

The value of primary prevention to reduce alcohol consumption

Primary prevention strategies that target the significant problem of alcohol consumption in Australia have many health, social, economic and other benefits for governments, businesses, communities and individuals.



Key messages

- In Australia, alcohol use is the fifth highest modifiable risk factor causing preventable health burden after tobacco use, overweight including obesity, all dietary risks and high blood pressure.¹
- More than 4% of all deaths in Australia were attributable to alcohol in 2018 (6,512 deaths in total).¹
- Alcohol use contributes significantly to Australia's health burden as well as contributing billions of dollars each year in health care and non-healthcare economic costs.^{2, 3}
- Globally, it is estimated three million deaths per year and 5.1% of the global burden of disease are caused by the harmful use of alcohol.⁴
- Alcohol is a known carcinogen for humans and causes many types of cancers including liver cancer, nasopharyngeal cancer, lip and oral cavity cancer, other oral cavity and pharynx cancers, laryngeal cancer, oesophageal cancer, bowel cancer and breast cancer.⁵
- In Australia over the next decade, it is projected that 15,000 cancers will be attributable to consumption of more than two alcohol drinks per day.⁶
- The other main causes of alcohol-related health burden are injuries, alcohol use disorder, road traffic injuries for cyclists, drivers, passengers and pedestrians.¹
- Most of the available evidence indicates that the more effective interventions to reduce the harms from alcohol use and consumption are comprehensive, multi-component strategies, targeting alcohol supply and use, and targeting populations and individuals.

Our findings

1 Effective preventive action requires a comprehensive approach based on implementing a range of interventions targeting alcohol supply and use.

Alcohol use in Australia is associated with a substantial amount of health burden and economic cost, including productivity impacts. There are a range of evidence-informed interventions available to improve population health in terms of addressing and reducing alcohol consumption. We identified a consistent body of evidence from reviews and single studies showing that structural or policy-based changes in the built environment, such as restrictions to the availability and accessibility of alcohol through limited trading hours and reduced outlet density, can help prevent the harms associated with alcohol use, and have a range of health, social and other non-health benefits.

2 Robust evaluation frameworks need to be combined with implementation of programs to enhance the evidence and help demonstrate the health, social and other benefits of preventive strategies addressing alcohol use.

More robust and comprehensive evaluations are required for complex preventive interventions that generate multiple benefits. Demonstrating the value of prevention is about being able to measure impact and change in behaviours, particularly over longer periods of time at both the individual and population level. Research and evaluation need to be embedded and the results more widely shared, including in the peer-reviewed literature, so that this evidence can be easily identified and included in updated systematic reviews and other types of evidence generation and appraisal to inform policy change.

Randomised controlled trials – the ‘gold standard’ of evidence generation and hypothesis testing – are not always feasible or appropriate, particularly for real-world policy changes and interventions that affect the whole population. This rapid review identified opportunities for future research, for example on the benefits of mass media and social marketing campaigns addressing alcohol use, as well as a clear need for more evidence on interventions targeting priority populations, such as Aboriginal and Torres Strait Islander communities, culturally and linguistically diverse communities (CALD), and the lesbian, gay, bisexual, intersex, queer or questioning (LGBTIQ+) community.

3 More economic evidence is required to help demonstrate the overall economic value of prevention.

There is a limited body of economic evidence for many primary prevention interventions targeting alcohol use. Given the significant health and economic costs of alcohol use in Australia, and the effective interventions in this area, there is an opportunity to generate robust economic evidence to help make the case for more investment in prevention, as has been done in other areas such as tobacco control and obesity prevention to aid decision makers and inform policy or practice change.

This review identified numerous co-benefits to addressing and preventing alcohol use and harms

Prevention benefits health overall and is also associated with a range of other benefits, including mental wellbeing and social benefits. Where economic evidence does exist, it tends to find that preventive interventions are cost-effective, if not cost saving.



Physical health benefits

Improved

- Body weight or BMI
- Health knowledge and attitudes

Reduced

- Cancer risk
- Chronic disease risk
- Problematic alcohol use and binge drinking
- Injuries and hospital presentations
- Motor vehicle injuries
- Prevalence of Foetal Alcohol Spectrum Disorders (FASD)
- Liver cancer
- Head, lip and neck cancers
- Oesophageal cancer
- Bowel cancer
- Breast cancer



Mental health benefits

Improved

- Mental and psychological wellbeing
- Self-esteem
- Cognitive function
- Quality of life

Reduced

- Mental health conditions (e.g. depression and anxiety)
- Stress
- Psychological distress
- Substance misuse
- Self harm and suicide





What is prevention?

Prevention can be defined as any action taken to protect and promote the health of populations.⁷ Prevention aims to prevent poor health, illness, injury and early death from occurring, and increase the likelihood that people will stay healthy and well for as long as possible.⁸

Effective preventive actions and strategies decrease the risk of experiencing a disease, condition or injury.⁷ Prevention also supports people to effectively manage existing diseases and conditions, so their health does not worsen. Addressing alcohol use and consumption is an important part of effective prevention targeting chronic diseases and injuries, which are the largest cause of poor health, death and disability in Australia.¹

Need for a systems approach

Prevention requires that individuals, communities, organisations and governments work together in a coordinated way to create solutions from different perspectives. Multi-component interventions and multiple strategies can target the various drivers of alcohol consumption, including sale and supply as well as individual behaviours. This includes sectors beyond the health system to create health-promoting opportunities and healthy environments. Interventions with built environment changes and geographic or place-based restrictions, particularly relating to decreasing the accessibility and availability of alcohol, can often produce non-health co-benefits for areas outside of health.

A systems approach to prevention can support preventive interventions or strategies that are effective at promoting large scale, systems-level changes that lead to long lasting health, social and economic benefits for all.⁹

Need for multiple strategies

Most of the evidence supports the effectiveness of multi-component interventions targeting multiple parts of the alcohol consumption system. For example, a coordinated, cross-government, approach to preventing alcohol misuse and harms. Similarly, other studies concluded that reducing the harms from alcohol consumption requires a suite of interventions at the local level, such as combining access restrictions (outlet density and days and times of sale) with localised access to health promotion programs and support through the health system.

About this Evidence Check

The first Evidence Check on the value of prevention was published by The Australian Prevention Partnership Centre in 2021.¹⁰ It included a full literature review and Evidence Brief which outlined the burden of death and disability attributed to overweight and obesity, unhealthy diet, physical inactivity, tobacco use and smoking. The report quantified the burden on government, businesses and communities including deaths per year in Australia and potentially in NSW, attributable percentage of overall disease burden, annual productivity loss and attributable health expenditure.

This supplementary Evidence Check was brokered by the Sax Institute for the Cancer Institute NSW and Centre for Alcohol and Other Drugs at the NSW Ministry of Health. It focused on the burden associated with alcohol consumption and the economic and health benefits associated with primary prevention strategies for on alcohol consumption.

Methodology

An Evidence Check is a rapid review of existing evidence tailored to the individual needs of an agency through a knowledge brokering session. Evidence Check answer specific policy or program questions and are presented as a report with an accompanying Evidence Brief. Reviewers may be asked to identify gaps in the evidence but do not undertake new research to fill these gaps. This style of review is not a comprehensive summary of all the available evidence on a topic, though systematic search processes and methodology are employed.

The review questions were:

1. What is the health burden and economic costs of alcohol consumption?
2. What are the health, social and economic benefits of primary prevention strategies which address alcohol consumption; and which strategies are most cost-effective?

Limitations

This was a rapid review and, while systematic searching methods were employed, it is not the same in terms of evidence grading as a systematic review. The prioritisation of umbrella reviews and systematic reviews due to the breadth of literature may also mean that some studies were missed.

Due to the large number of results and extensive areas covered by the review, a full quality assessment for each study or report was not performed; instead, a summary of the study's assessment of evidence quality was provided, including any assessment frameworks used and whether limitations were provided.

This assessment of the quality of the underlying evidence is also likely to be of more relevance to the reader than an assessment of the quality of an umbrella review, for example.



This review builds on the Prevention Centre's previous work on the health and other benefits of prevention and the cost-effectiveness of preventive health interventions for chronic disease.

To read the full report, visit the Evidence Reviews page on our website.

<https://preventioncentre.org.au/resources/evidence-reviews/>

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