



THE CASE FOR A MINIMUM (FLOOR) PRICE FOR ALCOHOL IN WESTERN AUSTRALIA

WA Alcohol and Youth Action Coalition

OCTOBER 2018

ABOUT THE WA COALITION

The WA Alcohol and Youth Action Coalition is an alliance of health and community organisations active across WA that has been formed with the objective of promoting action to reduce harm from alcohol among young people.

The following groups support the WA Alcohol and Youth Action Coalition (as at 1 March 2018):

Anglican Schools Commission
Anglicare WA
Association of Independent Schools WA
Australian Association of Social Workers (WA)
Australian Health Promotion Association (WA)
Australian Medical Association (WA)
Australian Research Alliance for Children and Youth
Baptist Churches Western Australia
Cancer Council WA
Catholic Education Office WA
City of Melville
City of Mandurah
Collaboration for Evidence, Research and Impact in Public Health (Curtin University)
Commissioner for Children and Young People WA
Country Women's Association WA
Curtin Monash Accident Research Centre
Curtin University
Cyrenian House
Environmental Health Australia (WA)
Foundation for Alcohol Research and Education
Alcohol and Drug Foundation – Good Sports (WA)
Holyoake
Hope Community Services
Injury Matters
Local Drug Action Groups Inc.
Marninwarntikura Fitzroy Women's Resource Centre
McCusker Centre for Action on Alcohol and Youth
McCusker Centre for Citizenship
Mission Australia (WA)
Murdoch University
National Drug Research Institute
Heart Foundation WA
Nindilingarri Cultural Health Service
NOFASD Australia
Notre Dame University
Palmerston Association Inc.
Parents and Friends Federation of WA
Parkerville Children and Youth Care
Perth Hebrew Congregation
Public Health Advocacy Institute of WA
Public Health Association of Australia (WA)
Red Cross (WA)
Royal Australasian College of Physicians (WA)
Royal Australasian College of Surgeons (WA Committee)
Royal Life Saving Society WA
Ruah Community Services
Rural Health West
School Drug Education and Road Aware
St John Ambulance WA
St John of God Health Care
The Salvation Army (WA Division)
Telethon Kids Institute
The University of Western Australia
School of Population Health, UWA
Valuing Children Initiative
WA Cancer Prevention Research Unit
WA Council of Social Service
WA Health Promoting Schools Association
WA Network of Alcohol and Other Drug Agencies
Peer Based Harm Reduction WA
WA Association for Mental Health
WA Centre for Rural Health
WA Local Government Association
WA Primary Health Alliance
Wirrpanda Foundation
Women's Health and Family Services
YMCA of Perth
Youth Affairs Council of WA
Youth Focus
Youth Involvement Council

For further information about the WA Alcohol and Youth Action Coalition, visit www.mcaay.org.au.

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EXECUTIVE SUMMARY

Over the past two decades, alcohol has become more affordable in Western Australia (WA) and cheap alcohol is readily available. Retail competition has led to aggressive discounting, with some alcohol products now promoted and sold for as little as 24 cents per standard drink.

But cheap alcohol comes at a cost. Alcohol use is high in WA by national and international standards and is responsible for a substantial burden of health and social harms to Western Australians. Reducing alcohol use would reduce alcohol-related harms in our community.

Price controls are an effective strategy for addressing harm from alcohol. **Minimum pricing is a price-control measure that sets a floor price per standard drink below which alcohol cannot be sold. It would affect only the cheapest alcohol products, so is targeted toward reducing drinking among the heaviest drinkers, while having minimal effect on moderate drinkers across all income levels.** This is because heavier drinkers buy cheaper alcohol, and more of it, than lighter drinkers. Young people are particularly sensitive to the price of alcohol, therefore minimum pricing can also be expected to support reductions in young peoples' drinking.

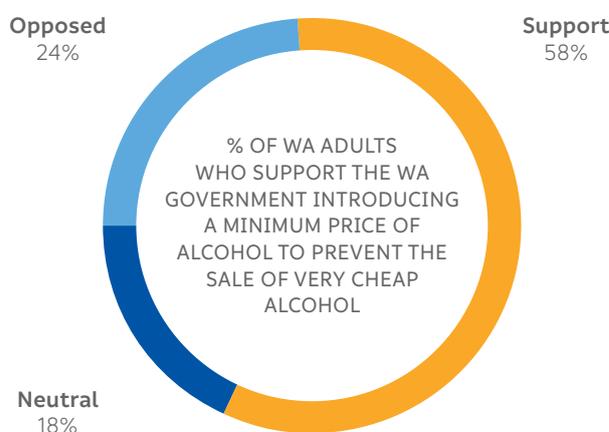
The WA Alcohol and Youth Action Coalition welcomes the current discussion about minimum pricing as a policy option for WA and congratulates the WA Deputy Premier and Minister for Health and Mental Health, the Hon. Roger Cook MLA, for encouraging community discussion on this important issue. This report is intended to inform and contribute to the discussion about minimum pricing of alcohol in WA.

The value of minimum alcohol pricing has been recognised internationally and in Australia. Canada and some Eastern European countries already have minimum pricing and it was introduced in Scotland in May 2018. The Northern Territory, Australia, will introduce a floor price in October this year. UK modelling studies indicate a minimum price will reduce excessive drinking while having little effect on moderate drinkers. In Canada, research has linked an increased minimum alcohol price to reduced alcohol use and reductions in alcohol-related deaths, hospitalisations, and crime.

Minimum pricing of alcohol can be implemented at a state level in Australia, as

part of a comprehensive approach to reducing alcohol-related harms. Modelling using WA data will inform the selection of a minimum price that effectively reduces drinking and harms (particularly among heavy drinkers) while limiting impacts on moderate drinkers. Based on minimum prices discussed and implemented elsewhere, an appropriate floor price may be between \$1.00 and \$1.50 per standard drink.

Western Australians support minimum alcohol pricing. A recent community survey commissioned by the McCusker Centre for Action on Alcohol and Youth found that 2 in every 3 respondents believed cheap alcohol is harmful to the community and want the WA Government to take action on this issue. There was majority support (58%) for the introduction of a minimum price on alcohol in WA (with a further 18% of respondents neutral). The survey found consistent support for minimum pricing across the WA community, with those on low incomes less opposed to minimum pricing than those on higher-incomes.



Monitoring and evaluation will be an important part of any implementation process to assess the effects of a minimum alcohol price on all Western Australians, and particularly on vulnerable groups. Preparation for a minimum price should take into account resourcing needs of support agencies.

The time is right for WA to move towards a minimum price on alcohol. A minimum floor price, set at an appropriate level, could make an important contribution to reducing and preventing problems linked to excessive drinking in this State.

SUPPORT FOR A MINIMUM ALCOHOL PRICE IN WA FROM HEALTH AND COMMUNITY GROUPS

Members of the WA Alcohol and Youth Action Coalition have expressed their support for the introduction of a minimum alcohol price in WA.

The AMA (WA) endorses the introduction of a minimum price for alcohol. Excessive alcohol consumption is the source of significant health, social and economic harms, particularly among young Australians. A minimum price will target high alcohol, low cost options which will have the greatest impact on young people and heavy drinkers, and is an important step toward a comprehensive taxation and pricing policy oriented around public health.

**Dr Omar Khorshid, President,
Australian Medical Association (WA)**

Based on the Canadian experience, the establishment of a minimum price on alcohol had significant and positive impacts on reducing consumption, health related harms and crime. We see similar benefits for the WA community through a minimum price and welcome community discussion.

**Angie Paskevicius, CEO,
Holyoake**

The Western Australian Network of Alcohol and other Drug Agencies (WANADA), as peak body for the Western Australian alcohol and other drug sector, supports the implementation of an evidence-based minimum floor price for alcohol in Western Australia. Such a measure will contribute to a comprehensive State Government response to reducing alcohol-related harms in the community.

**Jill Rundle, CEO, Western Australian
Network of Alcohol & Other Drug
Agencies**

It is clear from the views expressed to me by children and young people that they are concerned about alcohol-related harm to themselves, their friends and their families. I strongly support the introduction of a minimum price for alcohol in WA and encourage everyone who values a safe community for our children to do the same.

**Colin Pettit, Commissioner for
Children and Young People WA**

NOFASD Australia supports minimum pricing of alcohol for Western Australia. This will be a really important step towards preventing Fetal Alcohol Spectrum Disorders, which continue to be the leading preventable cause of birth defects worldwide.

**Louise Gray, Executive Officer,
NOFASD Australia**

Local Drug Action Groups Inc. wholeheartedly support the introduction of minimum pricing for alcohol in Western Australia. Our volunteers across the state are clearly concerned about alcohol and its impact on communities. This measure would help reduce harm from alcohol in our communities and complement action by our hardworking local volunteers in regional and metro WA.

**Jennifer O'Mullane, Executive Officer,
Local Drug Action Groups Inc**

Injury Matters leads the way in preventing injury and supporting recovery to enable Western Australians to live long and healthy lives. Injury Matters supports the minimum floor pricing for alcohol in Western Australia as an effective strategy in reducing the volume of alcohol consumed and as such reducing alcohol related harm.

Sandy Lukjanowski, Chief Executive, Injury Matters

We need to do more to reduce the impact alcohol has on the health and wellbeing of our community. A minimum floor price reduces availability of cheap alcohol, and we know this has an impact on how much people drink. The evidence tells us that reducing access to alcohol, particularly by those at risk such as young people and heavy drinkers, will reduce the level of illness and injury alcohol can cause. That's better for the health of everyone.

Learne Durrington, CEO, WA Primary Health Alliance

Cyrenian House Alcohol and Other Drug Treatment Service supports the case for Minimum Floor Pricing for Alcohol in Western Australia. We believe that this approach will generally target the heaviest and often the younger more risky drinkers, while having minimal effect on the more moderate drinkers. Cyrenian House see this initiative as an important step towards reducing alcohol consumption and harm, particularly among younger alcohol drinkers.

Carol Daws, CEO, Cyrenian House Alcohol and other Drug Treatment Service

For three decades we have known that alcohol use is a cause of cancer. Cancer Council WA supports the introduction of a minimum price for alcohol because it is likely to reduce consumption by those at greatest risk of harms (including cancer) caused by heavy, long term use.

Ashley Reid, Chief Executive Officer, Cancer Council WA

Momentum is building in many places around the world for minimum pricing as a policy option to reduce harm from alcohol. A minimum floor price, set at an appropriate level, could be one of the most important developments in Western Australia to prevent and reduce problems associated with heavy drinking.

Julia Stafford, Executive Officer, McCusker Centre for Action on Alcohol and Youth

The Salvation Army in Western Australia supports the WA Alcohol and Youth Action Coalition with their case for a minimum (Floor) price of Alcohol in WA. The Salvation Army recognises the cost to Australian society by the consumption of alcohol. The detrimental effects it has on people is a major cause of health and social care issues. Heavy alcohol misuse by young people and young parents can have a detrimental effect on the development and functioning of the family unit. The Salvation Army WA supports the evidence that shows alcohol price controls are a particularly effective strategy to reduce alcohol related deaths, hospitalisations and social issues amongst young people.

Yvonne Hunt, Network Director, Crossroads West, The Salvation Army (WA)

As the leading dedicated health promotion body in WA, the Australian Health Promotion Association Ltd (AHPA®) WA Branch advocates for improvements to public health policy that enables Western Australians to improve their health and wellbeing. This is why the AHPA (WA Branch) supports the introduction of minimum pricing for alcohol in WA as it is an evidence informed approach that will be effective, as part of a comprehensive strategy, in reducing alcohol-related harm across the community. The introduction of a minimum alcohol price will be welcomed by our broader membership in their prevention efforts across the state.

**Courtney Mickan & Lorena Chapman
Co-Presidents, WA Branch, Australian
Health Promotion Association (Ltd)**

Alcohol has an immediate and direct impact on affected individuals as well as innocent bystanders. WA Trauma data (from RPH) has shown a frightening and increasing trend in trauma that is directly caused by the behaviour related to the effects of alcohol. Road Trauma continues to be a major health and social problem. The use of alcohol is clearly associated with very high risk behaviours on the road (speed, lack of use of helmets or seatbelts). But the increasing trends of particular concern to me are interpersonal violence of a very serious nature, and increasing levels of domestic violence in an environment that is fuelled by alcohol.

The RACS Trauma Committee supports all reasonable measures to reduce alcohol consumption by limiting access, availability and inducements to consume alcohol.

Surgeons also deal with the long term (non-injury) impact of alcohol consumption – e.g. cancer, liver failure, pancreatic failure. We too call for a minimum floor price of alcohol, and other proven measures of reducing harm.

**Dr Sudhakar Rao, Chair, Royal
Australasian College of Surgeons (WA)
Trauma Committee, Trauma Surgeon**

The Public Health Association of Australia (WA Branch) strongly supports the introduction of a minimum floor price for alcohol. Alcohol is responsible for a substantial burden of death and injury in WA, and reducing the amount of alcohol consumed will reduce health and social harms in our community. Given a minimum floor price is targeted towards reducing drinking among the heaviest drinkers, it is one of the most effective policy interventions state governments can introduce to reduce harm from alcohol.

**Hannah Pierce, President,
Public Health Association of Australia
(WA Branch)**

The WA Council of Social Service is supportive of measures such as a minimum floor price on alcohol that tackles related harm through reducing consumption. It is crucial that it is accompanied by increased supports to prevent dependent drinkers on low incomes being pushed into further financial hardship.

**Louise Giolitto, CEO, Western
Australian Council of Social Service**

The Royal Australasian College of Physicians (RACP) supports the introduction of minimum alcohol pricing in WA, in line with other jurisdictions that have moved or are moving in this direction. Evidence has shown that minimum pricing can reduce some of the medical and societal harms associated with excessive or risky alcohol consumption. The health, social and financial burden of alcohol, particularly in communities that experience health disadvantage on several fronts, must be acknowledged and addressed. The approach for WA as set out in this report is based on evidence, and it's positive that it has been demonstrated to have strong public support.

**Dr Catherine Yelland, President,
Royal Australasian College of Physicians**

HOW MUCH DO WESTERN AUSTRALIANS DRINK?

Western Australians drink alcohol at levels higher than the Australian average and a considerable proportion drink enough to place themselves at risk of short- or long-term harm.



In 2016, risky drinking rates were higher in WA than the rates Australia-wide.³



In WA in 2016:

The proportion of lifetime risky drinkers (> 2 standard drinks per day) was highest among people aged in their 40s.

The proportion of binge drinkers (> 4 standard drinks on one occasion at least once a month) was highest among people aged in their 20s.³



In WA, annual alcohol consumption per capita (in litres of pure alcohol) is high by both national and international standards:

Western Australians aged 15+ years = 11.9 litres¹

Australians aged 15+ years = 10.0 litres¹

OECD countries = 9.1 litres²

Worldwide = 6.2 litres.²



In some WA regions, the annual amount of alcohol consumed per capita (in litres of pure alcohol) is particularly high:

Kimberley region = 16.1 litres

Gascoyne region = 14.9 litres

Goldfields region = 14.9 litres

Esperance region = 14.7 litres

Augusta-Margaret River-Busselton region = 14.2 litres

Pilbara region = 12.3 litres.¹

In 2012-13, 18-24 year old Aboriginal and Torres Strait Islander males were more likely and 18-24 year old females were less likely to drink at risk of harm compared to non-Indigenous males and females of the same age.⁵



Among Western Australians aged **14+ years** in 2016:

1 in 4

drank alcohol in quantities that placed them at risk of harm on a single occasion (> 4 standard drinks) at least once a month³

1 in 5

drank alcohol in quantities that placed them at risk of alcohol-related harm in their lifetime (> 2 standard drinks per day).³



Among 12-17 year old WA students in 2014:

1 in 4 (24%) had drunk alcohol in the past month.

1 in 7 (14%) had drunk alcohol in the past week.

1 in 3 (30%) of those who drank alcohol in the last week drank at levels that exceeded the adult drinking guidelines for single occasion risk (> 4 standard drinks on one occasion).⁴

In 2012-13 among 15-17 year olds, Aboriginal and Torres Strait Islander males were less likely and Aboriginal and Torres Strait Islander females were more likely to drink at risk of harm from alcohol on a single occasion than non-Indigenous young people.⁵

ALCOHOL HARMS IN WESTERN AUSTRALIA



Alcohol use costs the WA community **\$3.1 billion per year** in policing costs, hospitalisations, road crashes, and ambulances.⁶



In WA in 2012, alcohol was involved in: **18%** of injury fatalities



12% of injury hospitalisations



32% of injury-related emergency department presentations.⁷

In WA in 2015, there were

565 alcohol-attributable deaths among people aged 15+ years.⁹



In WA in 2012/13 among people aged 15+ years, **16,387 hospitalisations** were due to alcohol. WA's rate of alcohol-attributable hospitalisations (80.6/10,000) was higher than the rate Australia-wide (76.9/10,000).⁹



10,186 WA drivers tested by police were found to exceed the lawful alcohol limit in 2014-15.¹⁵



1 person every 27 minutes was hospitalised for an alcohol-attributable condition in WA in 2014.¹⁰



1 in 5 trauma admissions to Royal Perth Hospital in 2015 had documented alcohol and/or drug use in the 12 hours before their trauma event.¹¹



The rates of hospitalisation due to alcohol-related assault for young Western Australians were higher than the national rates in 2012-13. WA males aged 20-29 years were hospitalised at a rate more than triple the national average.¹⁷



A snapshot survey of 100 Australian emergency departments (EDs) at 2am on 16 Dec 2017 found:

- In WA, **1 in 5** ED patients was attending because of alcohol
- Australia-wide, **1 in 8** ED patients was attending because of alcohol.¹²



Most alcohol involved in offences at a dwelling was also consumed at a dwelling (77.3%) [i.e. was packaged liquor].¹⁹



Aboriginal and Torres Strait Islander people are less likely to drink alcohol compared to non-Indigenous Australians. However, of those that do drink, more are likely to drink at risky levels.

Aboriginal and Torres Strait Islander Australians are also more likely to experience greater harm from alcohol compared to non-Indigenous people.⁸



33 people were hospitalised each week in WA due to alcohol attributable assaults in 2012-13.¹⁷



In WA, alcohol attributable assault rates were higher than the national rates for both males and females in 2012-13.¹⁷

Over one-third (37%) of non-domestic assaults (4,492 assaults) reported to WA Police were recorded by WA Police officers as alcohol-related in 2011-12.¹⁸



In WA in 2017, on average: **Almost 15 ambulances per day** were called out for the primary reason of alcohol intoxication.

Over 9 ambulances per week were called out for the primary reason of alcohol intoxication in people 18 years and younger (493 for the year).¹⁴

Alcohol is involved in a substantial proportion of domestic violence incidents.¹⁸

Domestic violence incident rates vary across WA and in some regions can be as high as 9 times the state rate.²¹



In WA in 2016: **32% of all road fatalities involved alcohol.** 62 people died in alcohol-related crashes (an average 5 deaths per month) and **76 people suffered critical injuries.**¹⁶



About 1 in 5 children born in Fitzroy Crossing in WA has Fetal Alcohol Spectrum Disorders (FASD).²² This is one of the highest prevalence rates in the world.²³

A recent study of 10-17 year olds detained in WA's youth detention centre during 2015-16 reported that over 1 in 3 (36%) of those tested were diagnosed with FASD.²⁴ This is the highest known rate of FASD in a youth justice setting worldwide.



Hospital ED staff are on the front line in dealing with drunk patients' antisocial behaviour. In 2014: **97.9% suffered verbal aggression**
92.2% were physically threatened
88.3% had their care of other patients negatively affected
87.0% felt unsafe working in the ED.¹³



In 2016-17, an estimated **7,605 family assault incidents** were reported by WA Police as alcohol-related.^{19, 20}

ADDRESSING ALCOHOL PRICING CAN REDUCE ALCOHOL-RELATED HARMS

THE EFFECT OF ALCOHOL PRICE ON ALCOHOL-RELATED HARMS

Price controls are an effective strategy for addressing harm from alcohol.²⁵⁻²⁸ There is compelling evidence that as the price of alcohol increases, the amount of drinking decreases in the general population^{27, 29, 30} and among heavier drinkers and young people.³¹

There is compelling evidence that as the price of alcohol increases, the amount of drinking decreases.

A reduction in drinking reduces the risks of alcohol-related harms in a population.³² Alcohol price increases have been linked to reductions in drink driving, crimes involving alcohol, injury requiring hospitalisation, liver cirrhosis and other alcohol-related causes of death, and risky sexual behaviours.^{31, 33-35} Increases in alcohol prices have also been linked to improved academic performance among youth.³¹

A reduction in drinking reduces the risks of alcohol-related harms in a population.



Packaged liquor from bottleshops now accounts for 80% of alcohol sold in Australia.³⁶

CHEAP ALCOHOL IS READILY AVAILABLE IN WA

Cheap alcohol has never been more available. Packaged liquor from bottleshops now accounts for 80% of alcohol sold in Australia.³⁶ The packaged liquor market is increasingly dominated by supermarket-owned chains that use low-price alcohol as a key marketing strategy.³⁷ There has also been an increase in the number of liquor outlets in WA over recent years.³⁸ These include big box liquor barns with a heavy focus on low prices. Dan Murphy's is one such retailer that in 2016 attracted about \$1 in every \$3 spent by Australians on retail liquor.³⁹ Newer to WA, budget supermarket chain ALDI stocks a smaller range of alcohol products than the liquor barns, but sells some alcohol products very cheaply in a number of its stores.⁴⁰ Retail competition has led to aggressive discounting, resulting in very low-cost alcohol being available.³⁷ For example, some wine products are now sold for as little as \$0.24 cents per standard drink.⁴¹

Cheap alcohol has never been more available.



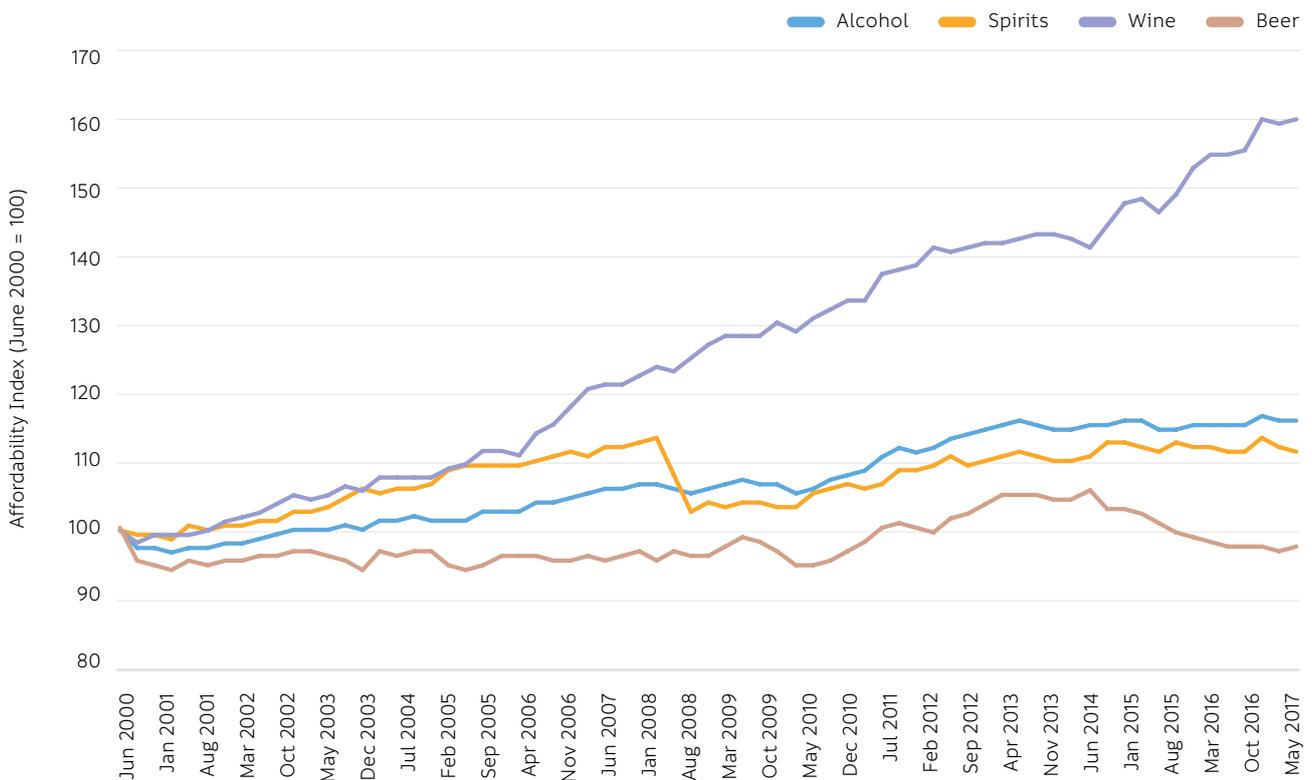
**\$1 in every \$3
Australians spend on retail alcohol
is spent at Dan Murphy's.³⁹**

ALCOHOL HAS BECOME MORE AFFORDABLE IN WA

When alcohol becomes more affordable relative to wages, more alcohol is consumed by a population.²⁹ In WA, alcohol (and particularly wine) has become more affordable over the last two decades. Figure 1 shows hourly rates of pay (excluding bonuses) in WA relative to alcohol prices in Perth, indexed to June 2000. The proportion of a person's weekly earnings that could purchase a unit of alcohol in Perth

in June 2000 would be enough to purchase 1.15 units of alcohol in June 2017. This means Perth consumers could afford to purchase 15% more alcohol in 2017 than they could in 2000. Wine showed the greatest increase in affordability over this period, such that the same proportion of a person's earnings could buy 1.6 times more wine in 2017 than it could have in 2000. Spirits also became more affordable, in spite of a reduction in affordability in 2008 due to the introduction of the alcopops tax. Beer affordability remained relatively stable over this time period.

FIGURE 1: AFFORDABILITY INDEX OF ALCOHOL, WESTERN AUSTRALIA 2000 – 2017



Sources: Foundation for Alcohol Research & Education (FARE) calculations for WA based on: ABS Cat. No. 6345.0 – Wage Price Index, Australia, June 2017; and ABS Cat No. 6401.0 – Consumer Price Index, Australia, June 2017.

WHAT IS A MINIMUM PRICE ON ALCOHOL?

Minimum pricing is a regulatory measure that sets a floor price per standard drink below which alcohol cannot be sold. A minimum price would reduce retailers' ability to heavily discount and sell alcohol at very cheap prices. It aims to reduce alcohol consumption among the heaviest drinkers, while having minimal impact on moderate drinkers.⁴² This is because heavier drinkers tend to buy cheaper alcohol, and more of it, compared to lighter drinkers.⁴³

A minimum price would reduce retailers' ability to heavily discount and sell alcohol at very cheap prices. It aims to reduce alcohol consumption among the heaviest drinkers, while having minimal impact on moderate drinkers.

WHAT WOULD THE MINIMUM PRICE BE?

Minimum pricing can be introduced as a state-level policy. Modelling specific to WA will need to be conducted to determine an appropriate minimum price level that would effectively reduce drinking and harms, particularly among heavy drinkers, while limiting the impacts on moderate and light drinkers. Based on minimum prices discussed and implemented elsewhere, an appropriate threshold price may be between \$1.00 and \$1.50 per standard drink. A recent review of Northern Territory (NT) liquor laws recommended minimum pricing⁴⁴ and in response, the NT Government plans to implement an alcohol floor price of \$1.30 per standard drink from October 2018.^{45, 51}

Decisions on the most appropriate threshold price for WA will need to consider local data, including the proportion of alcohol products for sale under the threshold price, income levels, alcohol purchasing and consumption patterns, and risks associated with alcohol use.⁴² Among the important considerations around minimum pricing are the resourcing needs of support agencies. Appropriate support services should be accessible for those particularly impacted by a minimum price policy.

HOW SHOULD A MINIMUM PRICE BE SET AND MAINTAINED?

To be most effective, minimum prices should be applied per standard drink and should apply to all alcohol products. Setting a minimum price for all alcohol prevents substitution between alcohol types by raising the price of all cheap alcohol products above the threshold.²⁹

Minimum pricing should be applied to alcohol sales from both off-premise retailers (e.g. bottle shops) and on-premise venues (e.g. bars, restaurants and clubs) to maintain consistency. To remain effective over time, the minimum price should at least be indexed to changes in income levels in WA.²⁹

Monitoring and evaluation will be an important part of any implementation process⁴⁶ to assess the effects of a minimum alcohol price on all Western Australians, particularly those within vulnerable groups such as dependent drinkers, young people, Aboriginal and Torres Strait Islander people, and those on low incomes.

Minimum pricing will affect only the cheapest alcohol products, including cheap bottled wine and cask wine and other products that are produced and positioned to be the cheapest in their category.

We appreciate that there are no magic bullets when it comes to preventing harm from alcohol. A minimum floor price on alcohol will be most effective as part of a comprehensive approach that addresses alcohol price, availability, advertising, and access to treatment.

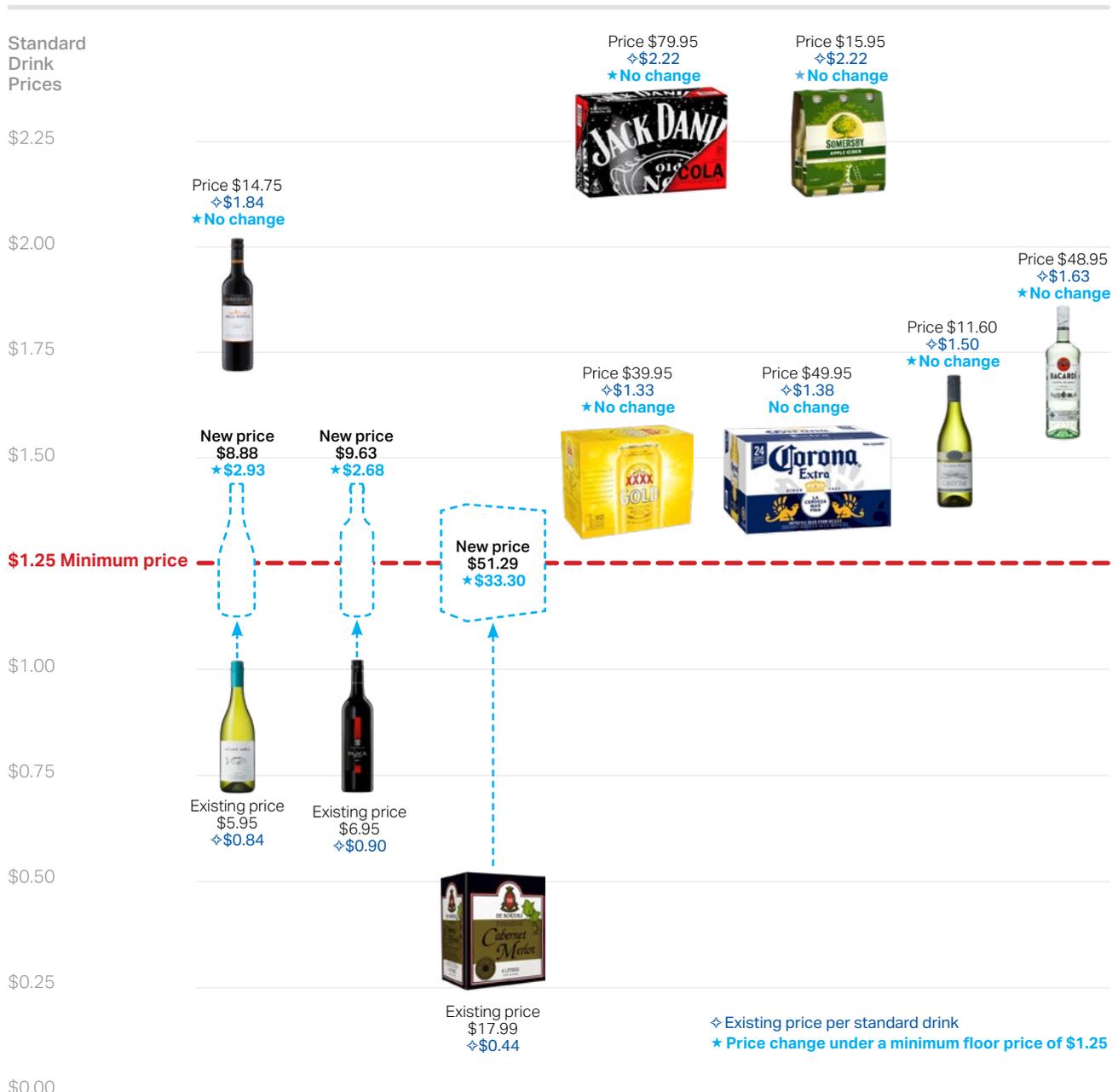
WHAT PRODUCTS WOULD A MINIMUM PRICE AFFECT?

Minimum pricing will affect only the cheapest alcohol products, including cheap bottled wine and cask wine⁴³ and other products that are produced and positioned to be the cheapest in their category. Currently, bottles of wine can be sold for under \$3 each and a 4L wine cask (containing 30 standard drinks) for \$9.00.^{40, 47} This is the equivalent of about \$0.30 to \$0.40 per standard drink. Discounted products are available

for as little as \$0.24 per standard drink. These products can be sold at such low prices because they are cheap to produce and are subject to the lowest rates of tax under the current Wine Equalisation Tax system.⁴⁸ Very cheap spirits and some discounted full strength beer may also be affected by a minimum price.^{37, 48}

The range of alcohol products affected by a minimum price will depend on the level at which the minimum price is set. For example, Australian modelling of the effect of a \$1 minimum price

FIGURE 2: EFFECT OF A MINIMUM FLOOR PRICE OF \$1.25 ON PRICES OF COMMONLY PURCHASED ALCOHOL PRODUCTS



Source: Prices as available from Dan Murphy's online (15/1/18). Products selected were named brands that were listed as most popular on the Dan Murphy's website. Bottled wine products listed were those most popular in price ranges \$0-\$7 and \$10-\$15.

Minimum pricing is unlikely to affect drinks bought at pubs, clubs, and restaurants as these would generally be sold at prices above the minimum threshold.

per standard drink indicated it would increase the price of the cheapest wine and beer products but have little effect on the prices of most spirit products that already cost more than \$1 per standard drink.⁴⁸ A higher minimum price level will affect a greater range of products and spread reductions in consumption and alcohol-related harms, and also economic impacts, across a broader section of the population.

Figure 2 illustrates the potential impact of setting a minimum price at between \$1.00 and \$1.50 per standard drink. It shows examples of how the prices of some items commonly purchased from bottle shops may be affected by a minimum price of \$1.25.

Minimum pricing is unlikely to affect drinks bought at pubs, clubs, and restaurants as these would generally be sold at prices above the minimum threshold. An increase in the minimum price of the cheapest drinks available from bottle shops would reduce the difference between their prices and the price of drinks at bars and clubs.

WHERE ELSE IN THE WORLD IS THERE MINIMUM PRICING?

Canada and some Eastern European countries (Russia, Ukraine, Uzbekistan, and the Republic of Moldova) already have minimum alcohol prices.⁴⁹ In several US states, minimum mark up or profit margins have been established for businesses selling alcohol, essentially setting a minimum price.² Minimum pricing was implemented in Scotland in May 2018.⁵⁰ Wales has passed legislation to allow floor pricing, which is expected to be introduced in 2019.⁸⁸ Ireland's parliament is considering minimum pricing, with other countries likely to follow. In Australia, in response to a recent review of NT liquor laws,⁴⁴ the NT Government indicated that from October 2018⁵¹ it will introduce a floor price for alcohol of no less than \$1.30 per standard drink.⁴⁵

EVIDENCE FOR THE EFFECTIVENESS OF A MINIMUM PRICE ON ALCOHOL

Minimum pricing is one method of increasing the price of the cheapest alcohol. Evidence on its effectiveness has been obtained from evaluations of real-world minimum alcohol pricing and from modelling studies.

The Canadian experience

Research on the real-world outcomes of a minimum alcohol price has been conducted in Canada, which has had minimum pricing (referred to as 'social reference pricing') since the 1990s. Results of this research have shown promising effects of this policy in reducing consumption, health-related harms, and crime.

In Saskatchewan province, a 10% increase in the minimum alcohol price was associated with an 8.4% reduction in alcohol use,⁵³ an 8% reduction in night time alcohol-related traffic offences for men, and a 19.7% reduction in violent offences four months after minimum pricing was introduced.³³ Also linked to minimum pricing was a 39% reduction in emergency department presentations due to motor vehicle crashes among women six months after its introduction.⁵⁴

In British Columbia, a 10% increase in the average minimum price of a standard drink reduced alcohol use by 3.4%,⁵⁵ alcohol-related hospital admissions by 9%,³⁴ and deaths wholly due to alcohol by 32%.³⁵ Low income families experienced greater reductions in harm under this policy than higher income families.⁵⁶



Canada and some Eastern European countries already have minimum alcohol prices.

Minimum pricing was implemented in Scotland in May 2018. In Australia, the NT Government indicated it will introduce a floor price for alcohol in October 2018.

Modelling of minimum pricing

The Sheffield Alcohol Policy Model, developed in the UK, estimates changes in health and social outcomes under a range of minimum alcohol prices and policies.⁵⁷ This model has been updated as new methods and data became available⁴² and has been adapted for use in other countries, including Australia. UK researchers using the Sheffield Alcohol Policy Model estimated that a minimum price of £0.45 per unit of alcohol would lead to reduced alcohol use in the UK, with the largest reductions among harmful drinkers. Moderate drinkers would be least affected, and the health benefits of the policy would be highest in the lowest socio-economic group.⁴²

Australian researchers used a similar approach to the Sheffield Model to model Australian data. Their findings were consistent with those from the UK. The Australian research, modelling minimum prices set at \$1 and \$2, found reductions in consumption would be greatest for the heaviest drinkers, while for light and moderate consumers there would be little effect on consumption or their annual alcohol expenditure.^{43, 58} As the effect of minimum pricing would be concentrated among heavy drinkers, the resulting drop in their alcohol use is likely to yield positive public health and community economic benefits.⁵⁸

TAXATION AND MINIMUM PRICING – COMPLEMENTARY APPROACHES

Pricing policies have been identified by the World Health Organization as one of the “best buys” to address harmful alcohol use.

Pricing policies have been identified by the World Health Organization as one of the “best buys” to address harmful alcohol use, with particularly strong evidence for tax increases.^{28, 59} However, Australia’s current alcohol tax system has been described as “not well suited to reducing social harm”.⁶⁰ The Wine Equalisation Tax (WET) calculates tax for wine and traditional cider products based on their wholesale price rather than their alcohol content.⁶¹ This is why cheaply produced bottled and cask wines are the cheapest alcohol products available.⁶² Other alcohol products are taxed volumetrically, such that taxes increase with increasing alcohol content and, for beer, whether it is sold as draught or packaged.⁶³

Reforms to Australia’s alcohol tax system, including removing the WET and applying a volumetric tax across all alcohol products, have been recommended by numerous government reviews^{25, 60, 64–66} and supported by public health agencies^{64, 67} and elements of the alcohol industry.⁶⁴ Applying an appropriate volumetric tax would increase the prices of many alcohol products, and reduce alcohol use and alcohol-related harms.⁵⁹ A volumetric tax would operate nationally and the resulting revenues would be public funds recouped by the Federal Government. However, tax can only be addressed at a federal level, and to date the Federal Government has shown little political interest in changing alcohol taxation.

Minimum pricing is a policy approach that could be implemented at a state level and would complement an appropriate alcohol tax system.

Minimum pricing is a policy approach that could be implemented at a state level and would complement an appropriate alcohol tax system.⁶² For example, tax increases could potentially be absorbed by producers and retailers, whereas the minimum price must be passed onto consumers.⁶⁸ A minimum price would increase the cost of only those alcohol products priced at below the minimum level, so it reduces the availability of cheap alcohol.

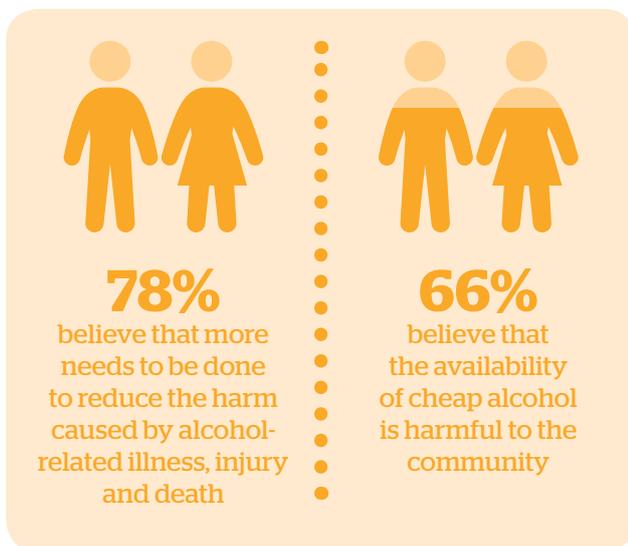
Australian research has found that while both volumetric taxation and minimum pricing could reduce heavy alcohol consumption with minimal effects on light and moderate drinkers, minimum pricing could produce bigger reductions in heavy drinking at a lower cost to consumers.⁴³ This is particularly true for the lowest income consumers.⁴⁸

Any revenue arising from a minimum alcohol price would be retained by the alcohol industry, including retailers.⁶⁸ However, there may be other opportunities to recoup public funds,⁸⁷ for example through changes to liquor licensing fees, to make them better reflect the cost of administering the licensing scheme for outlets with different risk profiles. This approach may be particularly relevant in WA where liquor licence fees are low relative to some other Australian jurisdictions.⁶⁹ For example, WA liquor stores pay \$594 in annual licence fees, compared to \$1934 in Victoria and \$4032 in Queensland.^{70, 71}

WA COMMUNITY SUPPORT FOR MINIMUM PRICING

PUBLIC OPINION SURVEY

In December 2017, the McCusker Centre for Action on Alcohol and Youth commissioned independent market research to explore public opinion on the price of alcohol and minimum pricing. Survey results show that the majority believe cheap alcohol is harmful to the community and want the WA government to take action.⁷² Based on a representative sample of 806 WA adults, the survey found:



The WA community clearly supports limiting the sale of cheap alcohol:



- **73% of older respondents**
 - **68% of low-income households**
 - **74% of respondents from regional areas**
- agree that the WA Government should ensure that alcohol products are not sold for cheaper prices than bottled water or soft drinks

There is majority support for a minimum price on alcohol in WA. About 3 in 5 WA adults support the WA Government introducing a minimum price of alcohol to prevent the sale of very cheap alcohol, with a further 1 in 5 neutral on this topic (see Figure 3). Less than a quarter of respondents were opposed to minimum pricing.

When presented with potential actual costs of common alcohol products under various minimum price options (\$1.00, \$1.25 or \$1.50) support continued to outweigh opposition. Support was consistent across each price option with most respondents supportive of, or neutral to, each minimum price (see Figure 4 a, b, c).

Support for minimum pricing was mostly consistent across the community. The only variation was that those on low incomes were *less* opposed to minimum pricing (17%) than those on higher incomes (30%). Low income earners became less supportive of a minimum price on alcohol than high income earners once the floor price reached \$1.50 per standard drink.

FIGURE 3: LEVEL OF SUPPORT FOR MINIMUM ALCOHOL PRICING IN WA

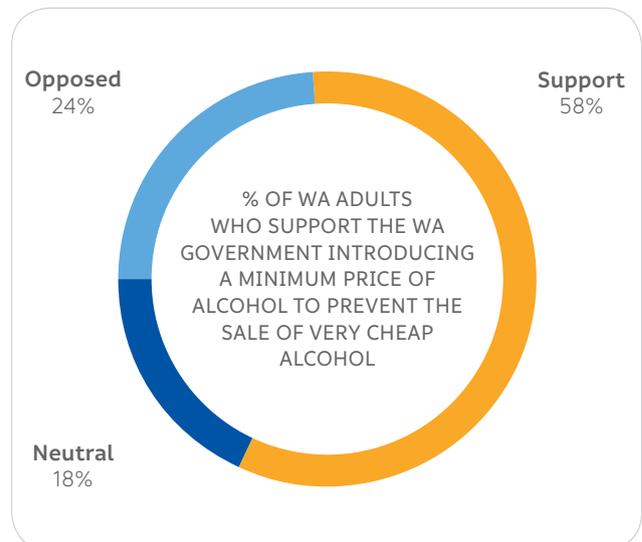
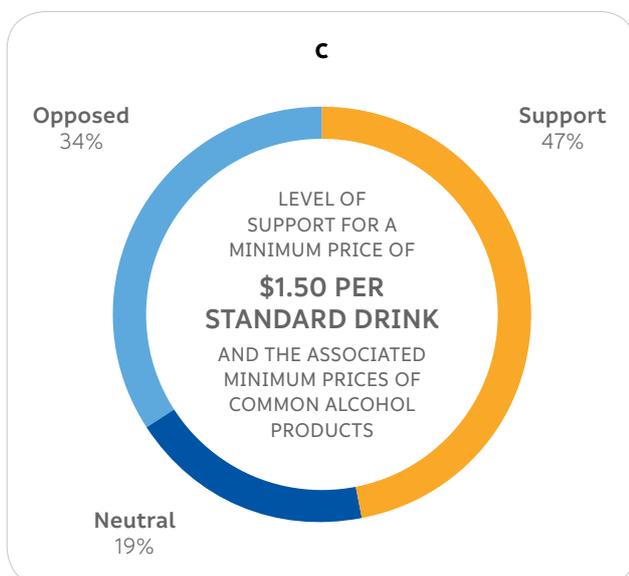
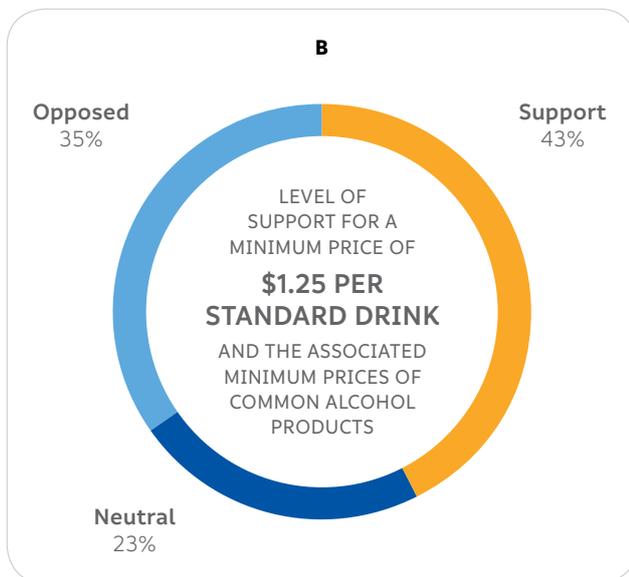
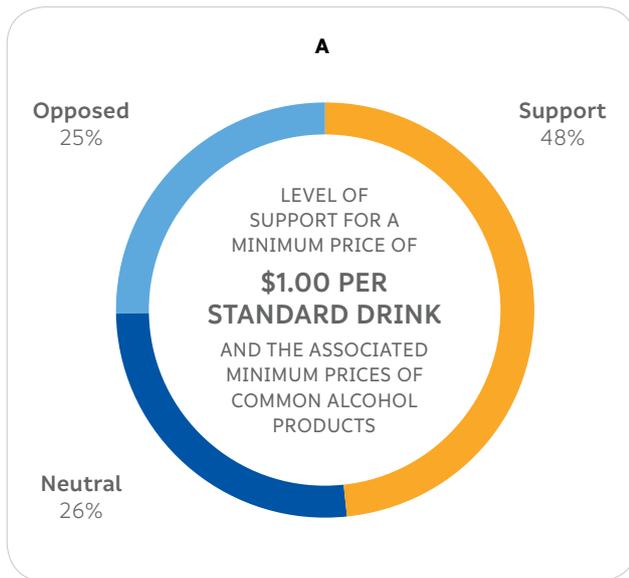


FIGURE 4: LEVELS OF SUPPORT IN WA FOR VARIOUS MINIMUM ALCOHOL PRICE OPTIONS



There is majority support for a minimum price on alcohol in WA.

WA ALCOHOL INDUSTRY SUPPORT FOR MINIMUM PRICING

To date, it appears there may be some support (or at least a neutral response) for minimum pricing from sections of the alcohol industry. Several factors may contribute to a positive response from industry. First, most of Australia’s cheap, bulk wine is produced in South Australia and New South Wales. WA winemakers produce a greater proportion of premium products at well above the minimum price threshold.⁷³ Second, the industry would keep any revenue from a minimum price, unlike a tax increase where additional funds would go to the government. Third, a minimum price may reduce the price differential between on- and off-premise alcohol, and would be unlikely to affect bar and pub drink prices in any significant way, thus is likely to be acceptable to the hospitality sector.

IMPACT OF MINIMUM PRICING ON DIFFERENT POPULATION GROUPS

A minimum price on alcohol will affect different subgroups in the population to a greater or lesser extent. The following section provides evidence for the effect of minimum pricing on heavy drinkers, low-income populations, moderate drinkers and young people.

IMPACT OF MINIMUM PRICING ON HEAVY DRINKERS

KEY POINTS

- Research shows that compared to lighter drinkers, the heaviest drinkers purchase more low cost alcohol, and it makes up a greater proportion of their alcohol purchases.
- Increasing the price of the cheapest alcohol will reduce alcohol use by heavy drinkers.
- There is little evidence that minimum pricing will cause dependent drinkers to drink illicit and non-beverage alcohol (e.g. mouthwash, aftershave, rubbing alcohol) or turn to criminal activity.

A minimum price is expected to reduce alcohol use among heavy and dependent drinkers. Heavy drinkers, regardless of income, have a preference for cheap alcohol. In Australia, the heaviest drinkers purchase a higher amount of low cost alcohol,⁷⁴ and it makes up a greater proportion of their alcohol purchasing compared to lighter drinkers in each income group.⁷⁵ Purchasing habits of Australian households show that heavy drinkers pay less per standard drink compared to lighter drinkers. For example, the heaviest drinkers pay on average \$1.33 per standard drink, compared to the lightest consumers who pay an average of \$2.21 per standard drink.⁴³

Research shows that increasing the price of the cheapest alcohol will reduce alcohol use by heavy drinkers. Australian modelling of a \$1 per standard drink minimum price estimated that the volume of wine and beer purchased by the heaviest consumers would be reduced by around 15.8 litres and 1.8 litres of pure alcohol, respectively, per person per year.⁴³ More recently, modelling of a \$2 minimum price estimated that the heaviest drinkers would reduce their drinking

by 6.3 standard drinks per week, while the figure for moderate drinkers was less than half a standard drink per week.⁵⁸

International research supports these findings. Modelling of a £0.45 minimum price per standard drink in England estimated that alcohol use in the population would reduce by 1.6% overall (0.23 units per week), and by 3.7% (about 2.7 units per week) among harmful drinkers compared to 0.6% (0.03 units per drinker per week) for moderate drinkers.⁴² In Scotland, a minimum price of £0.50 per unit of alcohol was estimated to reduce consumption among harmful drinkers by 7% (4.7 units per week), and among hazardous drinkers by 2.5% (0.7 units per week). The smallest reduction was predicted to be among moderate drinkers (1%, or 3.7 units per drinker per year or 0.07 units per week).⁷⁶

Studies of purchasing behaviours of heavy, dependent drinkers offer predictions of how they may respond to alcohol price increases. In New Zealand, dependent drinkers undergoing detoxification treatment indicated that they coped during times when they could not afford alcohol by forgoing other essentials (e.g. re-budgeting), borrowing alcohol, or going without alcohol. Reports of stealing or using non-beverage alcohol (in this case methylated spirits) were rare.⁷⁷ Similarly, Canadian research with 364 homeless dependent drinkers found they were most likely to reduce their alcohol use and re-budget their funds when alcohol became less affordable. Drugs and non-beverage alcohol (e.g. mouthwash, aftershave, rubbing alcohol) were used by a minority of respondents. Stealing of alcohol or other property was the least common method of coping with less affordable alcohol.⁷⁸

Research shows that increasing the price of the cheapest alcohol will reduce alcohol use by heavy drinkers.

Minimum pricing could be an important harm minimisation strategy for dependent drinkers, as it would raise the price of all types of cheap alcohol and prevent them from switching to cheaper product categories – a strategy commonly reported by heavy drinkers.⁷⁷ Access to appropriate support services will be important for those who would be most affected by minimum pricing. Demand for treatment services may initially

increase with reduced alcohol affordability and should be available to those wishing to access it. Over time minimum pricing may lead to fewer people becoming dependent on alcohol due to reduced access to cheap alcohol products and the resulting decreases in consumption.⁴⁶

IMPACT ON LOW-INCOME DRINKERS

KEY POINTS

- **Individuals in the lowest-income group are more likely to abstain from alcohol or drink at moderate levels than people in higher-income groups. Low-income, light to moderate drinkers would experience limited impacts from a minimum price policy.**
- **Lower-income groups experience more harms from drinking than higher-income groups. Therefore, low-income groups are likely to experience a greater reduction in alcohol-related harms as a result of reduced alcohol use due to minimum pricing compared to other income groups.**

Individuals in the lowest-income group are more likely to abstain from alcohol or drink at moderate levels than people in higher-income groups,^{42, 74} suggesting a considerable proportion of this group would experience limited impacts from a minimum price policy.⁴² Research has shown that the greatest impacts of a minimum price on alcohol will be experienced by the heaviest drinkers across all income levels.^{42, 48, 74}

For those who drink, it is the amount they drink, more so than their income, that affects how they would be impacted by minimum pricing.^{42, 74} Australian research has estimated that among the lowest-income group, a minimum price of \$1 per standard drink would increase costs for heavy drinkers of wine by \$16.70 per week, but only by \$0.05 per week for light drinkers of wine.⁴⁸ Cost increases for heavy and light beer drinkers in the lowest income group were estimated to be \$28.90 and \$0.21 per week respectively. Minimal changes in the price of most spirit products were predicted under a \$1 minimum price.

For the lowest-income drinkers, on average, a \$1 minimum price can be expected to reduce wine and beer consumption by about 11.5 and 5.7 standard drinks per capita per week respectively: for light to moderate drinkers the reduction will be less and for heavier drinkers it will be more.⁴⁸

Similarly, UK modelling of a £0.45 minimum price indicated the greatest reductions in alcohol use were among harmful drinkers, particularly those in the lowest-income group.⁴²

It is predicted that lower-income heavy drinkers will spend proportionally more of their income under a minimum price for alcohol than higher income drinkers as cheap alcohol makes up a larger proportion of the alcohol they drink.^{48, 74} An Australian study modelling the effect of introducing a minimum price of \$1 per standard drink estimated it would increase alcohol-related spending by 2.7% of income for the lowest-income drinkers compared to 0.3% of income for drinkers in the highest-income group.⁴⁸ However, this study also found that the lowest income group had the highest per capita alcohol consumption, so the larger estimated increase in price paid is not unexpected. Reductions in consumption would also be the most beneficial for this group. Any regressive effect of minimum pricing on low-income drinkers is likely to be concentrated among the heaviest drinkers and thus strongly outweighed by reductions in consumption and alcohol-related harm to this group. Lower-income groups experience more harms from drinking than higher-income groups.^{79, 80} Therefore, the reduction in alcohol use in low-income groups predicted to result from minimum pricing will likely lead to a greater reduction in alcohol-related harms for this group than for other income groups.⁴² This should translate to greater health and social benefits for low-income drinkers than for those belonging to other socio-economic groups.

In Canada, research found that increases in alcohol prices under a minimum pricing policy were associated with reductions in the number of hospitalisations due to alcohol. This effect was greatest in low-income areas, indicating low-income families accrued greater harm reductions under this policy than higher-income families.⁵⁶ A 1% increase in alcohol price was associated with a 3.6% reduction in acute alcohol-related hospital admissions in low-income regions compared to a 1.6% reduction in all other regions. Two to three years later reductions were also seen for chronic conditions wholly (2.05%) and partially (1.8%) related to alcohol in low-income regions.

In Canada, research found that increases in alcohol prices under a minimum pricing policy were associated with reductions in the number of hospitalisations due to alcohol. This effect was greatest in low-income areas.

These results suggest a minimum price for alcohol may contribute to reducing social inequalities.⁴² To ensure minimum pricing policies do not disadvantage vulnerable groups, consideration should be given to balancing the level at which a minimum price is set and the relative health and social advantages resulting from reduced drinking.⁷⁴

IMPACT ON MODERATE DRINKERS

KEY POINTS

- **Light and moderate drinkers drink fewer drinks overall and purchase less cheap alcohol than heavy drinkers. Minimum pricing will therefore have only a limited effect on light and moderate drinkers' alcohol use and costs.**

Light and moderate drinkers drink fewer drinks overall and, on average, spend more per standard drink than heavy drinkers.⁴³ These factors combined mean that minimum pricing will have only a limited effect on those who drink at light or moderate levels.

Australian modelling estimated that introducing a \$1 per standard drink minimum price would have little effect on the overall cost or volume of beer and wine purchased among light and moderate drinkers.⁴³ A \$1 per standard drink minimum price is predicted to increase the mean cost of wine for the lightest 20% of drinkers by \$2.16 per year, and between \$9.42 and \$20.54 per year for moderate drinkers. It is also expected to have negligible effect on the cost of beer, with the lightest drinkers predicted to pay \$0.14 more per year and moderate drinkers predicted to pay between \$1.17 and \$6.18 more per year for beer. There was a negligible effect of a \$1 minimum price on consumers of spirits. Australian modelling of a \$2 per standard drink minimum price similarly estimated that the reduction in alcohol purchases by moderate drinkers would be very low: less than half a standard drink per week.⁵⁸

In the UK, modelling by the University of Sheffield has also shown that the impact of minimum pricing on moderate drinkers is minimal. Modelling of a £0.45 minimum price projected that moderate drinkers would spend just £0.78 more per year on alcohol and reduce their alcohol use by 1.6 units per year,⁴² which is equal to less than a pint of beer.

IMPACT ON YOUNG PEOPLE

KEY POINTS

- **Young people are particularly sensitive to the price of alcohol.**
- **Young, high risk drinkers' drink choices are particularly influenced by price.**

Young people are particularly sensitive to the price of alcohol.^{81, 82} While little research has specifically assessed the effects of minimum pricing on young people, there is consistent evidence that changes in alcohol prices are related to changes in youth drinking.⁸³ Research commissioned by the Drug and Alcohol Office (now Mental Health Commission) in WA found that young people aged 18–29 years were more likely than older age groups to purchase cheap alcohol weekly or more often, and to report they would drink more if purchasing cheaper alcohol. Young people 18–29 years were also more likely than those in older age groups to indicate they would purchase and consume more alcohol if cheap alcohol became more available (e.g. if a new cheap bottle shop opened in their area).⁸¹

Young people who drink heavily may be more influenced by alcohol price than those who drink at light to moderate levels. Research with New Zealanders aged 16 to 19 years found heavier drinkers paid significantly less per drink compared to median and lighter alcohol users.⁸⁴ The median group in turn paid significantly less than the lighter use group per drink.⁸⁴

A survey of young, high-risk drinkers aged 16 to 19 years from Perth, Bunbury, Melbourne, and Sydney found that almost half (42%) cited price as a reason why they chose a particular beverage.⁸² This study also showed that young people drank less when they paid more per standard drink.⁸² Thus young people, particularly those who drink the most, are likely to be influenced to reduce their consumption by the introduction of a minimum floor price that increases the cost of the cheapest alcohol.

Policies to address binge drinking by young people have typically focussed on premises licensed to sell alcohol for consumption on site, such as bars, pubs, and clubs.⁸⁵ Pricing measures that affect the sale of takeaway alcohol, such as from bottle shops, would complement controls placed on on-premise licensed venues to address pre-drinking and binge drinking. Addressing the

Young people who drink heavily may be more influenced by alcohol price than those who drink at light to moderate levels.

price of alcohol through minimum pricing would also complement the existing WA guideline on the responsible promotion of liquor for consumption on premises,⁸⁶ which limits cheap and discounted liquor promotions likely to encourage irresponsible drinking.

Modelling and evaluation of minimum pricing should consider the potential impact on young people, including young Aboriginal and Torres Strait Islander people and particularly those in regional and remote areas of WA. Additional support for local and community controlled services may be needed to address any issues that may arise.

CONCLUSION

On the basis of the available evidence, a minimum floor price for alcohol is likely to make an important contribution to preventing and reducing harms from alcohol in WA. This state-level policy option can be expected to deliver important benefits for WA young people, as well as benefits across the community, including to drinkers and others. The WA Alcohol and Youth Action Coalition supports the introduction of a minimum floor price for alcohol, within a comprehensive and evidence-based approach, supported by well-designed modelling and evaluation, and adequate resourcing of support agencies.

REFERENCES

1. Loxley W, Gilmore W, Catalano P, Chikritzhs T. National Alcohol Sales Data Project (NASDP) Stage 5 Report. Perth, Western Australia: National Drug Research Institute, Curtin University; 2016.
2. Organization for Economic Co-operation and Development. Tackling Harmful Alcohol Use: Economics and public health policy. Paris: OECD Publishing; 2015.
3. Australian Institute of Health and Welfare. National Drug Strategy Household Survey 2016: detailed findings. Drug Statistics series no. 31. Cat. no. PHE 214. Canberra: AIHW; September 2017.
4. Mental Health Commission. Alcohol trends in Western Australia: Australian school students alcohol and drug survey: Government of Western Australia; 2016.
5. Statistics ABS. Australian Aboriginal and Torres Strait Islander Health Survey: First Results, Australia, 2012-13. Canberra; 2013.
6. Alcohol Think Again. Alcohol and Your Health Infographic 2017 [cited 10/11/2017]; Available from: <http://alcoholthinkagain.com.au/Resources/Alcohol-Use-Statistics>
7. Hendrie D, Miller T, Randall S, Brameld K, Moorin R. Incidence and costs of injury in Western Australia 2012: Government of Western Australia, Department of Health; 2017.
8. Gray D, Cartwright K, Stearne A, Siggers S, Wilkes E, Wilson M. Review of the harmful use of alcohol among Aboriginal and Torres Strait Islander people: Australian Indigenous HealthInfoNet; 2017.
9. National Drug Research Institute. Bulletin 16: Estimated alcohol-attributable deaths and hospitalisations in Australia, 2004 to 2015.: Curtin University; 2018.
10. Alcohol.Think Again. How alcohol can damage your body: Reducing your drinking will reduce your risk [campaign poster]. 2017 Jan 2017; Available from: http://alcoholthinkagain.com.au/Portals/0/documents/health_alcohol_infographic_jan2017.pdf
11. Royal Perth Hospital. Western Australian State Trauma Registry Report 2015: Department of Health, Government of Western Australia; 2017.
12. Australasian College for Emergency Medicine. 2017 Alcohol Harm Snapshot Survey Results. ACEM: Melbourne; 2017.
13. Egerton-Warburton D, Gosbell A, Wadsworths A, Moore K, Richardson DB, Fatovich D. Perceptions of Australasian emergency department staff on the impact of alcohol-related presentations. *MJA*. 2016;204(4):155.e1-e6.
14. St John Ambulance WA and Curtin University. More young WA men requiring ambulances for alcohol than women. Media Release, September 2018. Available from: <https://news.curtin.edu.au/media-releases/young-wa-men-requiring-ambulances-alcohol-women/>.
15. Western Australian Police. Annual report 2015. East Perth: WA Police; 2015.
16. Road Safety Commission. 2016 Summary: Preliminary fatal and critical injuries on Western Australian roads. Perth, WA: Road Safety Commission; 2017.
17. Lensvelt E, Gilmore W, Gordon E, Liang W, Chikritzhs T. Trends in estimated alcohol-attributable assault hospitalisations in Australia 2003/04 - 2012/13. Perth: NDRI; 2016.
18. Western Australian Police. Submission to the Review of the Liquor Control Act. [Internet] 2013; Available from: <https://www.rgl.wa.gov.au/liquor/liquor-news/liquor-news-archive/liquor-control-act-submissions>
19. Miller P, Cox E, Costa B, Mayshak R, Walker A, Hyder S, et al. Alcohol/Drug-Involved Family Violence in Australia: Final Report. Canberra, ACT: National Drug Law Enforcement Research Fund; 2016.
20. Western Australia Police Force. Crime Statistics Portal. 2018 [cited 17/1/2018]; Available from: <https://www.police.wa.gov.au/Crime/CrimeStatistics#/start>
21. Western Australia Police Force. All Western Australia 2016-2017 Financial Year: Monthly Crime Figures; 2017.
22. Lucas BR, Doney R, Latimer J, Watkins RE, Tsang TW, Hawkes G, et al. Impairment of motor skills in children with fetal alcohol spectrum disorder in remote Australia: The Lillilwan Project. *Drug and Alcohol Review*. 2016;35(6):719-27.
23. Fitzpatrick JP, Latimer J, Carter M, Oscar J, Ferreira M, Carmichael Olson H, et al. Prevalence of fetal alcohol syndrome in a population-based sample of children living in remote Australia: The Lillilwan Project. *Journal of Paediatrics and Child Health*. 2015;51(4):450-7.
24. Bower C, Watkins RE, Mutch RC, Marriott R, Freeman J, Kippin NR, et al. Fetal alcohol spectrum disorder and youth justice: a prevalence study among young people sentenced to detention in Western Australia. *BMJ Open*. 2018;8(e019605).
25. National Preventative Health Taskforce. Australia: The Healthiest Country by 2020 – National Preventative Health Strategy – the roadmap for action. Canberra: Commonwealth of Australia; 2009.
26. Babor T, Caetano R, Casswell S, Edwards G, Giesbrecht N, Graham K, et al. Alcohol: no ordinary commodity - research and public policy. Oxford: Oxford University Press; 2010.
27. Wagenaar A, Salois M, Komro K. Effects of beverage alcohol price and tax levels on drinking: a meta-analysis of 1003 estimates from 112 studies. *Addiction*. 2009;104:179-90.
28. World Health Organization. Tackling NCDs: 'Best buys' and other recommended interventions for the prevention and control of noncommunicable diseases. Geneva; 2017.
29. Jiang H, Livingston M. The Dynamic Effects of Changes in Prices and Affordability on Alcohol Consumption: An Impulse Response Analysis. *Alcohol and Alcoholism*. 2015;50(6):631-8.
30. Burton R, Henn C, Lavoie D, O'Connor R, Perkins C, Sweeney K, et al. A rapid evidence review of the effectiveness and cost-effectiveness of alcohol control policies: an English perspective. *The Lancet*. 2017;389(10078):1558-80.
31. Xu X, Chaloupka FJ. The effects of prices on alcohol use and its consequences. *Alcohol Research and Health*. 2011;34(2):236-45.
32. National Health & Medical Research Council. Australian guidelines to reduce health risks from drinking alcohol: Commonwealth of Australia; 2009.
33. Stockwell T, Zhao J, Sherk A, Callaghan RC, Macdonald S, Gatley J. Assessing the impacts of Saskatchewan's minimum alcohol pricing regulations on alcohol-related crime. *Drug and Alcohol Review*. 2017;36(4):492-501.
34. Stockwell T, Zhao J, Martin G, Macdonald S, Vallance K, Treno A, et al. Minimum Alcohol Prices and Outlet Densities in British Columbia, Canada: Estimated Impacts on Alcohol-Attributable Hospital Admissions. *American Journal of Public Health*. 2013;103(11):2014-20.
35. Zhao J, Stockwell T, Martin G, Macdonald S, Vallance K, Treno A, et al. The Relationship between Minimum Alcohol Prices, Outlet Densities and Alcohol Attributable Deaths in British Columbia, 2002 to 2009. *Addiction*. 2013;108(6):1059-69.
36. Euromonitor International. Passport: Alcoholic drinks in Australia; June 2017.
37. Johnston R, Stafford J, Pierce H, Daube M. Alcohol promotions in Australian supermarket catalogues. *Drug and Alcohol Review*. 2016;36(4):456-63.
38. Department of Racing Gaming and Liquor Western Australia. 2016-17 Annual Report; 2017.
39. Roy Morgan Research. The Australian alcohol market in review. Article No. 7181. [Internet] 2017 [cited Mar 20 2017]; Available from: www.roymorgan.com
40. Aldi. Aldi liquor website. [Internet] 2017 [cited Nov 2 2017]; Available from: <https://www.aldi.com.au/en/groceries/liquor/>
41. Woolworths. Woolworths online catalogue. Berri Estates Traditional Dry Red 5 Litre Cask "3 for \$37". Perth, WA: Woolworths Ltd; 2018 June 20.
42. Holmes J, Meng Y, Meier PS, Brennan A, Angus C, Campbell-Burton A, et al. Effects of minimum unit pricing for alcohol on different income and socioeconomic groups: a modelling study. *Lancet*. 2014;383(9929):1655-64.
43. Sharma A, Vandenberg B, Hollingsworth B. Minimum Pricing of Alcohol versus Volumetric Taxation: Which Policy Will Reduce Heavy Consumption without Adversely Affecting Light and Moderate Consumers? *PLoS ONE*. 2014;9(1):e80936.
44. Expert Advisory Panel of the Alcohol Policies and Legislation Review. Alcohol Policies and Legislation Review: Final report: Northern Territory Government; October 2017.
45. Northern Territory Government. Northern Territory Alcohol Policies and Legislation Reform: Floor Price. Northern Territory Government 2017. Available from: <https://alcoholreform.nt.gov.au/floor-price>

46. Holmes J, Meier PS, Angus C, Brennan A. Scotland's policy on minimum unit pricing for alcohol: the legal barriers are gone, so what are the implications for implementation and evaluation? *Addiction*. 2018;113(2):203-4.
47. Dan Murphy's. Dan Murphy's online catalogue. [Internet] 2017 [cited Nov 2 2017]; Available from: www.danmurphys.com.au/
48. Vandenberg B, Sharma A. Are alcohol taxation and pricing policies regressive? Product-level effects of a specific tax and a minimum unit price for alcohol. *Alcohol and Alcoholism*. 2016;51(4):493-502.
49. Carragher N, Chalmers J. What are the options? Pricing and taxation policy reforms to redress excessive alcohol consumption and related harms in Australia: NSW Bureau of Crime Statistics and Research, Attorney General's Department; 2011.
50. ITV Report. Scotland introduces alcohol minimum pricing. 2018 May 1. <http://www.itv.com/news/border/2018-05-01/scotland-introduces-alcohol-minimum-pricing/>
51. Northern Territory Government. Northern Territory Alcohol Policies and Legislation Reform: Milestones. Northern Territory Government. 2018 June 20. Available from: <https://alcoholreform.nt.gov.au/milestones>
52. Department of Health. Consultation Draft. National Alcohol Strategy 2018-2026: Commonwealth of Australia; 2018.
53. Stockwell T, Zhao J, Giesbrecht N, Macdonald S, Thomas G, Wettlaufer A. The raising of minimum alcohol prices in Saskatchewan, Canada: Impacts on consumption and implications for public health. *American Journal of Public Health*. 2012;102(12):e103-e10.
54. Sherk A, Stockwell T, Callaghan RC. The effect on emergency department visits of raised alcohol minimum prices in Saskatchewan, Canada. *Drug and Alcohol Review*. 2018.
55. Stockwell T, Auld MC, Zhao J, Martin G. Does minimum pricing reduce alcohol consumption? The experience of a Canadian province. *Addiction*. 2012;107:912-20.
56. Zhao J, Stockwell T. The impacts of minimum alcohol pricing on alcohol attributable morbidity in regions of British Columbia, Canada with low, medium and high mean family income. *Addiction*. 2017;112(11):1942-51.
57. Purshouse R, Meier P, Brennan A, Taylor K, Rafia R. Estimated effect of alcohol pricing policies on health and health economic outcomes in England: an epidemiological model. *Lancet*. 2010;375(9723):1355-64.
58. Sharma A, Etile F, Sinha K. The effect of introducing a minimum price on the distribution of alcohol purchase: A counterfactual analysis. *Health Economics*. 2016;25:1182-200.
59. World Health Organization. From burden to "best buys": Reducing the economic impact of NCDs in low- and middle-income countries; 2011.
60. Henry K. Australia's Future Tax System Review Panel. Australia's future tax system: report to the Treasurer. Canberra: The Treasury; 2010.
61. Australian Tax Office Australian Government. Wine Equalisation Tax. 2017 [cited 6/12/2017]; Available from: <https://www.ato.gov.au/Business/Wine-equalisation-tax/>
62. Daube M, Stafford J. Alcohol and tax – time for real reform. *MJA*. 2016;204(6):1-2.
63. Australian Taxation Office Australian Government. Excise rates for alcohol. 2017 [cited 6/12/2017]; Available from: <https://www.ato.gov.au/Business/Excise-and-excise-equivalent-goods/Alcohol-excise/Excise-rates-for-alcohol/>
64. Australian National Preventive Health Agency. Exploring the public interest case for a minimum (floor) price for alcohol, final report; 2013.
65. Standing Committee on Indigenous Affairs. Alcohol, hurting people and harming communities: Inquiry into the harmful use of alcohol in Aboriginal and Torres Strait Islander communities. Canberra: House of Representatives, The Parliament of the Commonwealth of Australia; 2015.
66. Senate Select Committee on Red Tape. Effect of red tape on the sale, supply and taxation of alcohol: Interim Report. Canberra: Commonwealth of Australia; March 2017.
67. Foundation for Alcohol Research & Education. Pre-Budget submission 2017-18: Submission to Treasury; January 2017.
68. Chalmers J, Carragher N, Davoren S, O'Brien P. Real or perceived impediments to minimum pricing of alcohol in Australia: Public opinion, the industry and the law. *International Journal of Drug Policy*. 2013;24:517-23.
69. Stafford J. Drowning in alcohol. *Medicus*. 2017;57(10):21-5.
70. Office of Liquor and Gaming Regulation. Liquor licensing fees and charges. [Internet] 2016 [cited Nov 3 2016]; Available from: <https://publications.qld.gov.au/dataset/olgr-publications/resource/a622ec53-72e8-4812-a7b7-f159899df608>
71. Victorian Commission for Gambling and Liquor Regulation. Liquor licensing fact sheet: Liquor license fees (from 1 July 2017). 2017; Available from: https://www.vcglrVIC.gov.au/sites/default/files/Liquor_licence_fees_July_2017.pdf
72. Painted Dog Research. Setting a minimum price on alcohol: omnibus survey findings prepared for McCusker Centre for Action on Alcohol and Youth. December 2017; Available from: www.mcaay.org.au
73. Wine Australia. Regional Snapshots. 2016 [cited 5/12/17]; Available from: <https://www.wineaustralia.com/market-insights/regional-snapshots>
74. Callinan S, Room R, Livingston M, Jiang H. Who purchases low-cost alcohol in Australia? *Alcohol and Alcoholism*. 2015;50(6):647-53.
75. Jiang H, Callinan S, Livingston M, Room R. Off-premise alcohol purchasing in Australia: Variations by age group, income level and annual amount purchased. *Drug and Alcohol Review*. 2017;36(2):210-9.
76. Angus C, Holmes J, Pryce R, Meier P, Brennan A. Model-based appraisal of the comparative impact of minimum unit pricing and taxation policies in Scotland: An adaptation of the Sheffield Alcohol Policy Model version 3. Sheffield; 2016.
77. Falkner C, Christie G, Zhou L, King J. The effect of alcohol price on dependent drinkers' alcohol consumption. *The New Zealand Medical Journal*. 2015;128(1427):9-17.
78. Erickson R, Stockwell T, Pauly B, Chow C, Roemer A, Zhao J, et al. How do people with homelessness and alcohol dependence cope when alcohol is unaffordable? A comparison of residents of Canadian managed alcohol programs and locally recruited controls. *Drug and Alcohol Review*. 2018; 37(S1):S174-S183.
79. Schmidt LA, Makela P, Rehm J, Room R. Alcohol: equity and social determinants. In: Erik Blas E, Kurup AS, editors. *Equity, Social Determinants and Public Health Programmes*. Geneva: World Health Organization; 2010. p. 11-30.
80. Probst C, Roerecke M, Behrendt S, Rehm J. Socioeconomic differences in alcohol-attributable mortality compared with all-cause mortality: a systematic review and meta-analysis. *International Journal of Epidemiology*. 2014;43(4) 1314-27.
81. Drug & Alcohol Office and TNS Social Research. Cheap drinks: Government of Western Australia; 2011.
82. Lam T, Lenton S, Ogeil R, Burns L, Aiken A, Chikritzhs T, et al. Most recent risky drinking session with Australian teenagers. *Australian and New Zealand Journal of Public Health*. 2017; 41(1):105-110.
83. Purshouse RC, Meier PS, Brennan A, Taylor KB, Rafia R. Estimated effect of alcohol pricing policies on health and health economic outcomes in England: an epidemiological model. *The Lancet*. 2010;375(9723):1355-64.
84. Wall M, Casswell S, Yeh L-C. Purchases by heavier drinking young people concentrated in lower priced beverages: Implications for policy. *Drug and Alcohol Review*. 2017 36(3):352-358.
85. Livingston M. To reduce alcohol-related harm we need to look beyond pubs and nightclubs. *Drug and Alcohol Review*. 2013;32(2):113-4.
86. Department of Racing Gaming and Liquor Western Australia. Responsible promotion of liquor – Consumption of liquor and the sale of packaged liquor. Industry Guideline Amended 26 June 2017.; 2017.
87. Foundation for Alcohol Research & Education. The price is right: Setting a floor price for alcohol in the Northern Territory. Canberra: FARE; August 2017.
88. Llywodraeth Cymru/Welsh Government. Minimum price for alcohol Bill approved. 2018 June 19. <https://gov.wales/newsroom/health-and-social-services/2018/mup-bill/?lang=en>