence provided to the consultation process reflected in the next revision of the NAS. Through ABA, they welcome the opportunity to partner with government to build on the extensive work of both industry and government in understanding and minimising alcohol related harm in Australia.

Should you wish to discuss this submission further, please do not hesitate to contact me on 02 8754 7000 or fergus@alcoholbeveragesaustralia.org.au.

Yours sincerely



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Executive Summary

Alcohol Beverages Australia (ABA) is the peak body representing Australia's 15.5 million adult drinkers and the proud industry manufacturers, distributors and retailers that operate legally and responsibly across Australia.

In this submission, ABA responds to the Draft National Alcohol Strategy (Draft NAS) and provides detailed evidence to support its contentions, outlined below. It also provides a set of recommendations to address the problems of the Draft NAS so that it may be strengthened to provide a robust, evidence based and effective framework to guide alcohol issues management and regulation in Australia.

There are elements of the Draft NAS that are strongly supported by industry – particularly those outlined in Priority Area 3, which specifically seek to help individuals with substance abuse problems find help, appropriate support and treatment. These programs are working now and should be strengthened and supported.

The Research and Evidence Base throughout the draft NAS is academically inadequate and requires re-examining. The Draft NAS does not provide evidence for some of the most important premises presented in the document to establish the policy context. It is ABA's recommendation that given the importance of the NAS, the evidence base should be infallible and demonstrate appropriate scientific rigour. ABA recommends that MDAF reconsider the evidence base used by the Draft NAS and undertake redrafting of the NAS in light of the evidence in this submission.

The Draft NAS fails to acknowledge or reflect Australia is already exceeding its obligations under World Health Organisation guidelines. ABA recommends that given Australia is currently exceeding commitments to the WHO Guidelines and other international instruments, the NAS should acknowledge Australia's leadership and progress internationally.

Alcohol-related key indicators in Australia show continued decline in harms. Despite several decades of positive drinking trends in Australia, the Draft NAS has a tone to it that suggests harms are increasing.

There is scant attention or recognition of any positive contribution alcohol makes to society and instead an almost exclusive focus on the harms which seeks to elevate them to a level of national emergency that doesn't reflect the current reality of most Australians' relationship with alcohol.

In order to be able to assess the required policy measures to reduce alcohol related harm it is important to understand the policy context through the key indicators relating to alcohol harms. Without considering this context, there is no objective means to assess the policy positions required.

In light of the positive trends for the reduction of alcohol related harms in Australia, ABA recommends that MDAF acknowledge these trends and ensure the policy options in the NAS reflect the improvements in the current alcohol harm climate in Australia.

The Draft NAS provides no evidence to justify the policy shift or that the policy shift will result in achieving a reduction in alcohol related harm. Comparing the key indicators of harmful alcohol consumption patterns in Australia at the time the 2006 NAS was developed compared to the current patterns, there has been a significant positive change.

The draft NAS fails to acknowledge that evidence-based targeted measures produce more reliable results than Population Wide Measures ABA encourages governments to invest in evidence-based targeted measures to reduce alcohol related harms, because a blanket approach to alcohol policy does not provide the solutions or support needed at a localised or individual level.

The policy initiatives outlined in the Draft NAS focus on population wide measures. However, the evidence shows them to be ineffective in reducing alcohol-related harm.

Given the achievements of successful targeted measures and the ineffectiveness of population wide measures, the NAS should turn its focus to targeted measures. ABA recommends that MDAF, industry and health practitioners work together to formulate targeted policy options.

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Alcohol Beverages Australia

ABA is the peak body representing Australia's 15.5 million adult drinkers and the proud industry manufacturers, distributors and retailers that operate legally and responsibly across Australia. Its role is to help organise a balanced management of alcohol regulation to provide the stability and certainty needed to drive growth and investment across our industry-while at the same time acknowledging and working with all stakeholders to minimise the harms associated with alcohol misuse.

The alcohol beverages industry continues to be a significant contributor to Australia's employment, economy, tourism image and tax revenue. This growing and sustainable industry provides hundreds of thousands of jobs, and much needed economic investment and community support throughout Australia's country towns, city suburbs and everywhere in between.

The industry also plays a key role underpinning the Australian entertainment, food and tourism sectors and helps raise national and international awareness of our country as a destination, courtesy of its multi-award-winning wines, beers and spirits that appear on wine lists, bar and cocktail menus and in liquor stores the world over. The export value of our alcoholic beverages has been steadily increasing in recent years, particularly in wine exports, with Australia now the world's fifth biggest exporter of wine.

International tourists identify 'great food, wine, local cuisine and produce' as a major reason for visiting Australia. Tourism Research Australia estimated that in 2014-15 there were 15.8 million domestic visits and 44.2 million international visits associated with Australian wineries. Overall wine related visitor expenditure totalled \$9.2 billion. The growth in craft breweries and distillers – particularly in the past five years – only lifts this figure higher.

ABA advocates for evidence based regulation and policies which target specific at-risk groups and those with substance abuse problems. We believe initiatives that seek to reduce overall consumption only serve to penalise the majority who drink responsibly while largely being ineffective at curbing underage and harmful consumption.

Aspects of the draft NAS that will reduce alcohol-related harm

There are elements of the Draft NAS that are strongly supported by industry – particularly those outlined in Priority Area 3, which specifically seek to help those individuals with substance abuse problems find help, support and treatment.

Priority Area 3 outlines the following solutions that ABA fully supports:

- Effective treatment including outpatient, inpatient and community based treatment services
- Medication assisted treatment for alcohol dependence
- Supporting frontline service providers to deliver early and opportunistic brief interventions
- Using technology to provide information about access to other services, with the ability to respond when a person decides to seek help in a timely manner
- The provision of appropriate alcohol-related harm and risk information during pregnancy and breastfeeding
- Services and support for adults with alcohol-induced brain injury (including FASD)
- Supporting family and peers to have access to evidence-based information about risky alcohol consumption

The Draft NAS also calls for building community knowledge through campaigns to reduce alcohol related harm. ABA supports targeted campaigns and messaging as they provide a means to educate and raise awareness about alcohol related issues. For example, DrinkWise successfully undertook the *Kids Absorb Your Drinking* campaign as outlined by the case study below.

Case Study: DrinkWise Campaign *Kids Absorb Your Drinking*

DrinkWise

Established in 2005 by the alcohol industry, DrinkWise Australia is an independent, not-for-profit organisation. DrinkWise's primary focus is to help bring about a healthier and safer drinking culture in Australia.

DrinkWise aims to:

- Promote a generational change in the way Australians consume alcohol.
- Increase the age that young Australians are introduced to alcohol, as evidence has shown that alcohol can impact the development of the adolescent brain.

To promote such significant behavioural changes, DrinkWise develops and implements a range of national information and education campaigns, as well as providing practical resources to help inform and support the community about alcohol use.

Kids Absorb Your Drinking Campaign

Kids Absorb Your Drinking marked DrinkWise's first generational change campaign. It took the form of national wide television advertisements. It was supported by online material for parents. The advertisements showed a father asking his son to fetch a beer for his father. The son morphs into an adult while fetching the beer and in turn asks his son to fetch him a beer. The eighteen month campaign represented a total investment of \$8 million.

The key to this campaign was 'holding up a mirror' to parents' drinking, to increase awareness of their impact as role models in positively influencing their children's future drinking behaviour. This represented a targeted message to those who can have a significant impact on underage drinking.



Results of the Campaign

Raising awareness of this was the major aim of *Kids Absorb Your Drinking*. The campaign sought to start conversations about this issue among spouses, family and friends – well before their own children started experimenting with alcohol.

The campaign has generated positive results, with parents indicating that they subsequently¹:

- Discussed how they drank with their partner (34%)
- Thought more about how they drank around their kids (33%)
- Talked with friends or colleagues about drinking in front of the kids (18%); and
- Discussed their consumption of alcohol with their children (24%)

Additionally, almost three in ten (28%) parents reported reducing their consumption of alcohol in front of their children. The primary reason cited for wanting to reduce consumption in front of their children was because they wanted to be a good role model (33%).

Kids Absorb Your Drinking received very high awareness and cut through with the general public. A study undertaken by Colmar Brunton Social Marketing Research indicated that it was the most recalled advertisement among all government marketing and communications in that year.

The Research and Evidence Base throughout the draft NAS is academically inadequate and requires re-examining

ABA holds serious concerns regarding the evidence base for the Draft NAS. The Draft NAS does not provide evidence for some of the most important premises presented in the document to establish the policy context.

The section titled “Harms associated with alcohol” provides a case study. Its first dot point suggests that alcohol is second only to tobacco as the contributor to Australia’s burden of disease.

The facts are as follows:

¹ DrinkWise Australia. (2017). *Kids Absorb Your Drinking*. Melbourne, Australia. Retrieved from <<https://drinkwise.org.au/wp-content/uploads/Kids-Absorb-Your-Drinking-campaign-summary.pdf>> on 1 Nov 2017.

- With infectious and communicable disease largely contained, chronic diseases are now Australia's greatest burden of disease, but not the only contributor.
- The authors of the Draft NAS should have been aware of a report written by their colleagues in AIHW and their recent 2011 Australian Burden of Disease study² which found "The five disease groups causing the most burden were cancer, cardiovascular diseases, mental & substance use disorders, musculoskeletal conditions and injuries; together, these account for 66% of the total burden. Coronary heart disease, back pain & problems, chronic obstructive pulmonary disease and lung cancer, as the leading specific diseases, contributed 18% of the total burden".
- The draft report authors should also have been aware that alcohol consumption and its contribution to the burden of disease is calculated by the NHMRC³ as accounting for 3.3 per cent of the total burden of disease and injury in Australia in 2003; 4.9 per cent in males and 1.6 per cent in females. This compared with a contribution of 7.8 per cent for tobacco smoking, 7.5 per cent for high body mass, 7.6 per cent for hypertension and 6.6 per cent for physical inactivity⁴.
- While using different methodology and attributable fractions, the AIHW 2011 study found similar: The risk factors contributing the most burden in 2011 were tobacco use (9.0%), high body mass (5.5%), alcohol use (5.1%), physical inactivity (5.0%) and high blood pressure (4.9%).

It should also be remembered that modifiable risk factors (of which harmful alcohol use is but one of 29 identified by the AIHW) were responsible for just 31% of the total disease burden. The fact alcohol finds itself in this table is the over-indexing role it plays in Injuries, rather than its significance in the big two disease groups of cancer or cardio vascular disease. While industry is not denying alcohol is a contributor in these two areas, the biggest improvement as a modifiable risk factor can largely be found by continuing to focus on road fatalities, suicides and alcohol being used or viewed as an excuse for anti-social behaviour and violence.

The relative weight of alcohol as a contributor to the burden of disease is important as it sets the context from which Governments and policy-makers seek to allocate a finite amount of taxpayers' dollars in order to achieve returns on the health of all Australians from that investment.

The second dot point also suggests that alcohol is a major cause of drug-related deaths, being "second only to tobacco" and "causing 5,500 deaths" annually. Alcohol is a legal product used by the majority of the adult population, while illicit drug use is limited to approximately 16% of the adult population⁵. For a legal product used responsibly by the vast majority of Australians, alcohol should

² Australian Institute of Health and Welfare 2016. Australian Burden of Disease Study: Impact and causes of illness and death in Australia 2011. Australian Burden of Disease Study series no. 3. BOD 4. Canberra: AIHW.

³ National Health and Medical Research Council 2009. Australian Guidelines to reduce health risks from drinking alcohol. Canberra: NHMRC.

⁴ Begg S, Vos T, Barker B, Stevenson C, Stanley L, Lopez AD 2007. The burden of disease and injury in Australia 2003. Cat. no. PHE 82. Canberra: AIHW.

⁵ Australian Institute of Health and Welfare. (2017). Illicit use of drugs. Retrieved from <<https://www.aihw.gov.au/reports-statistics/behaviours-risk-factors/illicit-use-of-drugs/overview>> on 5 Feb 2018.

have a weighted comparison to illicit drug use by the few which is on the rise and responsible for 1,808 deaths in 2016⁶.

The research relied upon to produce the “5,500 deaths attributable to alcohol” is also highly questionable. The methodology it used to determine alcohol-attributable fractions does not accord with that produced by NHMRC or AIHW and it departed from using ABS figures for overall per capita consumption and instead came up with a methodology that exaggerated AIHW survey data and wholesale sales data collection. Despite the incredibly positive reductions in alcohol-related harmful drinking that has been witnessed in the last decade, the report suggests that deaths from alcohol increased by 62 per cent over the same timeframe. Strangely, the research suggests this increase has come at a time of a 10% reduction in the total disease burden⁷, reduced drink driving fatalities⁸, reduced treatments for alcohol⁹, reduced hospital admissions for alcohol¹⁰, and reductions in alcohol-related liver disease¹¹. The supposed research fails the “pub-test” and without peer-review clearly appears to have been designed to elicit an alarmist headline rather than be regarded as reputable research which could be relied upon for the Draft NAS.

The third dot point of this section also makes sweeping statements without providing context. It claims alcohol contributes significantly to violence and assaults – including domestic, family and intimate partner.

ABA believes that alcohol should never be used as an excuse for violence. There should be no excuse and it is important that a NAS correctly provides information about this serious social issue in the correct context.

The AIHW tracks this through its National Drug Strategy Household Survey. From 2010 to 2016, it found ‘Verbal abuse’ has dropped from 25.4% to 18.7%; ‘physical abuse’ has dropped from 8.1% to 7.3% in 2016; ‘put in fear’ has dropped from 14.3% to 11.4%. Supporting this is trend data is data collected from the NSW Bureau of Crime Statistics and Research which shows domestic violence has been declining for alcohol related but increasing for non-alcohol related:

⁶ Australian Bureau of Statistics. (2017). Drug induced deaths at highest rate since late 90s. Retrieved from <[http://www.abs.gov.au/ausstats/abs@.nsf/Lookup/by%20Subject/3303.0~2016~Media%20Release~Drug%20Induced%20Deaths%20Increase%20in%202016%20\(Media%20Release\)~9](http://www.abs.gov.au/ausstats/abs@.nsf/Lookup/by%20Subject/3303.0~2016~Media%20Release~Drug%20Induced%20Deaths%20Increase%20in%202016%20(Media%20Release)~9)> on 5 Feb 2018.

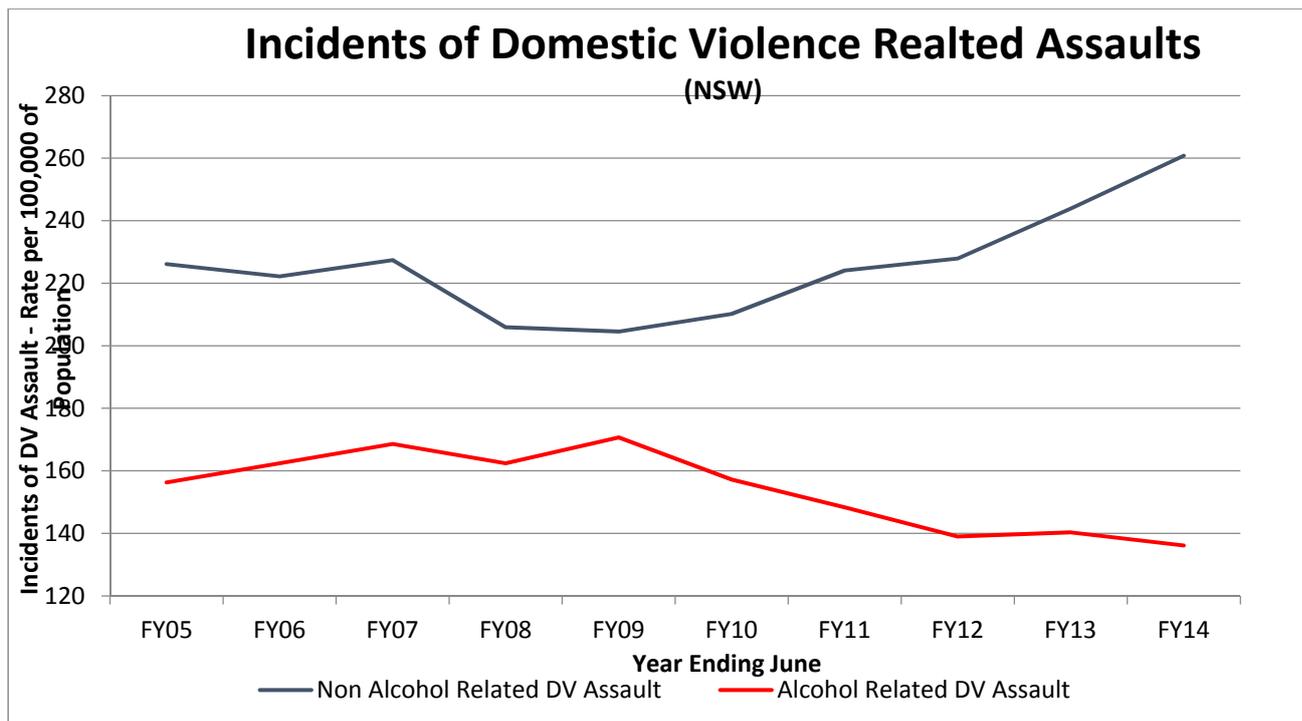
⁷ Australian Institute of Health and Welfare 2016. Australian Burden of Disease Study: Impact and causes of illness and death in Australia 2011. Australian Burden of Disease Study series no. 3. BOD 4. Canberra: AIHW.

⁸ Transport Accident Commission. (2016). Drink driving statistics. Retrieved from <<http://www.tac.vic.gov.au/road-safety/statistics/summaries/drink-driving-statistics>> on 5 Feb 2018.

⁹ Australian Institute of Health and Welfare 2014. Alcohol and other drug treatment services in Australia 2012-13. Drug treatment series 24. Cat. No. HSE 150. Canberra: AIHW.

¹⁰ Australian hospital statistics 2012–13. Australian Institute of Health and Welfare 2014. Health services series no. 54. Cat. no. HSE 145. Canberra: AIHW.

¹¹ Australian Bureau of Statistics. (2015). Causes of Death, Australia. Cat. No. 3303.0, retrieved from <<http://www.abs.gov.au/ausstats/abs@.nsf/mf/3303.0>> on 5 Feb 2018.



While the above examples are from first three dot points, there are further examples of poor context or trend information throughout the Draft NAS.

Even more concerning is when there is no use of any evidence to support an assertion.

An example of this is where the Draft NAS states that:

There is a strong association between exposure to alcohol advertising and young people's drinking.

The Draft NAS goes on to state:

Alcohol promotion has also been associated with a range of effects, from influencing immediate decisions about brand preference, to increasing the likelihood that adolescents will start to use alcohol and to drink more if they already drink alcohol. Both the content and context of advertising and the frequency of media exposure can have an impact on attitudes and behaviours

However, there is no evidence provided to support this statement. In fact, the evidence shows that the factors which most strongly influence young people's decisions in relation to alcohol include:

- Family environment, including parent and sibling behaviour¹²
- Peer drinking behaviour¹³
- Socioeconomic status¹⁴

¹² Abar, C., Abar, B., & Turrisi, R. (2009). The impact of parental modeling and permissibility on alcohol use and experienced negative drinking consequences in college. *Addictive Behaviors*, 34(6), 542-547.

¹³ Trucco, E. M., Colder, C. R., & Wieczorek, W. F. (2011). Vulnerability to peer influence: A moderated mediation study of early adolescent alcohol use initiation. *Addictive behaviors*, 36(7), 729-736.

¹⁴ Goodman, E., & Huang, B. (2002). Socioeconomic status, depressive symptoms, and adolescent substance use. *Archives of pediatrics & adolescent medicine*, 156(5), 448-453.

- Individual characteristics and personal attitudes towards drinking¹⁵

Where references are made in the Draft NAS, the quality of those references are also of concern. It is disappointing that a document seeking to provide a national framework to prevent and minimise alcohol related harm, is sourcing newspapers and radio programs as an evidence base, as follows:

- Footnote 14: <http://www.news.com.au/lifestyle/health/booze-integral-part-of-being-australian-say-gen-y/news-story/e50285cadd39fa19aa37bbb951e6e6bd>
- Footnote 15: <http://www.heraldsun.com.au/rendezview/the-most-unaustralian-thing-you-can-do-not-drink-apparently/news-story/93a1c2e742350881117af534b5013fa9>
- Footnote 16: <http://www.abc.net.au/radionational/programs/bigideas/whats-your-relationship-with-alcohol/8663232>

Further, much of the evidence used is not recent and has not been published in a peer-reviewed journal. While there are 64 footnotes, there is only reference to 10 peer reviewed studies. Of these 10 studies, only four have been published in the last five years. In addition, there are only four papers referenced that are peer reviewed, recent and based on the Australian experience. For ease of reference we have provided a critique of these references at **Attachment A**.

When providing references to evidence it is best practice to provide references to publically available sources. It may be the case that the reference is part of a paid source, but none the less is publically available. As such it is a surprise that the Draft NAS makes reference to the Young Australians' Alcohol Reporting System (YAARS): National Report 2016/17 (Footnote 23).

ABA was not able to reconcile this reference with any publically available sources and reached out to the University of New South Wales (UNSW) for further information. UNSW confirmed that this publication is not publically available. This is despite the YAARS website indicating that the program has received government funding. ABA has asked UNSW for a copy of the report but as yet has not been given access to the document.

It is important that any government policy is transparent and open in its evidence base. Using evidence sources unavailable to the public goes against the spirit of transparency in government and erodes public faith in the process. ABA encourages MDAF to ensure that the evidence base to the Draft NAS is available to the public as a matter of best practice.

When setting the scene for the policy context, the evidence base of the Draft NAS has also missed crucial information regarding the possible health benefits of moderate alcohol consumption. Providing accurate information on the health outcomes with moderate alcohol consumption could work as encouragement for harmful drinkers to become more moderate in their habits. To aid with the inclusion of this information in the Draft NAS, ABA has provided a cross section of research at **Attachment B**.

The NAS is an important part of the overall strategy to reduce harmful alcohol consumption and is deserving of a well-considered and robust evidence base. We urge the MDAF to reconsider the evidence base for the Draft NAS with the view to including robust and credible sources of information.

¹⁵ Zimmermann P, Wittchen H, Hofler M, Pfister H, Kessler R, Lieb R. (2003). Primary anxiety disorders and the development of subsequent alcohol use disorders: a 4-year community study of adolescents and young adults. *Psychol. Med.* 33:1211–22

Recommendation

Given the importance of the NAS, the evidence base should be infallible and demonstrate appropriate scientific rigour. ABA recommends that MDAF reconsider the evidence base used by the Draft NAS and undertake redrafting of the NAS in light of the evidence in this submission.

Australia continues to fulfil its obligations under World Health Organisation guidelines

The Draft NAS makes it clear that one of the aims of the NAS is to reiterate Australia's commitment to the following:

- World Health Organisation Global Action Plan for the Prevention and Control of Non-Communicable Disease 2013-2020
- World Health Organisation Global Strategy to Reduce Harmful Use of Alcohol
- United Nations 2030 Agenda for Sustainable Development Goals

The Draft NAS does not provide any context on the operation of these international documents and has not outlined how Australia has performed in relation to these commitments. Without understanding these two critical points, it is impossible to establish the correct policy responses to satisfy these commitments.

To assist with the development of the NAS, ABA has summarised Australia's performance in relation to our commitments under each of the international plans strategies above.

World Health Organisation Global Action Plan for the Prevention and Control of Non-Communicable Disease 2013-2020

The Draft NAS specifically calls on Australia's commitment to a voluntary target of a reduction in harmful drinking as outlined in the WHO Action Plan. In relation to this target the Who Action Plan aims for a 10% relative reduction in the harmful use of alcohol as appropriate, within the national context.

In 2013 when this plan came into effect 18.2% of Australian's were drinking at lifetime risky levels. In 2016, this figure has dropped to 17.1% of the population¹⁶. This represents a decrease of 6% in harmful alcohol consumption in Australia.

A 6% decrease in harmful alcohol consumption in just three years is a significant achievement. This welcome progress indicates that Australia is moving rapidly towards meeting the target of a 10% decrease in the harmful use of alcohol by 2025.

World Health Organisation Global Strategy to Reduce Harmful Use of Alcohol¹⁷

This Strategy calls on a number of different policy measures to reduce the harmful use of alcohol. Australia has implemented the overwhelming majority of the policy options outlined in this Strategy.

It is important to note that this Strategy should be read in the context of a document that is attempting to cater to a global audience, especially countries that have little or no regulation of the

¹⁶ Australian Institute of Health and Welfare 2017. National Drug Strategy Household Survey 2016: detailed findings. Drug Statistics series no. 31. Cat. no. PHE 214. Canberra: AIHW.

¹⁷ World Health Organization. (2010). Global strategy to reduce the harmful use of alcohol. Retrieved from <http://www.who.int/substance_abuse/activities/gsrhua/en/> on 25 Jan 2018.

alcohol industry or do not have universal health care. To rely on it as a guiding beacon is not appropriate for Australia, since federal, state and territory government have already implemented those policy measures most relevant to Australia.

Tackling harmful alcohol consumption requires solutions that purposefully target the relatively small portion of the Australian population that drink at harmful levels. This will not be achieved by implementing every point of a global strategy without regard to the unique situation of harmful consumers in Australia. Further detail on the ineffectiveness of population wide measures can be found below.

United Nations 2030 Agenda for Sustainable Development Goals¹⁸

This Agenda comprises of 41 pages in total and contains 158 goals. The only goal to mention alcohol is the following:

Strengthen the prevention and treatment of substance abuse, including narcotic drug abuse and harmful use of alcohol.

This agenda does not provide substantive guidance on reducing harmful alcohol use. It is largely irrelevant for a developed country like Australia to reference the Agenda in its NAS.

Recommendation

Given Australia is currently exceeding commitments to the WHO Guidelines and other international instruments, the NAS should acknowledge Australia's leadership and progress internationally.

Alcohol-related key indicators in Australia show continued decline in harms

Despite several decades of positive drinking trends in Australia, the Draft NAS has a tone to it that suggests harms are increasing.

This is highlighted on page 6, a full page of 'infographics' extolling the damage alcohol has on Australia. Disappointingly, it places quite normal aspects of alcohol (such as being able to purchase a standard drink for less than 40c and the convenience of a licensed venue for every 317 people) in the same category as intimate partner violence or road fatalities.

There is scant attention or recognition of any positive contribution alcohol makes to society and instead an almost exclusive focus on the harms which seeks to elevate them to a level of national emergency that doesn't reflect the current reality of most Australians' relationship with alcohol.

In order to be able to assess the required policy measures to reduce alcohol related harm it is important to understand the policy context through the key indicators relating to alcohol related harm. Without considering this context there is no objective means to assess the policy positions required.

¹⁸ United Nations. (2016). 2030 agenda for sustainable development goals. Retrieved from <http://www.who.int/substance_abuse/activities/gsrhua/en/> on 25 Jan 2018.

Most indicators of alcohol misuse and alcohol related harm have been steadily improving.

Indicator	2004	2016	Analysis
General			
Consume alcohol daily	8.9%	5.9%	This represents a 33% decrease in the proportion of Australians who consumed alcohol on a daily basis.
Drinking at lifetime risky levels	20.8%	17.1%	Lifetime risky alcohol consumption has decreased by 18%. This is an important key indicator as it relates directly to a decrease in alcohol related harm and harmful alcohol consumption.
Drinking at single occasion risky levels	29.5%	25.5%	The proportion of the population consuming alcohol at single occasion risky levels has decreased by 14% adding to the evidence that harmful alcohol consumption has decreased significantly.
Underage Consumption			
12-17 year-olds abstaining	54.3%	81.5%	There has been a 50% increase in the proportion of young people who are abstaining from alcohol consumption. This provides strong evidence that harmful alcohol consumption (i.e. any consumption for those under 18) has decreased significantly since 2004.
Average age of first drink	14.7	16.1	This represents a 10% increase in the average age when alcohol is first consumed. Delaying alcohol consumption is another indicator that shows alcohol related harm is decreasing.
Alcohol and pregnancy			
Percentage of pregnant women who either abstain from alcohol while pregnant or reduce consumption.	96.6%*	98.8%	These statistics show improving behaviours when it comes to alcohol consumption while pregnant.

Source: National Drug Strategy Household Survey 2016.

*2007 data as 2004 data is not available for this measure.

As evidenced by the key indicators above, it is clear that the policy context today is different to that of 2004. In fact, there have been significant improvements when it comes to harmful alcohol consumption in Australia¹⁹. The data shows both a decline in the frequency of alcohol consumption coupled with a decrease in the number of people who exceed the lifetime risk guidelines, and very clearly indicates that Australians are aware of the health issues associated with excessive alcohol

¹⁹ DrinkWise Australia. (2017). Australian drinking habits: 2007 vs 2017. Melbourne, Australia. Retrieved from [<https://drinkwise.org.au/our-work/australian-drinking-habits-2007-vs-2017/#>] on 31 October 2017.

consumption. They are actively changing their behaviour, resulting in the clear majority of Australians consuming alcohol in moderation.

It is important to consider this policy context when developing the Draft NAS, as it provides the evidence base to ensure that the resulting policy is proportionate to the issues it is attempting to tackle.

With so many improvements in Australia’s drinking culture since 2004, the case for the next National Alcohol Strategy to pursue an even more punitive and restrictive suite of policies cannot be justified.

Recommendation

In light of the positive trends for the reduction of alcohol related harms in Australia, ABA recommends that MDAF acknowledge these trends. In addition, the policy options in the NAS should reflect the improvements in the current alcohol harm climate in Australia.

The evidence does not support the reductive policy shift from 2006 NAS to Draft NAS

The Draft NAS represents a considerable policy shift in the way in which harmful alcohol consumption has been approached. The table below provides an outline of some of the shifts in policy.

	NAS 2006-2009	Draft NAS 2018-2026
Overall Strategies	The NAS 2006-2009 identified drinking to excess, or intoxication, as “the issue of greatest concern in the community”. The excessive consumption of alcohol was recognised as the main cause of alcohol-related harm. The Strategy’s strategies, such as improving enforcement or increasing capacity for treatment, were targeted to address the issue of intoxication.	The draft NAS 2018-2026 placed particular emphasis on “the risks and harms associated with alcohol consumption”, as opposed to excessive alcohol consumption. The Strategy dismissed the notion that moderate alcohol consumption can be part of a healthy lifestyle and healthier communities.
Language/Tone	The NAS 2006-2009 noted that a reputation for heavy drinking has been part of Australia’s national myth, and attributed Australia’s issues with intoxication to a pervasive drunken culture. As such, the Strategy struck a conciliatory tone that the co-operation of all stakeholders are essential to set off a shift in Australia’s drinking culture and ignite debate about the role of alcohol in Australia.	The draft NAS 2018-2026 held alcohol manufacturing industry, wider retail and hospitality industries, advertising, broadcasting and sporting industries responsible and liable by recommending heavy-handed population wide strategies designed to reduce overall consumption. Alcohol promotion and advertising are especially targeted as influencing adolescents to consume alcohol, despite the fact that there has been no research showing a causal relationship between the two.

<p>Industry as a Key Stakeholder</p>	<p>The NAS 2006-2009 acknowledged the positive contribution of the alcohol industry to the broader Australian economy and workforce employment. Inter-sectoral partnerships and a balance approach to harm minimisation were advocated for in the Strategy, such as the recommendation that the alcohol beverage and hospitality industry actively address the issue of over-consumption of alcohol.</p>	<p>The draft NAS 2018-2026 did not acknowledge any industry contributions. While it recognised that coordination and collaboration was essential, it did not recognise the alcohol industry as a stakeholder in the discussion. Despite conceding that the alcohol industry and associated industries have the ability to influence drinking behaviours, the draft NAS also acknowledged that they will not be eligible for membership of the Reference Group, which aims to strengthen partnerships between key stakeholders.</p>
<p>Labelling</p>	<p>The NAS 2006-2009 advocated for the continuation of work with industry to develop labelling of alcohol products to facilitate knowledge and self-monitoring through readily seen, consistent, graphic standard drinks labelling.</p>	<p>The draft NAS 2018-2026 departed from its previous rhetoric about co-operation with industry to develop any meaningful approaches towards harm minimisation or education. The Strategy had a curt recommendation to “implement readable, impactful health-related warning labels” with no mention of self-monitoring or regulation.</p>
<p>Individual Responsibility</p>	<p>The NAS 2006-2009 emphasised private host responsibility, particularly for parents, in partnership with police, schools, local government and family groups. The Strategy noted that intoxication frequently occurs in private settings, where the behaviour is expected as a cultural norm among many groups, and is reinforced by adult behaviours.</p>	<p>The draft NAS 2018-2026 emphasised that the public are currently subjected to “widespread alcohol availability, accessibility of cheap alcohol products... and exposure to alcohol advertising and promotion” as evidence of Australia’s “alcohol culture”, despite evidence showing declining overall consumption of alcohol in the country. The Strategy also challenged the consistency of messaging across all media in relation to the harms of alcohol. This narrative strips the individual of personal responsibility and can risk harming targeted approaches designed to help individuals overcome risky drinking behaviours.</p>
<p>Monitoring and evaluation</p>	<p>The NAS 2006-2009 acknowledged the importance of building partnerships to strengthen the data collection process</p>	<p>The draft NAS 2018-2026 established relevant indicators of change to assess the success of the Strategy. In</p>

	<p>to ensure consistent monitoring and evaluation. The Strategy recommended using industry-developed indicators, such as those developed by DSICA, as a useful tool and contribution to monitoring and evaluating the Strategy.</p>	<p>two out of its four priorities, total alcohol consumption per capita was used as an indicator, despite the fact that total alcohol consumption does not relay any information about the drinking patterns or behaviours of at-risk subpopulations and paints an incomplete picture of the situation. The Strategy has also neglected to use industry-developed indicators this time around.</p>
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The Draft NAS provides no evidence to justify the policy shift or that the policy shift will result in achieving a reduction in alcohol related harm. Comparing the key indicators of harmful alcohol consumption patterns in Australia at the time that the 2006 NAS was developed compared to the current patterns, there has been a significant positive change.

Without the evidence to establish that the policy shift is either needed or effective when it comes to alcohol related harm, it is difficult to reconcile the policy shift in the Draft NAS. We urge the MDAF to reconsider the shift in the policy position of the Draft NAS in light of the current key indicators of alcohol related harm as well as the evidence surrounding the ineffectiveness of population wide measures.

In addition, there is no justification for the shift of policy in relation to the industry's role as a stakeholder in harm reduction. The Draft NAS provides no basis for the exclusion of industry. The exclusion of industry represents poor policy development and deprives the processes of the valuable contribution that industry can make in harm reduction. As such industry should be directly represented on the Alcohol Reference Group.

Recommendation

Having demonstrated the improvements in the key indicators of alcohol related harm in Australia, ABA recommends that MDAF redraft the NAS to accurately reflect the current trends in alcohol related harm as opposed to an unjustifiable shift in policy. In particular, establishing a policy base that places emphasis on harmful drinking as opposed to demonising all consumption. Industry should also be included as part of the Alcohol Reference Group.

Evidence-based targeted measures produce more reliable results than Population Wide Measures

ABA encourages governments to invest in evidence-based targeted measures to reduce alcohol related harms, because a blanket approach to alcohol policy does not provide the solutions or support needed at a localised or individual level.

The policy initiatives outlined in the Draft NAS focus on population wide measures. However, the evidence shows them to be ineffective in reducing alcohol-related harm. Rather, a mix of interventions within a balanced regulatory framework is needed.

In 2016 the journal *Alcohol and Alcoholism* published an article titled 'The weakness of stern alcohol control policies' which sought to understand if there was a relationship between population wide

alcohol policy measures and a reduction in alcohol-related harm²⁰. The study did so by looking at the relationship between three variables, namely:

- Index of severity of alcohol policy,
- Total alcohol consumption, and
- Number of disability adjusted life years (DALYs) lost due to alcohol consumption.

Data relating to these variables were studied across 30 OECD countries which included Australia, New Zealand, UK, Germany, France, USA, Canada and Denmark.

The study found that there was no significant correlation between the severity of alcohol policy and total consumption. There was also no significant correlation between total alcohol consumption and the number of DALYs lost due to alcohol use. Most significantly, the study also found that there was no meaningful correlation between strict alcohol policies and DALYs lost due to alcohol use.

These findings demonstrate the weakness of strict population wide alcohol control policies. Instead, the study suggested that finding ways to reduce alcohol dependence and to promote moderate drinking among current drinkers, are of essence when it comes to alcohol policy.

Further, in August 2017 the journal *Alcohol and Alcoholism* published a commentary on the evidence and effectiveness of population wide policy²¹. The commentary highlighted a wide range of the latest research to explore the confidence placed in effectiveness of preventative policy measures advocated at the global level

The authors demonstrated that providing one set of policy measures for all countries or across all groups within a single country was not supported by evidence. Population wide policies neglect contextual and cultural determinants – social, economic, demographic and political – which are diverse and should not be treated as if they are a single, homogenous entity when it comes to alcohol related harms.

Instead, when an alcoholic beverage prevention program is being planned, policy-makers and stakeholders are recommended to consider targeted policies in order to:

- focus on delineated population sectors or subgroups (like youth, women, older people, or lower socio-economic groups);
- address targeted problems (like heavy drinking and heavy episodic drinking) and harm (such as liver cirrhosis, underage consumption or binge drinking), rather than total consumption;
- collect information about relevant contextual determinants in each country and community, listen to the population's needs, and tailor the proposed policy to the different contexts;
- plan an evaluation program, so that successful interventions can be measured and replicated.

An example of a population wide measure that is ineffective in reducing harm and has wider implications for the population that the Draft NAS is suggesting is minimum unit pricing (MUP). MUP would see significant price increases for everyday consumers including up to \$5.00 extra per carton of beer and many wines increasing in price between \$10-\$12 per bottle. Everyone will pay more for alcohol beverages, unfairly penalising those who drink responsibly and do not misuse alcohol, and

²⁰ Poikolainen, K. (2015). The weakness of stern alcohol control policies. *Alcohol and alcoholism*, 51(1), 93-97.

²¹ Allamani, A., Beccaria, F., & Einstein, S. (2017). A Commentary on the Limits of Alcoholic Beverage Policies. *Alcohol and Alcoholism*, 1-9.

forcing an unnecessary cost of living increase burden onto those with lower and fixed incomes, like pensioners, who often drink lower priced products.

While advocates of MUP claim it targets the harmful alcohol consumption, this is not supported by evidence. Most minimum pricing policy ideas are based on the scientifically disproven and derided Sheffield Alcohol Policy Model, which falsely assumes that increasing prices will cause heavy drinkers to reduce their alcohol consumption. But its calculations are based on controversial beliefs about the relationship between per capita alcohol consumption and rates of alcohol related harm. Its assumptions about the relationship between price and consumption have frequently been refuted by real world evidence^{22,23}.

Case Study: The MUP Experiment in British Columbia

MUP in British Columbia

British Columbia (BC) is a Western Canadian province with a population in 2012 of 4.6 million.

An often cited publication *Minimum Alcohol Prices and Outlet Densities in British Columbia, Canada: Estimated Impacts on Alcohol-Attributable Hospital Admissions*²⁴ reports that there has been an 8.9% reduction in acute alcohol admissions and a 9.2% reduction in chronic alcohol-attributable admissions since the introduction of MUP. However, these statistics are unreliable because the publication does not present the actual number of hospitalisations related to alcohol. Instead the researchers take the actual figures, manipulate them and produce the figures they rely on.

A more accurate measure would be the raw data. While we do not have access to the raw data used in the publication, the raw data related to alcohol overdoses in BC is discussed below.

Alcohol Overdoses in British Columbia

If MUP targets the heaviest drinkers then the expectation is that hospitalisations for alcohol overdoses would decrease with the introduction of a MUP. This is because alcohol overdoses would be reflective of drinking patterns amongst the heaviest drinkers and not moderate drinkers.

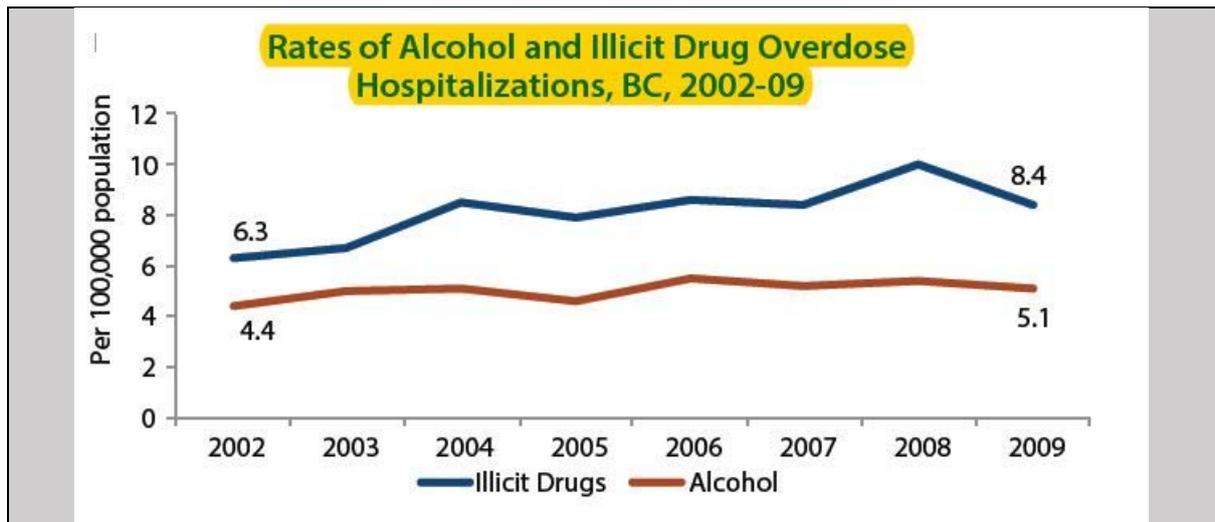
The paper titled, *Overdose Events in British Columbia: Trends in Substances Involved, Contexts and Responses*²⁵, shows that between 2002 and 2009 the rate of hospitalisations for alcohol overdose increased from 4.4 to 5.1 per 100,000 of the populations. This equates to a 16% rise in the rate of alcohol overdose hospitalisation since the introduction of MUP in British Columbia.

²² Robinson, M., Bouttell, J., Lewsey, J., Mackay, D., McCartney, G., and Beeston, C. (2017) The short-term impact of the alcohol act on alcohol-related deaths and hospital admissions in Scotland: a natural experiment. *Addiction*, doi: 10.1111/add.14019.

²³ Mäkelä, P., Bloomfield, K., Gustafsson, N.-K., Huhtanen, P. and Room, R. (2008), Changes in volume of drinking after changes in alcohol taxes and travellers' allowances: results from a panel study. *Addiction*, 103: 181–191. doi:10.1111/j.1360-0443.2007.02049.x

²⁴ Stockwell, T., Zhao, J., Martin, G., Macdonald, S., Vallance, K., Treno, A., ... & Buxton, J. (2013). Minimum alcohol prices and outlet densities in British Columbia, Canada: estimated impacts on alcohol-attributable hospital admissions. *American journal of public health*, 103(11), 2014-2020.

²⁵ Vallance, K., Martin, G., Stockwell, T., Macdonald, S., Chow, C., Ivsins, A., Buxton, J., Tu, A., Sandhu, J., Chu, T. and Fair, B. (2012). *Overdose Events in British Columbia: Trends in Substances Involved, Contexts and Responses*. CARBC Statistical Bulletin #8, Victoria, British Columbia: University of Victoria.



Source: Centre of Addictions Research of BC (CARBC), Statistical Bulletin #8, Victoria, British Columbia: University of Victoria.

Alcohol Related Deaths – British Columbia

In BC the actual number of deaths directly attributable to alcohol in 2002-2011 increased from 315 to 387 (22%) despite MUP being in place during this period²⁶. If MUP were to produce outcomes for the heaviest drinkers, then the expectation would also be that alcohol-related deaths would decrease as a result of the introduction of such a policy, because it would stand to reason that those drinking at the heaviest levels would be most susceptible to alcohol related death.

Real life outcomes in places with an MUP like British Columbia also show us that MUP does not improve outcomes when it comes to harmful consumption.

Population wide measures are not only ineffective in reducing alcohol related harm, they also pose serious ramifications to the everyday lives of 15.5 million Australian alcohol beverages consumers. The vast majority of Australians drink responsibly as part of a healthy and balanced lifestyle, population wide measures will punish these responsible drinkers without benefiting those who drink at harmful levels.

In addition, ineffective population wide measures will adversely impact the economic contributions of the industry. In particular, job opportunities created by the industry are put in jeopardy and rural small businesses are disproportionately affected.

When it comes to alcohol-related harm, population wide measures do not provide the targeted tools needed to appropriately address issues. Instead of turning to population wide measures, we urge MDAF to invest in measures targeting sub groups of the population with particular drinking patterns that are high-risk and associated with harmful outcomes.

Recommendation

Given the achievements of successful targeted measures and the ineffectiveness of population wide measures, the NAS should turn its focus to targeted measures. ABA recommends that MDAF, industry and health practitioners work together to formulate targeted policy options.

²⁶ Centre for Addictions Research of BC (2013). Alcohol-related deaths in British Columbia. CARBC Data Notes, p. 1-3. University of Victoria.

Conclusion

Considering the serious issues raised in this submission, including the lack of an evidence-based approach to the NAS, ABA recommends the NAS be substantially redrafted in consultation with health professionals, the wider community and industry. To this end ABA encourages a collaborative approach and offers its insight and resources into the re-development of the Draft NAS.

Attachment A

Study	Recently published within last 5 years?	Relevant to the Australian landscape?	Critique
<p>Burns L, Breen C, Bower C, O' Leary C, Elliott EJ (2013) Counting fetal alcohol spectrum disorder in Australia: the evidence and the challenges. Drug and Alcohol Review 32(5):461–467</p>	✓	✓	<ul style="list-style-type: none"> - This study is only a passive narrative review that collates information on the prevalence of FASD in Australia and documents the various methods used for attaining estimates of FASD. - In the absence of an accompanying systematic review, it is uncertain whether the search for data has been exhaustive or if the variable conditions have been addressed. An accompanying systematic review here is important due to a lack of using explicit methods to methodically search and critically appraise the available literature on FASD in Australia. - This study only concludes that FASD data collections is inconsistent and the measurement of FASD prevalence is incomplete in Australia.
<p>Fitzpatrick J et al. Prevalence of fetal alcohol syndrome in a population-based sample of children living in remote Australia: The Lililwan Project. Journal of Paediatrics and Child Health 51 (2015) 450–457.</p>	✓	✓	<ul style="list-style-type: none"> - This study adds to the evidence that high rates of alcohol use in pregnancy puts children at risk of developing FASD. - FAS was diagnosed in 13/108 children. Of those children's mothers, 10/13 mothers had Alcohol Use Disorders Identification Test scores and all drank at a high-risk level. - For example, one mother drank daily. On a typical drinking day, 9/10 would consume at least 14 standard drinks, and the remaining one consumed at least 7 standard drinks. - The study suggests maternal risk factors for FASD are: low socio-economic status, rural residence, low educational attainment, being a single mother, having a male partner who drinks and living in a community tolerant of heavy drinking.
<p>Freisther, B.; Gruenewald, P.J.; Ring, L.; and LaScala, E.A. An ecological assessment of the population and environmental correlates of childhood accident, assault, and child abuse injuries.</p>	✗	✗	<ul style="list-style-type: none"> - This study uses data on populations and environments in California that were collected for the year 2000. - The results were calculated using complex statistical models, which then showed that injuries occurred more often in areas with higher percentages of African American residents, female-headed household families and off-premise alcohol outlets.

Alcoholism: Clinical and Experimental Research 32:1969–1975, 2008.			- The study acknowledges that it cannot clearly elucidate the relationship between injury outcome and off-premise alcohol outlets in this study. It can only speculate that the lack of adult supervision and parental monitoring behaviours, combined with impoverishment and residential instability, led to higher rates of childhood injuries.
Scribner, R.A.; MacKinnon, D.P.; and Dwyer, J.H. Alcohol outlet density and motor vehicle crashes in Los Angeles County cities. Journal of Studies on Alcohol 55: 447–453, 1994.	X	X	- This study uses 1990 data from cities within the Los Angeles County. - The results were calculated using complex statistical models.
Guria, J.; Jones, W.; Leung, J.; and Mara, K. Alcohol in New Zealand road trauma. Applied Health Economics and Health Policy 2:183–190, 2003.	X	X	- This study discusses the impact of three drink-driving interventions in New Zealand in the 1990s. The three interventions are: the introduction of Compulsory Breath Tests (CBT); enforcement and advertising directed at drink driving (SRSP); and lowering the legal minimum drinking age from 20 years to 18 years. - The study did not look into other variables involved in drink driving. This study is only a narrow evaluation review of the drink-driving interventions.
Kypri, K.; Voas, R.B.; Langley, J.D.; et al. Minimum purchasing age for alcohol and traffic crash injuries among 15- to 19-year-olds in New Zealand. American Journal of Public Health 96:126–131, 2006.	X	X	- This study discusses the impact of lowering the legal minimum drinking age from 20 years to 18 years in New Zealand in 1999. - The study did not look into other variables involved in drink driving. This study is only a narrow evaluation review of the change in drinking age.
Chikritzhs, T., and Stockwell, T. The impact of later trading hours for hotels on levels of impaired driver road crashes and drive breath alcohol levels.	X	✓	- This study uses police data on the 'last place of drinking' for impaired drivers involved in road crashes between 1990 and 1997, as a comparison between outlets with extended trading permits (ETP) and those without. - A main limitation on the data is the inability to identify whether the 'last place of drinking' of impaired drivers was in fact

<p>Addiction 101:1254–1264, 2006.</p>			<p>where the majority of alcohol was consumed.</p> <ul style="list-style-type: none"> - While the study found ETP hotels tend to purchase beverages with high alcohol content, it also acknowledged that ETP hotels tend to be located in inner city areas where its clientele tend to be of younger age, greater propensity to drunk-drive and a preference for high-risk beverages.
<p>Vandenberg, Brian & Sharma, Anurag. (2015). Are Alcohol Taxation and Pricing Policies Regressive? Product-Level Effects of a Specific Tax and a Minimum Unit Price for Alcohol. Alcohol and alcoholism (Oxford, Oxfordshire). 51. . 10.1093/alcalc/agv133.</p>	✓	✓	<ul style="list-style-type: none"> - This study assumes that heavy consumers in the lowest-income quintile who will be the most affected from minimum unit pricing (MUP) will reduce their alcohol consumption under a MUP policy. However, this study neglects that there an addict will often seek other means to satisfy their addiction, such as buying cheaper alcohol on the black market or making illegal – and often toxic – moonshine on their own.
<p>Jones, S.C & Magee, C.A. (2011). Exposure to Alcohol Advertising and Alcohol Consumption among Australian Adolescents. Alcohol and Alcoholism 46 (5): 630–637.</p>	✗	✓	<ul style="list-style-type: none"> - This study is a strict study into the relationship between exposure to alcohol advertising and drinking in adolescents. However, it neglects to account for other indicators of young people’s drinking behaviours, such as exposure to family members being drunk or peer influences. - While the sample size is large, the sample size may not be representative of the Australian adolescent population and the type of recruitment, particularly online, may have biased the results. - The study was unable to quantify the level of exposure to different forms of advertising, and thus was unable to specifically quantify the influence of advertising on adolescent drinking behaviour.
<p>Pettigrew S, Roberts M, Pescud M, et al. The extent and nature of alcohol advertising on Australian television. Drug and Alcohol Review 2012; 31(6):797–802.</p>	✗	✓	<ul style="list-style-type: none"> - This study is only a content analysis on alcohol advertisements aired over two months, and cannot quantify the number of children who are actually exposed to the advertisements. The short time frame of the study is also not representative of Australia’s advertising landscape as a whole. - The study put forward the idea that the alcohol advertisements studied “contained

			<p>at least one advertising execution element that is particularly appealing to children”, such as themes of humour, friendship/mateships and value for money. However, these themes are also universally appealing to adults and do not deliberately only appeal to children. The use of simple, uncomplicated storylines with obvious themes are also misconstrued to target children and underage youth; the use of such storylines are widespread practice to accommodate for time-constrained advertising slots.</p>
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Attachment B

Systematic reviews and observational studies on alcohol consumption by health outcome

Cardiovascular Diseases

<u>Study</u>	<u>Key Messages</u>
Huang, C., Zhan, J., Liu, Y.J., Li, D.J., Wang, S. Q., He, Q.Q. (2014). Association between alcohol consumption and risk of cardiovascular disease and all-cause mortality in patients with hypertension: a meta-analysis of prospective cohort studies. Mayo Clinic Proceed. 89(9): 1201-10.	<ul style="list-style-type: none">> Findings suggest that low-to-moderate alcohol consumption was inversely significantly associated with the risk of CVD and all-cause mortality (ACM) in patients with hypertension.> The most beneficial alcohol dose is higher in men than in women because males metabolize ethanol in a different way, leading to a lower risk of disease at relatively higher alcohol intake levels than women.> Different alcohol beverages made no difference when the amount of ethanol was computed for purpose. However, red wine, rich in polyphenols, has been shown to be more protective owing to antioxidants and anti-inflammatory properties.
Ronksley, P. E., Brien, S. E., Turner, B. J., Mukamal, K. J., & Ghali, W. A. (2011). Association of alcohol consumption with selected cardiovascular disease outcomes: A systematic review and meta-analysis. British Medical Journal, 342(7795), 479.	<ul style="list-style-type: none">> Light to moderate alcohol consumption is associated with a reduced risk of multiple cardiovascular outcomes.> The lowest risk of coronary heart disease mortality occurred with 1–2 drinks a day.> Secondary analysis of mortality from all causes showed lower risk for drinkers compared with non-drinkers.
Brien, S. E., Ronksley, P. E., Turner, B. J., Mukamal, K. J., & Ghali, W. A. (2011). Effect of alcohol consumption on biological markers associated with risk of coronary heart disease: Systematic review and meta-analysis of interventional studies. British Medical Journal, 342, d636.	<ul style="list-style-type: none">> Favourable changes in several cardiovascular biomarkers provide indirect pathophysiological support for a protective effect of moderate alcohol use on coronary heart disease.> Moderate alcohol consumption showed (a dose-response relation with higher levels of high density lipoprotein cholesterol and adiponectin and lower levels of fibrinogen.> Results were similar across beverage types.
Klatsky, A. L. (2010). Alcohol and cardiovascular health. Physiology and Behavior, 100(1): 76-81.	<ul style="list-style-type: none">> Lighter drinking is not clearly related to increased risk of any cardiovascular condition and, in observational studies, is related to lower risk of coronary heart disease, ischemic stroke, and diabetes mellitus.> Increased cardiovascular risks of heavy drinking include: (1) alcoholic cardiomyopathy, (2) systemic hypertension (high blood pressure), (3) heart rhythm disturbances, and (4) hemorrhagic stroke.

	<p>> International comparisons and some prospective study data suggest that wine is more protective against CHD than liquor or beer. Possible non-alcohol beneficial components in wine (especially red) support possible extra protection by wine, but a healthier pattern of drinking or more favorable risk traits in wine drinkers may be involved.</p>
<p>Droste DW, Iliescu C, Vaillant M, Gantenbein M, De Bremaeker N, Lieunard C, Velez T, Meyer M, Guth T, Kuemmerle A, Gilson G, Chioti A. A daily glass of red wine associated with lifestyle changes independently improves blood lipids in patients with carotid arteriosclerosis: results from a randomized controlled trial. <i>Nutr J.</i> 2013; 12(1): 147.</p>	<p>> Lifestyle changes including a modified Mediterranean diet and physical exercise as well as a glass of red wine daily improve independently the LDL/HDL ratio in patients. This may also translate in a reduction of future heart attacks and strokes.</p> <p>> The group that did not drink wine showed an increase in LDL and total cholesterol.</p> <p>> Findings did not address whether there is a particularly beneficial effect of red wine over other forms of alcohol, but suggest that regular consumption of small quantities of any form of alcohol prevents cerebro-cardiovascular diseases rather than that there is a particular benefit of red wine.</p>

Ischemic Heart Disease

<u>Study</u>	<u>Key Messages</u>
<p>Yang, Y., Liu, D. C., Wang, Q. M., Long, Q. Q., Zhao, S., Zhang, Z., et al. (2016). Alcohol consumption and risk of coronary artery disease: A dose-response meta-analysis of prospective studies. <i>Nutrition</i>, 32(6), 637-644.</p>	<p>> Alcohol consumption in moderation is associated with a reduced risk of coronary artery disease (CAD) with 36 grams/day of alcohol conferring a 31% lower risk than other levels.</p> <p>> There are several possible mechanisms for protection against CAD by alcohol, with the leading possibility being related to the levels of plasma lipoproteins and a decrease in LDL cholesterol.</p> <p>> Findings suggest established light to moderate drinkers, accounting for the majority of drinkers in the USA and Western Europe, do not need to change their drinking habits, except in special circumstances.</p>
<p>Roerecke, M., & Rehm, J. (2014). Alcohol consumption, drinking patterns, and ischemic heart disease: a narrative review of meta-analyses and a systematic review and meta-analysis of the impact of heavy drinking occasions on risk for moderate drinkers. <i>BMC medicine</i>, 12(1), 1.</p>	<p>> Epidemiological evidence for a beneficial effect of low alcohol consumption without heavy drinking episodes is strong, corroborated by experimental evidence.</p> <p>> Episodic and chronic heavy drinking do not provide any beneficial effect on ischemic heart disease (IHD).</p>

	<p>> When examining average alcohol consumption in comparison to lifetime abstainers, the relationship with IHD risk follows a J-curve.</p>
<p>Hvidtfeldt UA, Tolstrup JS, Jakobsen MU, Heitmann BL, Grønbaek M, O'Reilly E, Bälter K, Goldbourt U, Hallmans G, Knekt P, Liu S, Pereira M, Pietinen P, Spiegelman D, Stevens J, Virtamo J, Willett WC, Rimm EB, Ascherio A. Alcohol and intake and risk of coronary heart disease in younger, middle-aged and older adults. <i>Circulation</i>. 2010; 121: 1589-97.</p>	<p>> Alcohol is also associated with a decreased risk of coronary heart disease (CHD) in younger adults; however, the absolute risk was small compared with middle-aged and older adults.</p> <p>> Several plausible explanations for the lowered risk of CHD among moderate drinkers exist. The evidence is strongest for a mechanism involving alcohol increasing high-density lipoprotein cholesterol and reducing plasma fibrinogen levels, thereby reducing platelet aggregability.</p> <p>> This study supports current knowledge that alcohol in moderate amounts protects against CHD in both men and women. Findings further suggest that this effect is also present in younger age groups.</p>

Heart Failure / Myocardial infraction

<u>Study</u>	<u>Key Messages</u>
<p>Brügger-Andersen T, Pönitz V, Snapinn S, Dickstein K, OPTIMAAL study group. Moderate alcohol consumption is associated with reduced long-term cardiovascular risk in patients following a complicated acute myocardial infarction. <i>Int J Cardiol</i>. 2009; 133(2): 229-32.</p>	<p>> Results demonstrate a strong positive association between moderate alcohol use and survival in patients following complicated acute myocardial infection.</p> <p>> Both heavy drinkers and abstainers had poorer prognosis, with no significance difference between those 2 groups.</p> <p>> Results are in accordance with earlier studies that also suggest a U-shaped relationship between alcohol use and survival following MI with an increased CV-mortality associated both with abstinence and excessive use.</p>
<p>Larsson, S. C., Orsini, N., & Wolk, A. (2015). Alcohol consumption and risk of heart failure: a dose–response meta-analysis of prospective studies. <i>European journal of heart failure</i>, 17(4), 367-373.</p>	<p>> Results from this meta-analysis showed that alcohol consumption in moderation is associated with a reduced risk of heart failure (HF).</p> <p>> Light to moderate alcohol consumption may improve insulin sensitivity and endothelial function, reduce oxidative stress, and influence coagulation and fibrinolytic cascades.</p>

Diabetes

<u>Study</u>	<u>Key Messages</u>
Li XH, Yu FF, Zhou YH, He J. Association between alcohol consumption and the risk of incident type 2 diabetes: a systematic review and dose-response meta-analysis. Am J Clin Nutr. 2016 Mar;103(3):818-29.	<ul style="list-style-type: none">> Light and moderate alcohol consumption was associated with a lower risk of Type 2 Diabetes (T2D), whereas heavy alcohol consumption was not related to the risk of T2D.> A lower T2D risk was associated with alcohol consumption of ,20 g/d in women and 40 g/d in men.> Light to moderate alcohol consumption was associated with a lower incidence of T2D among elderly people, whereas there were no significant associations related to sex between low, moderate, or heavy alcohol consumption and the risk of T2D.
Knott C, Bell S, Britton A. Alcohol consumption and the risk of type 2 diabetes: A systematic review and dose-response meta-analysis of more than 1.9 million individuals from 38 observational studies. Diabetes Care. 2015 Sep;38(9):1804-12.	<ul style="list-style-type: none">> This is a review of more than 1.9 million individuals from 38 observational studies.> Relative to abstainers, reductions in the risk of type 2 diabetes were present at all levels of alcohol intake <63 g/day, with risks increasing above this threshold.> Peak risk reduction was present between 10–14 g/day at an 18% decrease in hazards.> Reductions in risk among moderate alcohol drinkers may be confined to women and non-Asian populations.

Non-alcohol related cancers

<u>Study</u>	<u>Key Messages</u>
I. Tramacere, C. Pelucchi, M. Bonifazi, V. Bagnardi, M. Rota, R. Bellocco, L. Scotti, F. Islami, G. Corrao, P. Boffetta, C. La Vecchia and E. Negri. Alcohol drinking and non-Hodgkin lymphoma risk: a systematic review and a meta-analysis. Ann Oncol., 2012, 23: 2791-2798.	<ul style="list-style-type: none">> This meta-analysis provides quantitative evidence of a favourable role of alcohol drinking on non-Hodgkin lymphoma risk (NHL).> Results found a 15% reduction of NHL risk among alcohol drinkers compared with non-drinkers, providing more precise quantitative evidence than previously available that alcohol drinking is inversely related to NHL.> Compared with non-Asian countries, we observed a reduced risk in Asian population, which are characterized by a smaller prevalence of heavy drinking.
Rota M, Porta L, Pelucchi C, Negri E, Bagnardi V, Bellocco R, Corrao G, Boffetta P, La Vecchia C. Alcohol drinking and risk of	<ul style="list-style-type: none">> The meta-analysis did not report an association between alcohol drinking and leukemia risk. If any, a modest favorable effect emerged for light alcohol drinking

<p>leukemia-a systematic review and meta-analysis of the dose-risk relation. Cancer Epidemiol. 2014 Aug;38(4):339-45.</p>	<p>(<=1 drink/day), with a model-based risk reduction of 10% at this level of consumption. > The study did not find an increased risk of leukemia among alcohol drinkers.</p>
<p>Friberg E, Orsini N, Mantzoros CS, Wolk A. Alcohol intake and endometrial cancer risk: a meta-analysis of prospective studies. Br J Cancer. 2010 Jun 29;103(1):127-31.</p>	<p>> The meta-analysis indicates a possible J-shaped relationship between alcohol intake and endometrial cancer risk. > Consumption of up to 13 g of alcohol per day seemed to be weakly protective, whereas exposure to more than two drinks (>26 g of alcohol) per day may increase risk. > Moderate alcohol consumption might protect against endometrial cancer, whereas high alcohol consumption may increase risk.</p>
<p>Song DY, Song S, Song Y, Lee JE. Alcohol intake and renal cell cancer risk: a meta-analysis. Br J Cancer. 2012 May 22;106(11):1881-90.</p>	<p>> The findings from the meta-analysis support the hypothesis that alcoholic beverage intake is inversely associated with a lower risk of renal cell cancer, with moderate consumption (15g a day) conferring the protection and higher consumption conferring no additional benefits. > The inverse associations were consistent across specific alcoholic beverages, suggesting that ethanol per se is most likely the responsible factor. > Alcoholic beverage intake lowered risk of renal cell cancer for both men and women.</p>

All-cause mortality

<u>Study</u>	<u>Key Messages</u>
<p>Smyth A, Teo KK, Rangarajan S, O'Donnell M, Zhang X, Rana P, Leong DP, Dagenais G, Seron P, Rosengren A, Schutte AE, Lopez-Jaramillo P, Oguz A, Chifamba J, Diaz R, Lear S, Avezum A, Kumar R, Mohan V, Szuba A, Wei L, Yang W, Jian B, McKee M, Yusuf S; PURE Investigators. Alcohol consumption and cardiovascular disease, cancer, injury, admission to hospital, and mortality: a prospective cohort study. Lancet. 2015 Nov 14;386(10007):1945-54</p>	<p>> This is a study of 114,970 participants from 12 countries. > High intake was associated with increased risk of mortality, consistent with previous studies. > Moderate drinking was associated with reduced risk of myocardial infarction, with no associated risk with cardiovascular disease. > Although wine drinking seemed to be associated with lower hazards of cardiovascular disease, injury, admission to hospital, and the composite outcome compared with spirit or beer drinkers, this result could also reflect characteristics of</p>

	<p>the drinker (e.g. wine drinkers might be healthier individuals of higher socioeconomic status, be more educated, or might consume healthier diets than spirit or beer drinkers) rather than the exposure of drinking wine itself.</p>
<p>Ford, E.S., Zhao, G., Tsai, K., Li, C. (2011) Low-risk lifestyle behaviours and all-cause mortality: Findings from the National Health and Nutrition Examination Survey III Mortality Study. <i>Am J Pub Health</i>. 101: 1922-29.</p>	<ul style="list-style-type: none"> > Low-risk lifestyle factors, including low consumption of alcohol, exert a powerful and beneficial effect on mortality. > The lifestyle behaviors of interest included never smoked, healthy diet, adequate physical activity, and moderate alcohol consumption. > Those who had all 4 such behaviors were 63% less likely to die, and, furthermore, the number of low-risk behaviors was related to mortality in a dose-related fashion. Never-smoked was the strongest protective factor for mortality.
<p>Fuller, T. D. (2011). Moderate alcohol consumption and the risk of mortality. <i>Demography</i>, 48(3), 1105-1125.</p>	<ul style="list-style-type: none"> > Findings show that those who consume a moderate amount of alcohol have lower all-cause mortality and CHD mortality, and the relationship is possibly causal. > This article re-examines the issue using prospective data for more than 124,000 persons interviewed in the U.S. National Health Interview Surveys of 1997 through 2000 with mortality follow-up through 2002 using the Linked Mortality File. The study involves about 488,000 person-years. > Controlling for a variety of covariates, this study finds that compared with non-drinkers, those who consume a moderate amount of alcohol have lower all-cause and CHD mortality.