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## Research Insights

# How to reduce the social cost of binge drinking in Australia?

There is substantial cross-country evidence that binge drinking has significant social costs. In this study we add to the growing body of evidence on the association between problem drinking and antisocial and unlawful behaviours using data from the Australian National Drug Strategy Household Survey (NDSHS) administered by the Australian Institute of Health and Welfare (AIHW).

# The social cost of binge drinking

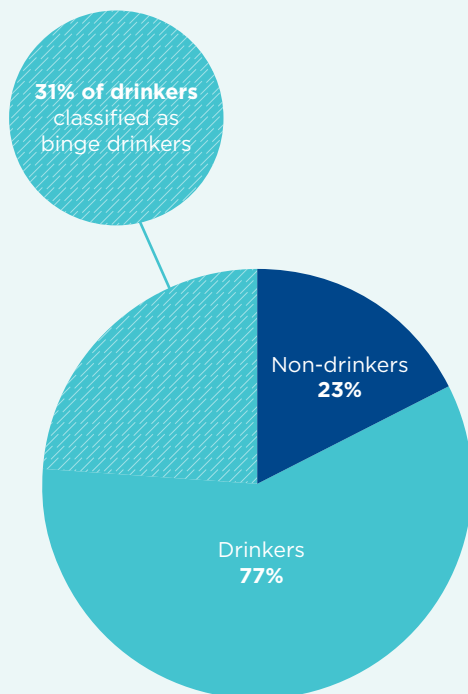
As in many developed countries, alcohol consumption is inherent in Australian society. In 2003 alcohol was responsible for 3.2 per cent of the total burden of disease and injury in Australia, and much of the recent concern arises from evidence of a binge-drinking culture and the increasing popularity of pre-mixed spirits, especially among young people.

Australian survey data show that in 2010 almost two-thirds of males aged 18-19 years, and more than half of males aged 20-29 years, put themselves at personal risk of an alcohol-related injury at least once a month (Australian Institute of Health and Welfare, 2011).

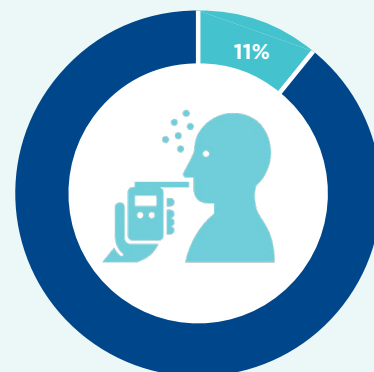
Excessive alcohol consumption is also associated with a range of negative social externalities. These negative externalities include increased road accidents, criminal activity, abuse of family and others, as well as increased healthcare budgets and poorer labour market participation and productivity. These external costs are often not considered or borne by an individual drinker, but rather are borne by society as a whole.

A key policy tool used by governments to correct for such market failure is a tax on alcohol aimed at reducing excessive consumption and associated high external social costs. This study aims to inform the development of effective alcohol-related tax policies by shedding light on the nature of the problem and quantifying the harms resulting from excessive alcohol consumption.

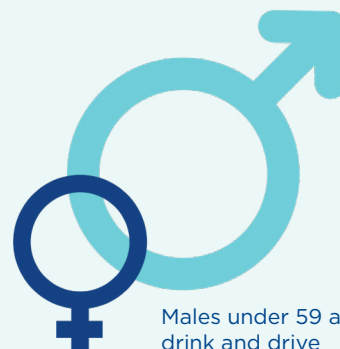
Alcohol drinking profile of Australians



Most common antisocial behaviour linked to drinking alcohol



11% drive a motor vehicle under the influence of alcohol



Males under 59 are more likely to drink and drive

Source: 2010 Wave of the Australian National Drug Strategy Household Survey (NDSHS)

# Key Insights

## 1 Antisocial behaviours most linked to binge drinking

The surveys on which this research is based asked participants directly about amounts and incidence of alcohol consumption during the previous year, and specific antisocial behaviours engaged in under the influence of alcohol. In 2010 22.8 per cent of respondents were non-drinkers and 77.2 per cent were drinkers, with 30.6 per cent of the latter classified as binge drinkers as defined by the 2001 National Health and Medical Research Council (NHMRC) Alcohol Guidelines. We focus on six key antisocial behaviours: drink driving; creating a public disturbance; damage to property; theft of money, goods or property; verbal abuse; and physical abuse. The data show that in 2010 driving a motor vehicle under the influence of alcohol was the most common antisocial behavior (11.4 per cent of all drinkers). Verbal abuse was the next most significant antisocial behaviour (4.1 per cent of all drinkers). Much smaller percentages (0.7 to 1.9 per cent) were reported for the other categories above. Not surprisingly binge drinkers are even more likely to engage in each of these antisocial behaviours, especially drink driving, which is consistent with other studies.

### BINGE DRINKING AS DEFINED BY THE 2001 NHMRC ALCOHOL GUIDELINES:

**Men:** Consuming at least seven standard alcoholic drinks on at least a single occasion in the past year.

**Women:** Consuming at least five standard drinks on at least a single occasion in the past year.

## 2 The role of age and gender in antisocial behaviour

Across all categories of antisocial behaviour younger people are considerably more likely than the older age groups to be antisocial under the influence of alcohol. For example, 19 to 25 per cent of males in the five age categories between 18 to 59 years admitted driving under the influence of alcohol, compared with just 11 per cent of males over 60 years. These figures are roughly double the comparable drink driving rates for females in the same age ranges (9 to 15 per cent and 3 per cent respectively). For the other categories of antisocial behaviour the data show that young males from 12 to 17 years are as implicated as those aged 18 to 29 years, while males 30 years and older, on a sliding rate with age, are much less likely to create a public disturbance, steal or engage in abuse. Once again

the numbers for females are around half those for males in the comparable age groups, except for females 12 to 17 years, who are just as likely as males of the same age to create a disturbance, steal or engage in abuse while under the influence of alcohol. When it comes to binge drinkers the incidence of antisocial behaviour follows the same patterns as above but is more exaggerated.

## 3 The role of household structure, race and remoteness on drinking behaviour

Turning to other demographic and social aspects of alcohol and antisocial behaviour, the data show that being married is associated with a lower probability of binge drinking and engaging in poor behaviours, as is coming from a household with dependent children. Living in capital cities significantly reduces the probability of binge drinking and antisocial behaviour, as does being employed. There is a positive correlation between being an Aboriginal or Torres Strait Islander and antisocial behaviours and binge drinking.

## 4 The impact of employment and retirement status on binge drinking

The effect of an individual's main occupation varies, but we find a consistent association between unemployment status and the incidence of binge drinking and antisocial behaviour. Comparing retirees, pensioners and those engaged in home duties with workers and the unemployed as a group - the latter are more likely to binge drink and more likely to drink and drive (which is consistent with our findings on age). The effects (differences) for these two groups are not statistically significant when it comes to creating disturbance, damage and theft.

## 5 Effects of education and income on binge drinking

People with a tertiary degree are less likely to binge drink, create a disturbance or be verbally or physically abusive, but they are 2.6 percentage points more likely to drink and drive than those with less than year 12 qualifications. Meanwhile, we find a U-shaped relationship between income, binge drinking and engaging in abusive behaviours; that is, individuals at both ends of the income distribution have higher probabilities of engaging in binge drinking and abuse. In contrast, as income increases people are much less likely to create a public disturbance or damage property.

# The case for an alcohol tax

Our results show that young people aged 18 to 29 and under the influence of alcohol are the most likely to be involved in binge drinking (based on 2001 NHMRC Alcohol Guidelines), drink-driving, creating a public disturbance, theft of money, goods or property, or verbal or physical abuse. Males, the unmarried, childless, unemployed, less educated, and Aboriginals and Torres Strait Islanders are more likely to be engaged in causing a disturbance and abusive behaviours.

Being highly intoxicated or binge drinking is also shown to increase the probability of participating in any one of the antisocial and unlawful behaviours by 25 percentage points. This is a large effect, considering the very low participation in such behaviours among the general drinking population. As most of the related costs from such negative drinking behaviours are borne by society as a whole (given the low risk of individuals being charged criminally or paying through private healthcare), these results provide evidence supporting the case for an alcohol tax to penalise drinkers with excessive consumption of alcohol and high social costs of associated antisocial behaviour. In this regard, given that any alcohol tax reform will likely have different implications for different alcoholic beverages, further research quantifying the link between negative behaviours differentiated by beverage types would be useful.

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## Further Information

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### **Datasets:**

The 2001, 2004, 2007 and 2010 waves of the Australian National Drug Strategy Household Survey (NDSHS). The NDSHS is a nationally representative, cross-sectional survey of the non-institutionalised Australian civilian population aged 12 years and older. The survey is administered by the Australian Institute of Health and Welfare (AIHW) and provides information on drug-use patterns, attitudes and behaviour. It also provides a wide range of information on respondents' demographic and socioeconomic backgrounds.

### **Further reading:**

Yang, O., Zhao, X. and Srivastava, P., 2016. Binge Drinking and Antisocial and Unlawful Behaviours in Australia. *Economic Record*, 92(297), 222-240.

### **References:**

Australian Institute of Health and Welfare (2011), 2010 National Drug Strategy Household Survey Report. AIHW, Canberra.

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