



Australian Government
Department of Health and Ageing

Australian Government Department of Health and Ageing
Submission to the
Senate Community Affairs Committee for the inquiry into
Ready-to-drink alcohol beverages

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This submission to the Senate Community Affairs Committee inquiry into ready-to-drink alcohol beverages is made by the Australian Government Department of Health and Ageing.

Terms of Reference

The terms of reference for the inquiry are as follows:

On 15 May 2008 the Senate referred to the Community Affairs Committee for inquiry and report by 24 June 2008:

- a. the effectiveness of the Government's proposed changes to the alcohol excise regime in reducing the claims of excessive consumption of ready-to-drink alcohol beverages;
- b. the consumption patterns of ready-to-drink alcohol beverages by sex and age group;
- c. the consumption patterns of all alcohol beverages by sex and age group;
- d. the impact of these changes on patterns of overall full strength spirit consumption, including any increased consumption of standard drinks of alcohol;
- e. the evidence underpinning the claims of significant public health benefit in the increase of excise on this category of alcohol;
- f. applicability of incentives to encourage production and consumption of lower alcohol content beverages;
- g. the modelling underpinning the Government's revenue estimates of this measure;
- h. the effectiveness of excise increases as a tool in reducing the levels of alcohol related harm;
- i. the empirical evidence on which the government's decision to increase the excise on ready-to-drink alcohol beverages was based; and
- j. the effects of alternative means of limiting excessive alcohol consumption and levels of alcohol related harm among young people.

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Introduction

Alcohol use is embedded in Australian culture. It generates employment and income, and plays a central role in traditions and customs. However, it also generates significant costs for society by adding to the burden of mortality, morbidity, violence, crime, and many other areas of health and welfare.

According to the 2007 National Drug Strategy Household Survey, over 80 per cent of Australians report they drink alcohol. About 35% drink at least once a year at levels that risk harm in the short term from such events as accidents and violence. About 10 per cent drink at levels that risk harm in the long term from conditions such as cancer, cardiovascular disease, and dependence¹.

According to the National Drug Strategy Household Surveys risky alcohol consumption for both short and long term harm has remained fairly stable for the general population between 2004 and 2007. Risky alcohol consumption for harm in the short term in the 14–19 year age group has also remained stable, while the 20–29 year age group has shown a small increase from 59.4 per cent in 2004 to 61 per cent in 2007. A small decrease for the 14–19 age group (10% to 8.8%) and a small increase 20–29 year age group (14.7% to 16%) for risky drinking for long term harm have been observed between 2004 and 2007. No statistical testing has been published for the risky drinking rates from the Household Survey. However, about 20,000 girls aged 12–15 years drink alcohol daily or weekly. About one in five girls aged 14–19 drink at a risky or high risk level for short-term harm at least monthly.²

Most people do not suffer ill-effects from modest consumption of alcohol, however, the risk of harm increases exponentially as consumption increases. During the ten years between 1992 and 2001, it is estimated that over 31,100 Australians died from alcohol-caused disease and injury. Liver cirrhosis, road-crash injury, suicide, and dependence were the most common causes of death over the ten year period. Over 570,000 hospitalisations were caused by alcohol use between 1993–94 and 2000–01.³ Alcohol abuse and related harms impose serious social costs to the Australian community, most recently estimated at \$15.3 billion in 2004-05.⁴

Across a number of surveys a change in the type of alcohol consumed by young people has been observed. Ready-to-drink alcohol products have become much more popular. The data shows a substantial increase among young girls in consumption of ready-to-drink alcohol products (RTD). In 2000, about 14 per cent of female drinkers aged 15-17 reported drinking RTD at their last drinking occasion. By 2004, this has increased to 60 per cent.⁵

The Department's submission provides comments against each of the Inquiry's Terms of Reference.

1 Australian Institute of Health and Welfare 2008. *2007 National Drug Strategy Household Survey: first results*. AIHW cat. no. PHE 98. AIHW: Canberra.

2 Australian Institute of Health and Welfare 2008

3 Chikritzhs T, Catalano P, Stockwell T, Donath S, Ngo H, Young D & Matthews S 2003. *Australian alcohol indicators, 1990-2001: patterns of alcohol use and related harms for Australian state and territories*. National Drug Research Institute: Perth.

4 Collin D & Lapsley H 2008. *The costs of tobacco, alcohol and illicit drug abuse to Australian society in 2004/05*. Commonwealth of Australia: Canberra.

5 King E, Taylor J & Carroll T 2005. *Alcohol consumption patterns among Australian 15-17 years olds from 2000 to 2004*. Australian Government Department of Health and Ageing: Sydney.

Term of Reference A: The effectiveness of the Government's proposed changes to the alcohol excise regime in reducing the claims of excessive consumption of ready-to-drink alcohol beverages

Term of Reference E: The evidence underpinning the claims of significant public health benefit in the increase of excise on this category of alcohol

Term of Reference H: The effectiveness of excise increases as a tool in reducing the levels of alcohol related harm.

Term of Reference I: The empirical evidence on which the Government's decision to increase the excise on ready-to-drink alcohol beverages was based

Terms of Reference A, E, H and I are discussed together because the evidence analysed relates to each of these areas.

There is clear evidence both in the Australian setting and internationally that price levers can be employed to reduce alcohol consumption. Broadly, there is ample and consistent evidence that lower priced alcohol is associated with higher alcohol consumption and higher rates of harm.⁶ For example, a large number of studies have shown that when the real price of alcohol has increased there have been corresponding reductions in an extensive range of indicators of alcohol related harm such as violent crimes and motor vehicle fatalities.⁷

Alcohol related harms

The harms attributable to alcohol are well documented. The most recent burden of disease and injury in Australia report found that in 2003, alcohol harm was responsible for 3.2 per cent of the total burden of diseases and injury in Australia.⁸ The positive effects of low risk alcohol consumption also prevented 0.9 per cent of the total burden. In relation to harm attributable to alcohol:

- breast cancer contributed 5 per cent of harm attributed to alcohol, and accounted for 184 deaths in 2003;
- oesophagus cancer also contributed 5 per cent of the harm attributed to alcohol, and accounted for 368 deaths in 2003;
- alcohol dependence contributed 39 per cent of the harm attributed to alcohol, and accounted for 918 deaths in 2003.

Alcohol is also a major contributing cause of mortality and morbidity. Between 1992 and 2001, it was estimated that 31,133 Australians died from risky or high risk alcohol use, which

6 Babor T, Caetano R, Casswell S, Edwards G, Giesbrecht N, Graham K, Grube J, Gruenewald P, Hill L, Holder H, Homel R, Osterberg E, Rehm J, Room R & Rossow I 2003. *Alcohol: no ordinary commodity – research and public policy*, Oxford University Press, Oxford.

7 Chikritzhs T., Stockwell T & Pascal R 2005. The impact of the Northern Territory's Living With Alcohol program, 1992–2002: revisiting the evaluation. *Addiction*, 100, 1625-1636.

8 Begg S, Vos T, Barker B, Stevenson C, Stanley L & Lopez A 2007. *The burden of disease and injury in Australia 2003*. AIHW cat. no. PHE 82. AIHW: Canberra.

averages 3,100 per year.⁹ Between 1993-94 and 2000-01, approximately 577,269 Australians were hospitalised due to risky alcohol use which averages 72,000 per year.¹⁰ The most common diagnoses are alcohol dependence (15%) and injuries caused by assaults (13%). About 70 per cent of all alcohol-related hospitalisations are due to short-term conditions caused by episodes of drunkenness.¹¹

Of recent concern has been the effects of maternal alcohol consumption on the development and overall health of the fetus and the child. A variety of studies support the conclusion that chronic heavy maternal drinking is a necessary causal factor in ‘fetal alcohol syndrome’ (FAS).¹² In a recent Western Australian survey, 59 per cent of women reported drinking during pregnancy, of whom 14% had a heavy drinking session in the three months before pregnancy and 15 per cent had drunk at above the level recommended in the National Health and Medical Research Council guidelines during the first trimester.¹³ A recent survey of 1,103 women aged 18 and 45, found that 34 per cent consumed alcohol during their last pregnancy and 32% said they would drink during a future pregnancy.¹⁴

Driving while under the influence of alcohol can have fatal consequences, as well incurring substantial pain and suffering to occupants of the vehicle and pedestrians, added costs of medical care, police enforcement, insurance and lost work. Road traffic accidents contribute 13 per cent of the harm attributed to alcohol, and accounted for 396 deaths in 2003.¹⁵

Alcohol abuse imposes serious social costs on the Australian community. Recent estimates have placed the social costs of alcohol abuse in Australia at \$15.3 billion in 2004-05 (Table 1).¹⁶

Table 1: Tangible and intangible social costs of alcohol abuse, 2004-05

| | (\$ million) |
|--------------------------|-------------------|
| Tangible | |
| Workforce | \$3,578.6 |
| Household | \$1,570.8 |
| Healthcare | \$1,976.7 |
| Crime | \$1,424.0 |
| Road accidents | \$2,202.0 |
| Total tangible | \$10,829.5 |
| Intangible | |
| Loss of life | \$4,125.0 |
| Pain and suffering | \$353.6 |
| Total intangible | 4,488.7 |
| Total social cost | \$15,318.2 |

Source: Collins D & Lapsley H 2008.

9 Chikritzhs T et al. 2003.

10 Begg et al. 2007.

11 Chikritzhs T, Stockwell TR, Hendrie D, Ying F, Fordham RJ, Cronin J, Olerman K & Phillips M 1999. *The public health, safety and economic benefits of the Northern Territory's Living with Alcohol Program 1992-93 to 1995-96*. Monograph No. 2. National Drug Research Institute: Perth.

12 Stratton K, Howe C & Battaglia B eds 1996. *Fetal alcohol syndrome, diagnosis, epidemiology, prevention and treatment*. National Academy Press: Washington DC.

13 Colvin L, Payne J, Parsons D, Kurinczuk J & Bower C 2007. Alcohol consumption during pregnancy in non-indigenous West Australian women. *Alcoholism: Clinical and Experimental Research*, 31(2): 276-284.

14 Adelaide Advertiser. *Many pregnant mums still drinking*. 13 May 2008.

15 Begg et al 2007.

16 Collins D & Lapsley H 2008.

Excise increases to reduce alcohol related harm

The role of alcohol pricing as a means to curb consumption and harm has been described as,

Alcohol [pricing policy] is thus an attractive instrument of alcohol policy as [it] can be used to both generate direct revenue and to reduce alcohol-related harms. The most important downside to raising alcohol taxes is the possibility of potential alternatives or substitutions to taxed alcoholic beverages...The net effects of taxation and price increases, however, are to reduce alcohol use and related problems."¹⁷

The introduction of the cask wine levy in the Northern Territory led to a significant reduction in per capita consumption of cask wine, without any corresponding shift to the consumption of other beverage types (e.g. beer, spirits). In the year following removal of the levy, the price of cask wine decreased, while consumption increased (but not to pre-levy levels).¹⁸

An examination of the Northern Territory's *Living with Alcohol* (LWA) program provides another example of the effect of an increase in price/excise.¹⁹ The LWA was a comprehensive program aimed at reducing alcohol consumption and alcohol-related harms in the Northern Territory. The program was introduced in 1992, and funded by the introduction of a small levy on all alcoholic beverages sold in the Northern Territory with an alcohol content of 3 per cent or more, which saw the retail costs of these beverages increase by about 5 cents per standard drink. An evaluation of the program showed significant reductions in alcohol related harm over the four year period, including an estimated 129 fewer alcohol related deaths, 1,394 fewer road crash injuries requiring medical attention, and 1,277 fewer alcohol related hospital admissions for other conditions.^{20 21}

International literature also suggests that there are positive effects on the reduction of alcohol-related harms when price is increased. Several studies examining the impact of beer excise taxes in the United States concluded that increases in beer tax would significantly reduce youth motor vehicle fatalities.^{22 23} Research examining the increase in excise tax on distilled spirits in the United States showed a reduction in deaths for alcohol-related liver cirrhosis.²⁴ A change in tax reform in Switzerland led to a decrease in the price on foreign spirits, in turn leading to an increase in consumption of spirits.²⁵ The increase in consumption was consistent across all subgroups, except those aged 60 years or over.

17 Babor et al. 2003.

18 Gray, D., Chikritzhs, T., & Stockwell, T 1999. 'The Northern Territory's cask wine levy: health and taxation policy implications', *Australian & New Zealand Journal of Public Health*, 23:6, pp. 651-653.

19 Chikritzhs T et al. 1999.

20 Stockwell T, Chikritzhs T, Hendrie D, Fordham R, Ying F, Phillips M, Cronin J & O'Reilly B 2001. The public health and safety benefits of the Northern Territory's Living with Alcohol programme. *Drug and Alcohol Review*. 20: 167-180.

21 Chikritzhs T, Stockwell T & Pascal R 2005. The impact of the Northern Territory's Living with Alcohol program, 1992-2002: revisiting the evaluation. *Addiction*. 100: 1625-1636.

22 Saffer H & Grossman M 1987. Beer taxed, the legal drinking age, and youth motor vehicle fatalities. *Journal of Legal Studies*. 16(2): 351-374.

23 Chaloupka FJ, Saffer H & Grossman M 1993. Alcohol-control policies and motor-vehicle fatalities. *Journal of Legal Studies*, 22(1) 161-186.

24 Grossman M 1993. The economic analysis of addictive behaviour. In Hilton ME & Bloss G. eds. *Economics and the prevention of alcohol-related problems*. NIAA Research Monograph No, 25.

25 Kuo M, Hoeb J, Gmel G & Rehn J 2003. Does price matter? The effect of decreased price on spirits consumption in Switzerland. *Alcoholism: Clinical and Experimental Research*, 27(4): 720-725.

Analysis of alcohol consumption data in New Zealand over the period 1984-96, has shown an impact of real price on alcohol consumption.²⁶ The study showed that beer consumption was reduced by real price of beer increases, whereas wine consumption increased by real price of wine decreases. Price was found to be a significant factor on aggregate alcohol consumption of absolute alcohol in New Zealand. Furthermore, the research also showed that the availability of alcohol affected its purchase, specifically, the introduction of wine sales in New Zealand supermarkets led to an increase in purchase of this product by young people.

It has been reported that some people will sometimes adapt to price increases by changing to cheaper brands or types of drink, so as to maintain their alcohol consumption at the same cost. The more wide ranging the price increases the less potential there is for substitution.^{27 28} However, even in the face of such substitution, overall consumption is still lowered.²⁹ Potential high-risk groups, such as heavy drinkers and young people, appear to be price sensitive.³⁰

Alcohol excise taxes are capable of being designed explicitly to target the types of alcohol known to be the subject of abuse, and to discriminate in favour of types associated with lower levels of abuse. Given that young people are more influenced by the price of alcohol, increasing the tax rate on alcoholic drinks which are specifically targeted at the youth market (for example, ready to drink alcohol products) is likely to be effective.

26 Zhang J & Caswell S 1999. The effects of real price on a change in the distribution system on alcohol consumption. *Drug and Alcohol Review*, 18:371-378.

27 Gruenewald PJ, Treno AJ, Nephew TM & Ponicki WR 1995. Routine activities and alcohol use: constraints on outlet utilization. *Alcoholism: Clinical and Experimental Research*, 19:44-53.

28 Gruenewald PJ, Ponicki WR, Holder HD & Romelsjo A 2006. Alcohol prices, beverage quality, and the demand for alcohol: quality substitutions and price elasticities. *Alcoholism: Clinical and Experimental Research*, 30:96-105.

29 Osterberg E 2001. Effects of price and taxation. In N Heather, T J Peters & T Stockwell (Eds.), *International Handbook of Alcohol Dependence and Problems* (pp. 685-698). Chichester: John Wiley and Sons.

30 Loxley W, Toumbourou JW, Stockwell T, Haines B, Scott K, Godfrey C, Waters E, Patton G, Fordham R, Gray D, Marshall J, Ryder D, Saggars S, Sanci L & Williams J 2004. *The prevention of substance use, risk and harm in Australia: a review of the evidence*. Ministerial Council on Drug Strategy: Monograph prepared by the National Drug Research Institute and the Centre for Adolescent Health

Term of Reference B: The consumption patterns of ready-to-drink alcohol beverages by sex and age group

Australian consumption

According to the 2007 National Drug Strategy Household Survey (NDSHS), over 80% of Australians aged 14 years or older report they drink alcohol.³¹ About 35 per cent drink at least once a year at levels that risk harm in the short term from such events as accidents and violence. About 10 per cent drink at levels that risk harm in the long term from conditions such as cancer, cardiovascular disease, and dependence.

Analysis of the 2007 survey data to illustrate the types of alcohol beverages most commonly consumed, was recently undertaken by the Australian Institute of Health and Welfare. The 2001, 2004 and 2007 surveys asked respondents who had consumed alcohol in the last 12 months 'what type of alcohol they usually drank' – multiple responses were allowed. When reviewing these data, it is important to note that for 2001, only 14–15 year olds are included within the 12–15 year old analysis, and overall totals. Further, absolute drinking preferences cannot be determined using the NDSHS.

Overall among males, regular strength beer and bottled wine are the dominant alcoholic drink preferences, and this has been the case since 2001 (Table 2). For older males aged 40 years or older the preference has consistently been for bottled wine, while for males aged under 18 years, the preference has been fairly even between regular strength beer, bottled spirits and liqueurs and pre-mixed spirits in a can. Specifically in 2007 among young males (aged 12-15 years), over one-third (36.9%) preferred pre-mixed spirits in a can, nearly one-third preferring bottled spirits and liqueurs (30.5%), and one-quarter preferring pre-mixed spirits in a bottle (25.8%). When looking across the younger male age groups, where pre-mixed spirits in a bottle have been nominated as the preferred beverage, there is an observed increase in this preference with age: 25.8 per cent in 2007 among 12-15 year olds, 29.9 per cent among 16-17 year olds, peaking at 33.3% among males aged 18-19 years. When all ages groups and alcohol types are considered, it is clear the alcohol preferences of those under 30 years of age is for bottled spirits and liqueurs, premixes in bottles and cans and regular strength beer.

Overall among females, bottled wine and bottled spirits and liqueurs are the dominant alcoholic drink preferences, this has been the case since 2001 (Table 3). Across all age groups for females, there is no real observed increase in the proportion preferring ready-to-drink (pre-mixed) beverages. When looking across the younger female age groups, 2007 data show where pre-mixed spirits in a bottle or can have been nominated as the preferred beverage, there is an observed increase in this preference with age. When all age groups and alcohol types are considered, the clear alcohol preferences of females under 30 years of age are for bottles spirits and liqueurs, and premixes in bottles and cans.

As shown in the following two tables, young females have stronger preferences for pre-mixed drinks (in a can or bottle), when compared to young males.

31 Australia Institute of Health and Welfare 2008.

Table 2: Trends in preferences for selected alcoholic drinks, 2001-2007, males (per cent)

| Alcohol type | Year | Age group | | | | | | Total |
|-------------------------------|------|-----------|-------|-------|-------|-------|------|-------|
| | | 12-15 | 16-17 | 18-19 | 20-29 | 30-39 | 40+ | |
| Cask wine | 2001 | 10.0 | 11.7 | 5.9 | 7.7 | 11.0 | 22.2 | 16.0 |
| | 2004 | 9.5 | 8.0 | 9.1 | 7.7 | 9.4 | 22.1 | 15.9 |
| | 2007 | 6.1 | 8.2 | 7.5 | 7.0 | 7.1 | 16.0 | 12.0 |
| Bottled wine | 2001 | 21.4 | 14.6 | 15.2 | 34.2 | 42.3 | 45.0 | 39.7 |
| | 2004 | 17.2 | 8.3 | 21.0 | 36.2 | 46.0 | 49.4 | 43.4 |
| | 2007 | 11.9 | 10.1 | 18.9 | 34.1 | 47.7 | 52.6 | 45.1 |
| Regular strength beer | 2001 | 44.2 | 62.9 | 71.7 | 67.1 | 59.1 | 38.2 | 50.1 |
| | 2004 | 34.9 | 51.2 | 67.8 | 68.6 | 55.3 | 35.7 | 47.0 |
| | 2007 | 29.0 | 50.6 | 63.9 | 68.0 | 61.0 | 40.1 | 49.8 |
| Low alcohol beer | 2001 | 21.4 | 18.4 | 8.9 | 15.4 | 26.3 | 36.1 | 28.3 |
| | 2004 | 23.7 | 14.2 | 5.5 | 12.7 | 23.1 | 33.6 | 26.0 |
| | 2007 | 13.5 | 12.5 | 5.7 | 11.0 | 17.5 | 29.4 | 22.3 |
| Bottled spirits and liqueurs | 2001 | 44.4 | 58.0 | 67.6 | 58.4 | 40.9 | 30.3 | 40.4 |
| | 2004 | 35.5 | 42.9 | 63.1 | 51.9 | 37.1 | 31.9 | 38.0 |
| | 2007 | 30.6 | 47.6 | 54.0 | 54.5 | 40.3 | 32.0 | 38.7 |
| Pre-mixed spirits in a can | 2001 | 43.8 | 57.9 | 53.5 | 34.8 | 19.5 | 5.5 | 18.2 |
| | 2004 | 50.2 | 55.7 | 65.3 | 42.0 | 27.9 | 9.3 | 23.0 |
| | 2007 | 36.9 | 56.3 | 60.7 | 47.6 | 28.5 | 10.9 | 24.3 |
| Pre-mixed spirits in a bottle | 2001 | 24.1 | 31.9 | 35.6 | 21.2 | 9.1 | 1.7 | 9.6 |
| | 2004 | 21.1 | 32.0 | 41.7 | 22.7 | 10.0 | 3.6 | 10.8 |
| | 2007 | 25.8 | 29.9 | 33.3 | 26.4 | 11.6 | 3.8 | 11.5 |

Notes:

1. Preferences are inferred from responses to the question 'What type of alcohol do you usually drink?'; respondents could select more than one usual drink.
2. The 2001 survey did not include 12-13 year olds. In this table, 14-15 year olds are shown in the 12-15 age group column for 2001. Therefore the trend for this column should be interpreted with caution. The totals for 2001 are for 14 years and over.

Source: AIHW analysis of National Drug Strategy Household Surveys.

Table 3: Trends in preferences for selected alcoholic drinks, 2001-2007, females (per cent)

| Alcohol type | Year | Age group | | | | | | Total |
|-------------------------------|------|-----------|-------|-------|-------|-------|------|-------|
| | | 12-15 | 16-17 | 18-19 | 20-29 | 30-39 | 40+ | |
| Cask wine | 2001 | 12.4 | 15.8 | 18.4 | 14.9 | 19.8 | 30.3 | 23.9 |
| | 2004 | 8.8 | 11.0 | 16.0 | 13.6 | 14.8 | 26.8 | 20.8 |
| | 2007 | 3.8 | 7.3 | 9.7 | 10.7 | 10.9 | 19.3 | 15.2 |
| Bottled wine | 2001 | 24.7 | 20.1 | 30.7 | 57.3 | 62.0 | 61.6 | 57.3 |
| | 2004 | 19.5 | 21.0 | 32.7 | 54.4 | 62.0 | 66.8 | 59.8 |
| | 2007 | 15.4 | 16.5 | 28.0 | 60.0 | 69.0 | 70.2 | 63.8 |
| Regular strength beer | 2001 | 8.9 | 15.1 | 26.2 | 29.3 | 17.6 | 8.4 | 15.1 |
| | 2004 | 12.1 | 17.2 | 24.9 | 26.5 | 18.1 | 8.2 | 14.4 |
| | 2007 | 9.8 | 9.6 | 17.3 | 25.6 | 19.8 | 9.0 | 14.3 |
| Low alcohol beer | 2001 | 12.9 | 5.6 | 3.0 | 8.1 | 11.9 | 14.4 | 11.9 |
| | 2004 | 7.8 | 5.2 | 4.6 | 7.9 | 10.8 | 12.7 | 10.8 |
| | 2007 | 5.8 | 3.6 | 6.3 | 5.9 | 7.7 | 10.8 | 8.8 |
| Bottled spirits and liqueurs | 2001 | 51.7 | 59.1 | 76.8 | 64.4 | 48.8 | 33.4 | 45.4 |
| | 2004 | 46.1 | 64.4 | 69.8 | 61.5 | 43.1 | 34.4 | 43.5 |
| | 2007 | 53.3 | 54.4 | 73.9 | 58.3 | 44.2 | 33.5 | 42.4 |
| Pre-mixed spirits in a can | 2001 | 55.5 | 57.2 | 62.0 | 32.5 | 19.2 | 5.5 | 18.6 |
| | 2004 | 43.0 | 61.7 | 57.3 | 37.1 | 21.9 | 7.5 | 20.1 |
| | 2007 | 59.4 | 57.0 | 60.8 | 37.1 | 22.8 | 9.7 | 21.3 |
| Pre-mixed spirits in a bottle | 2001 | 63.6 | 70.8 | 76.4 | 47.7 | 25.3 | 7.1 | 24.7 |
| | 2004 | 55.1 | 80.8 | 75.4 | 51.8 | 27.2 | 10.5 | 26.8 |
| | 2007 | 49.9 | 68.5 | 68.9 | 47.3 | 28.7 | 11.0 | 25.4 |

Notes:

1. Preferences are inferred from responses to the question 'What type of alcohol do you usually drink?'; respondents could select more than one usual drink.
2. The 2001 survey did not include 12-13 year olds. In this table, 14-15 year olds are shown in the 12-15 age group column for 2001. Therefore the trend for this column should be interpreted with caution. The totals for 2001 are for 14 years and over.

Source: AIHW analysis of National Drug Strategy Household Surveys.

Analysis of the 2004 NDSHS on preferred alcohol type and risky drinking shows that, males most commonly consumed regular strength beer, except for two groups, both drinking at low-risk levels in the long term:

- those aged 14-19 years, who preferred premixed spirits in a can; and
- those aged 40 years or older, who commonly drank bottled wine.³²

Preferred beverage type among female respondents varied. Females aged 30 years or older most commonly consumed bottled wine, whereas females aged 14-29 years most commonly consumed bottled spirits and liqueurs. Females aged 14-19 years drinking at low risk in the long term, preferred premixed spirits in a can (Table 4).

³² Australian Institute of Health and Welfare 2005. *2004 National drug strategy household survey: detailed findings*. AIHW cat. no. PHE 66. AIHW: Canberra.

Table 4: Type of alcohol usually consumed, recent drinkers aged 14 years or older, by long-term risk status, Australia, 2004

| Age group | Low risk | Risky or high risk |
|-------------------|--------------------------------------|-------------------------------------|
| Males | | |
| 14-19 years | Premixed spirits in a can (58.1%) | Regular strength beer (76.8%) |
| 20-29 years | Regular strength beer (66.4%) | Regular strength beer (84.3%) |
| 30-39 years | Regular strength beer (55.8%) | Regular strength beer (71.1%) |
| 40 years or older | Bottled wine (53.2%) | Regular strength beer (56.3%) |
| Females | | |
| 14-19 years | Premixed spirits in a can (53.9%) | Bottled spirits and liqueur (84.8%) |
| 20-29 years | Bottled spirits and liqueurs (60.1%) | Bottled spirits and liqueur (67.5%) |
| 30-39 years | Bottled wine (64.0%) | Bottled wine (59.8%) |
| 40 years or older | Bottled wine (69.3%) | Bottled wine (66.4%) |

Notes

1. Base is recent drinkers.
2. Respondents could select more than one response.
3. 'Risky' refers to a level of drinking at which risk of harm is significantly increased beyond any possible benefit, 'high risk' refers to a level of drinking at which there is substantial risk of serious harm, and above which risk continues to increase rapidly and 'long term risk' refers to the level of risk associated with regular daily patterns of drinking, defined by the total amount of alcohol typically consumed per week. 'Low risk' for adult males refers to the consumption of 29 to 42 standard drinks per week, for adult females 'low risk' refers to the consumption of 15 to 28 standard drinks per week.

Source: Australian Institute of Health and Welfare 2005. 2004 National Drug Strategy Household Survey: detailed findings. AIHW cat. No. PHE 66. AIHW: Canberra.

Youth consumption

The Australian Secondary Students' Alcohol and Drug (ASSAD) survey is a triennial survey of 12-17 year old secondary school students on their behaviours, patterns of use, and attitudes towards tobacco, alcohol and illicit substances. The most recent ASSAD survey conducted in 2005, asked current drinkers (i.e. those who consumed alcohol in the past week) to indicate the type of alcohol they consumed, respondents were only permitted one response.

The most common type of drink consumed by drinkers of all ages was some type of spirit, such as vodka, scotch and rum.³³ Across 12-17 year olds, 35 per cent indicated that they consumed spirits that were not in premixed bottles, and another 29 per cent of students indicated they drank premixed spirits (Table 5). There was a gender difference in the consumption of both premixed and non-premixed spirits, with the consumption of premixed spirits significantly more common among females than males ($p < 0.01$, 42% of females aged 12-15 years versus 12% of males; 53% of females aged 16-17 years versus 15% of males).

Overall for students aged 12-17 years, following non-premixed spirits (35%) and premixed spirits (29%), beer was the next most commonly consumed beverage (21%). Wine (5%) and alcoholic soda (1%) were less commonly consumed amongst this age group.

33 White V & Hayman J 2006. *Australian secondary school students' use of alcohol in 2005*. Australian Government Department of Health and Ageing: Canberra.

Table 5: Drink types most commonly consumed by those who drank alcohol in the past week, Australia, 2005 (per cent)

| | 12-15 years | | | 16-17 years | | | Total (12-17 years) | | |
|------------------|-------------|--------|-------|-------------|--------|-------|---------------------|--------|-------|
| | Male | Female | Total | Male | Female | Total | Male | Female | Total |
| Beer (ordinary) | 29 | 7 | 19 | 39 | 5 | 22 | 33 | 6 | 21 |
| Wine | 7 | 6 | 7 | 3 | 4 | 4 | 5 | 5 | 5 |
| Alcoholic soda | 1 | 2 | 1 | 0 | 0 | 0 | 1 | 1 | 1 |
| Premixed spirits | 12 | 42 | 25 | 15 | 53 | 34 | 13 | 47 | 29 |
| Spirits | 39 | 32 | 36 | 39 | 27 | 33 | 39 | 30 | 35 |

Notes

1. Percentages of total in each age category.
2. Percentages exclude responses from students who gave more than one type of drink.
3. Percentages do not add to 100% as only the most frequent responses are listed.

Source: White V & Hayman J 2006. *Australian secondary school students' use of alcohol in 2005*. Australian Government Department of Health and Ageing: Canberra.

The Australian Division of General Practice (2003), investigated current alcohol consumption among 400 young people (12–21 years) in Canberra, Sydney and Melbourne. Specifically, the research sought to investigate whether there is a relationship between the type of alcoholic beverages young people are consuming and their level of risk drinking. In this study ready-to-drink alcohol products (referred to within the study as ‘alcopops’) were defined as alcoholic sodas, a distinct category of the ready-to-drink segment of the alcohol market

Ready-to-drink products were the most common alcoholic beverage consumed by young people with 39 per cent stating that an alcopop was the last drink they consumed (Table 6).³⁴ This proportion was higher for females (45%) than males (33%). For females, the next most common beverage last consumed was other spirits (23%) followed by wine (11%). Around one in ten (12%) of females surveyed reported never having drunk alcohol. For males, the next most common beverage was beer (28%), then other spirits (20%).

Table 6: Last drink consumed by 12-21 year olds and sex, Canberra, Sydney and Melbourne 2003 (per cent) (n=400)

| | Male | Female | Total |
|----------------|------|--------|-------|
| Beer | 28 | 9 | 18 |
| Wine | 10 | 11 | 10 |
| Ready-to-drink | 33 | 45 | 39 |
| Other spirits | 20 | 23 | 21 |
| Other | 0 | 2 | 0.3 |
| Never drunk | 9 | 12 | 11 |

Source: Australian Divisions of General Practice Ltd 2003. *Ready to drink? Alcopops and youth binge drinking*. Australian Division of General Practice: Manuka, ACT

When examined by age group, ready-to-drink products were the most popular alcoholic drink among 12-14 year olds, with 52 per cent of respondents in this age group reporting an alcopop as their last drink (Table 7).³⁵ The popularity of ready-to-drink products decreased markedly with increased age, with young people aged under 18 years more than twice as

34 Australian Divisions of General Practice Ltd 2003. *Ready to drink? Alcopops and youth binge drinking*. Australian Division of General Practice: Manuka, ACT

35 Australian Divisions of General Practice Ltd 2003.

likely to drink ready-to-drink products than people aged 18-21 years. Beer (29%) and other spirits (28%) were the most common last drink consumed among participants aged 18-21 years.

Table 7: Last drink consumed by age group, Canberra, Sydney and Melbourne, 2003 (per cent) (n=400)

| | 12-14 years | 15-17 years | 18-21 years |
|----------------|-------------|-------------|-------------|
| Beer | 9 | 20 | 29 |
| Wine | 4 | 10 | 20 |
| Ready-to-drink | 52 | 40 | 20 |
| Other spirits | 14 | 23 | 28 |

Source: Australian Divisions of General Practice Ltd 2003. *Ready to drink? Alcopops and youth binge drinking*. Australian Division of General Practice: Manuka, ACT

The study also reported a high incidence of perceived drunkenness among the young people surveyed. Nearly three in five (59%) young people stated that they had got drunk at least once in the past month, and one in five (22%) stated that they got drunk at least 4 times in the past month.³⁶ Respondents whose last drink was a ready-to-drink alcohol product reported a higher incidence of drunkenness, with 32 per cent reporting getting drunk at least once a week in the past month (compared with 20 per cent of beer drinkers and 12 per cent of wine drinkers).

Trends in youth consumption

The ASSAD survey lends itself to longitudinal analysis, and consequently makes it possible to examine the trends in the proportion of current drinkers preferring beer, wine, premixed drinks or spirits between 1999 and 2005. The following analysis is based on students who are classified as ‘current drinkers’ and excludes those who reported more than one beverage type. Since the 2002 ASSAD survey there have been separate categories for premixed spirits and alcoholic sodas, while in the 1999 survey these types of drinks were grouped together. To enable a comparison across survey years premixed spirits and alcoholic sodas have been grouped together in all three survey years, as illustrated in Table 8.

There has been a significant decrease over time in the proportion of males aged 12-15 and 16—17 years of age reporting that they usually drink beer, with the proportion of males reporting that they usually drink beer significantly lower in 2005 than in 1999 (Table 8).³⁷ Correspondingly, significantly more males reported that they usually drank premixed spirits, however, while the proportion of 12-17 year old males who usually drank premixed spirits increased between 1999 and 2002, this was followed by a significant decrease between 2002 and 2005.

For females, there has been a significant increase in the proportion reporting that they usually drank premixed spirits. While the proportion of females who usually drank premixed spirits was similar in 2002 and 2005, significantly more females reported that they usually drank premixed spirits in 2005 than in 1999. The proportion of 12-17 year old females who usually drank non-premixed spirits decreased over time.

36 Australian Divisions of General Practice Ltd 2003.

37 White V & Hayman J 2006. *Australian secondary school students’ use of alcohol in 2005*. Australian Government Department of Health and Ageing: Canberra.

The data suggest that beer has continued to lose its share of the market of male adolescent drinkers to spirits, in either non-premixed or their premixed form. Among adolescent females, premixed appeared to be taking market share from non-premixed spirits.

Table 8: Drinks most commonly consumed by those who drank alcohol in the past week by age group and sex, Australia, 1999, 2002 and 2005 (per cent)

| | 12-15 years | | | 16-17 years | | | Total (12-17 years) | | |
|----------------|-------------|------|------|-------------|------|------|---------------------|------|------|
| | 1999 | 2002 | 2005 | 1999 | 2002 | 2005 | 1999 | 2002 | 2005 |
| Males | | | | | | | | | |
| Spirits | 36 | 37 | 39 | 37 | 39 | 39 | 36 | 38 | 39 |
| Beer | 33* | 25 | 29 | 50* | 37 | 39 | 40* | 30 | 33 |
| Premixed | 7* | 19* | 12 | 5* | 14 | 15 | 6* | 17* | 14 |
| Wine | 9 | 7 | 7 | 2* | 3 | 3 | 6 | 5 | 5 |
| Females | | | | | | | | | |
| Spirits | 36 | 28* | 32 | 50* | 32 | 27 | 42* | 29 | 30 |
| Beer | 11* | 6 | 7 | 7 | 5 | 5 | 9* | 6 | 6 |
| Premixed | 21* | 45 | 43 | 26* | 51 | 54 | 23* | 48 | 48 |
| Wine | 10* | 8 | 6 | 4 | 4 | 4 | 7* | 6 | 5 |

* Significantly different from 2005 at $p < 0.01$.

Notes

1. Percentages of total in each age category.
2. Percentages exclude responses from students who gave more than one type of drink.
3. Percentages do not add to 100% as only the most frequent responses are listed.

Source: White V & Hayman J 2006. *Australian secondary school students' use of alcohol in 2005*. Australian Government Department of Health and Ageing: Canberra.

Term of Reference C: The consumption patterns of all alcohol beverages by sex and age group

Australian consumption

Results from the 2007 National Drug Strategy Household Survey (NDSHS) show that the alcohol drinking status of Australians aged 14 years or older varied considerably between males and females, and across age groups (Table 9). Overall in 2007, males (10.8%) were almost twice as likely as females (5.5%) to drink daily – this was the case across all age groups.³⁸ The proportion of daily drinkers increased with age, peaking for daily drinkers aged 60 years or older (15.7%) – more so for males in this age group (21.4%). In 2007, for all age groups, drinking alcohol (daily, weekly or less than weekly) was more prevalent than not drinking alcohol. Only for teenagers (71.0%) and those aged 60 years or older (75.3%) was the prevalence of drinking alcohol less than the population average of 82.9 per cent.

Across surveys, weekly drinking increased marginally from 41.2 per cent in 2004 to 41.3 per cent in 2007, driven by an increase in weekly drinking by females (from 35.0% to 35.9%), contrary to a decline for males (from 47.6% to 46.8%).^{39 40} The proportions of Australian aged 14 years or older abstaining from alcohol (never had a full serve of alcohol) increased significantly between 2004 (9.3%) and 2007 (10.1%), with a greater change seen among males than females.

Table 9: Alcohol drinking status: proportion of the population aged 14 years or older, by drinking status, by age (year groups) and sex, Australia, 2007 (per cent)⁴¹

| Drinking status | Age group | | | | | | |
|-------------------------------|-----------|-------|-------|-------|-------|------|------|
| | 14–19 | 20–29 | 30–39 | 40–49 | 50–59 | 60+ | 14+ |
| Males | | | | | | | |
| Daily | 1.4 | 2.8 | 6.1 | 11.4 | 15.9 | 21.4 | 10.8 |
| Weekly | 23.0 | 56.7 | 54.8 | 51.0 | 49.6 | 39.2 | 46.8 |
| Less than weekly | 46.4 | 30.3 | 28.2 | 26.7 | 24.5 | 22.1 | 28.3 |
| <i>Current drinkers</i> | 70.8 | 89.8 | 89.1 | 89.1 | 90.0 | 82.7 | 85.9 |
| Ex-drinker ^(a) | 3.3 | 2.8 | 5.2 | 5.7 | 5.7 | 10.3 | 5.8 |
| Never a full glass of alcohol | 25.9 | 8.3 | 5.7 | 5.1 | 4.2 | 7.0 | 8.2 |
| Females | | | | | | | |
| Daily | 0.5 | 1.7 | 3.0 | 5.6 | 7.8 | 10.5 | 5.5 |
| Weekly | 18.8 | 39.6 | 40.4 | 42.7 | 38.0 | 30.6 | 35.9 |
| Less than weekly | 52.0 | 44.0 | 43.1 | 37.7 | 36.2 | 27.8 | 38.5 |
| <i>Current drinkers</i> | 71.3 | 85.3 | 86.5 | 86.0 | 82.0 | 68.9 | 79.9 |
| Ex-drinker ^(a) | 2.6 | 5.8 | 6.4 | 6.2 | 8.4 | 14.2 | 8.1 |
| Never a full glass of alcohol | 26.1 | 8.9 | 7.0 | 7.8 | 9.7 | 6.9 | 12.1 |
| Persons | | | | | | | |
| Daily | 1.0 | 2.3 | 4.6 | 8.5 | 11.8 | 15.6 | 8.1 |
| Weekly | 20.9 | 47.8 | 47.5 | 46.8 | 43.8 | 34.6 | 41.3 |
| Less than weekly | 49.1 | 37.0 | 35.7 | 32.3 | 30.4 | 25.1 | 33.5 |
| <i>Current drinkers</i> | 71.0 | 87.1 | 87.8 | 87.6 | 86.0 | 75.3 | 82.9 |
| Ex-drinker ^(a) | 3.0 | 4.3 | 5.8 | 5.9 | 7.1 | 12.4 | 7.0 |
| Never a full glass of alcohol | 26.0 | 8.6 | 6.3 | 6.5 | 7.0 | 12.3 | 10.1 |

(a) Has consumed at least a full serve of alcohol, but not in the previous 12 months.

38 Australian Institute of Health and Welfare 2008.

39 Australian Institute of Health and Welfare 2005.

40 Australian Institute of Health and Welfare 2008.

41 Australian Institute of Health and Welfare 2008.

The 2007 National Drug Strategy Household Survey allows for analysis of alcohol use by people as young as 12 years of age, however these data should be interpreted with caution due to the low prevalence and smaller sample size for these younger ages. Nevertheless, in 2007, over two in three 12-15 year olds (67.5%) had never consumed a full serve of alcohol (Table 10).⁴² Rates of daily alcohol consumption increased with age (0.2% for 12-15 years olds to 1.6% among 18-19 years olds), but did not reach the ‘population’ rate (7.9% for Australians aged 12 years or older).

Among 12-15 year olds, higher proportions of females (3.7%) than males (1.0%) consumed alcohol daily and weekly. In the age groups 16-17 years and 18-19 years, higher proportions of males than females consumed alcohol daily and weekly.

Table 10: Alcohol drinking status: proportion of the population aged 12 years or older, by age group and sex, Australia, 2007 (per cent)

| Drinking status | Age group | | | | |
|-------------------------------|-----------|-------|-------|-------|------|
| | 12-15 | 16-17 | 18-19 | 12-19 | 12+ |
| Males | | | | | |
| Daily | — | 1.7 | 2.6 | 1.1 | 10.5 |
| Weekly | 1.0 | 20.0 | 46.7 | 17.3 | 45.3 |
| Less than weekly | 28.8 | 50.9 | 40.9 | 37.4 | 27.7 |
| Ex-drinker ^(a) | 2.7 | 5.2 | 1.5 | 3.1 | 5.7 |
| Never a full glass of alcohol | 67.5 | 22.1 | 8.3 | 41.2 | 10.8 |
| Females | | | | | |
| Daily | 0.5 | — | 0.7 | 0.4 | 5.4 |
| Weekly | 3.2 | 15.4 | 35.3 | 14.4 | 34.8 |
| Less than weekly | 26.8 | 63.2 | 51.9 | 42.3 | 37.7 |
| Ex-drinker ^(a) | 2.1 | 3.0 | 1.9 | 2.3 | 7.9 |
| Never a full glass of alcohol | 67.4 | 18.4 | 10.2 | 40.6 | 14.3 |
| Persons | | | | | |
| Daily | 0.2 | 0.8 | 1.6 | 0.7 | 7.9 |
| Weekly | 2.1 | 17.8 | 41.1 | 15.9 | 40.0 |
| Less than weekly | 27.8 | 57.0 | 46.3 | 39.8 | 32.8 |
| Ex-drinker ^(a) | 2.4 | 4.2 | 1.7 | 2.7 | 6.8 |
| Never a full glass of alcohol | 67.5 | 20.3 | 9.2 | 40.9 | 12.5 |

(a) Has consumed at least a full serve of alcohol, but not in the previous 12 months.

Source: Australian Institute of Health and Welfare 2008. *2007 National Drug Strategy Household Survey: first results*. AIHW cat. no. PHE 98. Canberra: AIHW.

Consumption by beverage type

Alcohol consumption can be described in terms of indirect consumption which is usually reported as ‘apparent consumption’. Apparent consumption is consumption of alcohol measured in litres per person, using the amount of alcohol available relative to the population size. In the 3 years between 2005 and 2007, apparent alcohol consumption by Australians aged 15 years or older has remained stable at 10 litres per person per year (Table 11).⁴³ The biggest variation over this time has been in the apparent consumption of ready-to-drink alcohol products increasing by 14.8% since 2005, to 1.08 litres per person per year. There was little variation observed in the apparent consumption of beer (no change, remaining at

42 Australian Institute of Health and Welfare 2008.

43 Australian Bureau of Statistics 2008. *Apparent consumption of alcohol Australia, 2006-07* (4307.0.55.001).

4.57 litres per person per year), wine (decrease of 2.5%, to 3.05 litres) and spirits (decrease of 4.3%, to 1.15 litres).

Table 11: Alcohol: Available for consumption and apparent per person consumption by persons aged 15 years or older – years ended 30 June

| | 2005 | 2006 | 2007 |
|--|----------------------------|-----------------|-----------------------|
| Available for consumption ('000 litres of alcohol) | ('000 litres of alcohol) | | |
| Beer | 74,279 | 75,371 | 76,753 ^(a) |
| Wine | 50,803 | r51,459 | 51,276 |
| Spirits ^(b) | 19,451 | 19,154 | 19,265 |
| Ready to drink ^(c) | r15,338 | r16,794 | 18,123 |
| Total | r159,871 | r162,778 | 165,417 |
| Apparent per person consumption (15 years or older) | (litres of alcohol/person) | | |
| Beer | r4.57 | r4.56 | 4.57(a) |
| Wine | 3.13 | r3.12 | 3.05 |
| Spirits ^(b) | 1.20 | 1.16 | 1.15 |
| Ready to drink ^(c) | r0.94 | r1.02 | 1.08 |
| Total | r9.84 | r9.86 | 9.85 |

(a) Due to excise tariff reform in July 2006, data may not be directly comparable with data prior to 2004–05 (see ABS 2008 Explanatory notes, paragraph 5).

(b) Excludes Ready to Drink pre-mixed spirit products.

(c) Ready to Drink pre-mixed products include spirit based, wine based, and other than spirit or wine based products (see Explanatory notes, paragraph 11).

"r" indicated revised data (see ABS 2008 Explanatory notes paragraph 11, paragraph 14 and paragraph 16).

Source: Australian Bureau of Statistics 2008. *Apparent consumption of alcohol Australia, 2006-07* (4307.0.55.001).

The National Health Survey (NHS), conducted by the Australian Bureau of Statistics, also collects alcohol consumption data, although in a different format from the National Drug Strategy Household Survey. Analysis of the 1998-99, 1995 and 2001 surveys has been undertaken to provide a snapshot of the types of alcohol beverages consumed among Australians aged 18 years or older, for those who consumed alcohol in the previous week.⁴⁴

Differences in survey methods make comparisons difficult across surveys; the following analysis has been limited to comparisons between 1995 and 2001 data. Over this time weekly consumption of extra/special light beer increased by 514 per cent and consumption of low alcohol beer decreased by 9 per cent (Table 12). Consumption of wine increased by 52 per cent and spirits by 44 per cent. Consumption of full strength beer and fortified wine remained approximately equal between the two surveys.

Differences in consumption are similar across gender. Both males and females increased their wine consumption (0.88 and 0.85 standard drinks respectively) between 1995 and 2001. Further, males increased weekly consumption of low alcohol beer (0.65 standard drinks) and spirits (0.6 standard drinks).⁴⁵

44 Clemens S, Donath S, Stockwell T & Chikritzhs T 2007. *Alcohol consumption in Australia: national surveys from 1989 to 2004*. National Drug Research Institute: Perth.

45 Clemens et al. 2007

When comparing consumption differences across age groups, both 18-24 year olds and 25-39 year olds demonstrated large increases in weekly spirit consumption (1.4 standard drinks for 18-24 years olds and 0.65 standard drinks for 25-39 year olds). Those aged 40 years or older increased consumption of wine by 1.2 standard drinks per week.⁴⁶

Table 12: Average weekly alcohol consumption by beverage, Australia, 1989-90, 1995 and 2001 (extract)

| Beverage | mls per population 18 years or older (population in millions) | mls per population 18 years or older (population in millions) | mls per population 18 years or older (population in millions) |
|---|---|---|---|
| | 1998-90 NHS ^(a) | 1995 NHS | 2001 NHS |
| Persons | (12.4m) | (13.4m) | (14.2m) |
| All alcohol | 104.6 | 84.2 | 103.3 |
| Extra/special light beer ^(b) | 1.1 | 0.9 | 5.4 |
| Low alcohol beer ^(c) | 4.6 | 6.9 | 6.2 |
| Full strength beer | 59.4 | 41.7 | 41.6 |
| Wine | 21.8 | 21.0 | 32.0 |
| Spirits | 13.7 | 11.2 | 16.1 |
| Fortified wine | 3.1 | 1.6 | 1.6 |
| Other alcohol | 0.8 | 1.1 | 0.4 |

(a) Seven-day diary

(b) Extra/special light beer (1995) equals low alcohol beer (2001)

(c) Low alcohol beer (1995) equals mid strength beer (2001)

Source: Clemens S, Donath S, Stockwell T & Chikritzhs T 2007. *Alcohol consumption in Australia: national surveys from 1989 to 2004*. National Drug Research Institute: Perth.

Risky or high risk drinking by beverage type

The consumption of alcohol beverage type in risky patterns was examined using data from the 2001 National Drug Strategy Household Survey (NDSHS).⁴⁷ This analysis showed that regular strength beer and spirits (neat and pre-mixed) were most likely to have been drunk in a risky or high risk manner, while wine (bottled and cask) was less likely to be consumed in a risky or high risk manner (Table 13). Cider, low strength beer and fortified wine were least likely to be consumed in a risky or high risk way.

Table 13 also provides a comparison of the estimates of the total market share of different alcoholic beverages estimates from the 2001 survey data, compared to industry sales and taxation data. These comparisons show that while the two estimates are broadly comparable, regular strength beer, cask wine and fortified wine were underestimated by the NDSHS survey method. This may be reflective of the difficulty of sampling high risk drinkers in household surveys.

46 Clemens et. al. 2007.

47 Chikritzhs T, Catalano P, Stockwell T, Donath S, Ngo H, Young D & Matthews S 2003.

Table 13: Contribution of various alcoholic beverages to risky and high risk alcohol consumption for acute harm as estimates from the 2001 NDSHS, including comparisons between survey and industry market share data for all drinking in 2001 (persons aged 14+ year) (per cent) (extract)

| All drinking | | | |
|--------------------|---|------------------------------|--------------|
| Alcoholic beverage | % contribution to total risky/high risk consumption | % contribution to 2001 NDSHS | |
| | | 2001 NDSHS | 2001 DISICA* |
| Regular beer | 38.8 | 34.4 | 40.5 |
| Spirits | 18.3 | 14.8 | 13.0 |
| Bottled wine | 15.8 | 19.0 | 15.1 |
| Cask wine | 7.5 | 9.9 | 11.8 |
| Premixed spirits | 7.3 | 6.7 | 5.1 |
| Mid-strength beer | 5.6 | 6.1 | 5.5 |
| Homebrew beer | 2.5 | 2.2 | 1.9 |
| Low beer | 1.8 | 4.1 | 4.4 |
| Cider | 1.2 | 1.6 | 0.4 |
| Fortified wine | 0.7 | 0.6 | 2.7 |
| Other | 0.6 | 0.5 | 0.4 |
| Total | 100.0 | 100.0 | 100.0 |

* Calculated with the assumption that homebrew has 1.9% of market share as indicated by 2001 NDSHS results.

Source: Chikritzhs T, Catalano P, Stockwell T, Donath S, Ngo H, Young D & Matthews S 2003. *Australian Alcohol Indicators, 1990-2001: Patterns of alcohol use and related harms for Australian states and territories*. National Drug Research Institute: Perth.

Term of Reference D: The impact of these changes on patterns of overall full strength spirit consumption, including any increased consumption of standard drinks of alcohol

Historical data on the availability of spirits for consumption shows a period of increased availability starting from 1969-70 (12,657,000 litres available for consumption), peaking in 1997-98 at 22,230,000 litres.⁴⁸ Since 1997-98, the availability of spirits has started slowly to decrease, with 18,628,000 litres available as at 2004-05. Similarly, the availability of ready to drink alcohol products experienced rapid growth, with 778,000 litres available for consumption in 1984-85, with a peak in growth in 2004-05 with 14,923,000 litres available.

When availability for consumption data are examined taking into account the increase in population, the change in apparent per person consumption is not as marked. As noted previously, the biggest variation between 2005 and 2007 has been in the apparent consumption of ready-to-drink alcohol products increasing by 14.8 per cent since 2005, to 1.08 litres per person per year.⁴⁹ There was little variation observed in the apparent consumption of beer (no change, remaining at 4.57 litres per person per year), wine (decrease of 2.5%, to 3.05 litres) and spirits (decrease of 4.3%, to 1.15 litres).

The Distilled Spirits Industry Council of Australia budget revenue estimates for 2004-05 to 2006-07 suggest that the market share for spirits will continue to decrease, from 11.7 per cent to 11.3 per cent over this period (Table 14). Ready to drink alcohol products are expected to increase their market share from 9.4 per cent in 2004-05 to 10.6 per cent in 2006-07.

Table 14: Proportion alcohol beverage market estimates for 2004-05 to 2006-07 (spirits)

| | 2004-05 | 2005-06 (forecast) | 2006-07 (forecast) |
|----------------------|--------------|--------------------|--------------------|
| Spirits | 11.7% | 11.5% | 11.3% |
| RTDs | 9.4% | 10.1% | 10.6% |
| Total spirits | 21.1% | 21.6% | 22.0% |

Source: Distilled Spirits Industry Council of Australia Inc. 2006. *Alcohol tax in Australia 2006*.

Industry sales data have also shown that at November 2006, the moving annual total for retails sales of the off premise liquor market – for beer, wine, spirits and ready to drink products – increased by \$394 million.⁵⁰ Over this time, all liquor categories experienced growth in sales with ready to drink alcohol products increasing by 7.5%, spirits (up 4.3%), packaged beer (up 3.3%), and wine (up 0.5%). The total retail sales for ready to drink alcohol products over this period were \$2.36 billion.

48 Distilled Spirits Industry Council of Australia Inc. 2006. *Alcohol tax in Australia 2006*.

49 Australian Bureau of Statistics 2008.

50 National Liquor news (February 2007). *Australian liquor research, AC Nielsen ScanTrack liquor*, 73-78.

Term of Reference F: Applicability of incentives to encourage production and consumption of lower alcohol content beverages

In Australia, beer and spirits are subject to an alcohol excise proportional to the amount of alcohol they contain (apart from the duty free threshold of 1.15% alcohol content for beer) while wine is taxed only on its wholesale value. This means that rates of taxation on cask wine per standard drink are one-fifth of that on mid and low strength beer⁵¹. This difference is often the subject of criticism.

What public health advocates desire from alcohol taxation reform is:

- *a move from ad valorem to a volumetric tax on alcohol content with special arrangements to encourage lower concentration beverages;*
- *hypothecation (earmarking funds to be directed towards related harms); and*
- *a slight increase in overall price, but not enough to encourage a black market.*⁵²

Australian excise arrangements mean that low-strength beer is cheaper than full-strength

Between 1990 and 2000, discretionary tax rates were created for lower strength beers (initially by the states and then federally) with the result that by the end of that decade approximately 40% of the beer market consisted of beers with an alcoholic strength of less than 3.8%.⁵³

and some commentators⁵⁴ suggested that this may have had a beneficial impact on consumption levels in Australia.

However, the changing nature of the alcohol market has reduced the past beneficial impact of increased consumption of lower alcohol beers. There has been significant growth in ready-to-drink product sales over the last 10 years. The alcohol industry acknowledges that ready-to-drink sales have been growing since 1993–94 and they report that ready-to-drink product sales increased 254% between 1999–00 and 2006–07.⁵⁵ These primarily have a similar alcohol content to full strength beer, or higher, with very few mid strength beverages and none that are low alcohol.

Although there are some mid-strength ready-to-drink products, they are not widely available or marketed. It has been suggested that there is little incentive to produce and market lower-strength ready-to-drink products as the current alcohol excise levels apply the same rate of excise as full strength beer to all ready-to-drink products, whatever their alcohol content.

This results in a situation where there is no financial incentive for alcohol manufacturers to promote and produce mid and low strength RTD products.⁵⁶

51 Loxley W et al. 2004.

52 Marsden Jacob Associates 2005. *Identifying a framework for regulation in packaged liquor retailing*. Melbourne: Report prepared for the National Competition Council as part of the NCC Occasional Series, 41.

53 Stockwell T 2004. Australian alcohol policy and the public interest: a brief report card [Editorial]. *Drug and Alcohol Review*, 23(4), 377-379.

54 Hall W 2005. British alcohol policy: lessons for Australia. *ADCA News Line*, 28, 6-7.

55 Distilled Spirits Industry Council of Australia, *Pre-budget Submission 2008–09*, May 2008.

56 ADCA 2005. *Alcohol Taxation*. http://www.adca.org.au/policy/Alcohol_tax_fact_sheet.pdf.

In the context of harm minimisation, there is support for a tax system that provides incentives for the production, sale and consumption of lower alcohol content beverages and for using taxation and price to maximise harm minimisation outcomes. The evidence indicates this can have the impact of reducing overall alcohol consumption and correspondingly reducing related problems for individuals and communities.

Term of Reference G: The modelling underpinning the Government's revenue estimates of this measure

The Treasury is responsible for matters relating to taxation policy and was responsible for the modelling and costing which underpins the Government's revenue estimates.

Below is Treasury modelling for this measure (tabled in Parliament by the Hon Nicola Roxon MP on 15 May 2008).

Increased Taxation of Ready to Drink Beverages

BACKGROUND

Ready to Drink products (RTDs), are premixed drinks that cannot exceed 10 per cent alcohol by volume. Prior to 27 April 2008, these drinks were taxed at the same rate as full strength beer, at \$39.36 per litre of alcohol. In comparison to beer, RTD products did not receive an exemption on the first 1.15 percentage points of alcohol by volume.

The measure increased the tax rate applying to alcohol known as 'other excisable beverages not exceeding 10 per cent by volume of alcohol' (broadly RTDs) from \$39.36 to \$66.67 per litre of alcohol on 27 April 2008.

DATA:

The costing uses data for clearances of 'other excisable beverages' obtained from the Australian Taxation Office and Treasury forecasts of clearance volumes prepared by the Revenue Analysis Unit of Treasury. The volume data relate to the numbers of litres of pure alcohol subject to excise. Projections are based on the growth rates underlying the Budget forward estimates.

ASSUMPTIONS:

The relatively new existence of RTDs within the market place makes it difficult to determine precisely the sensitivity of the volume of sales of RTDs relative to changes in their prices. Conceptually, changing the price of RTDs can have two effects. The first effect is an own price elasticity which is the change in the consumption of RTDs due to the change in the price of RTDs. The second possibility is a re-direction of alcohol consumption to other products as a result of the change in price of RTDs. Based on a survey of academic studies in Australia and overseas, it is assumed that RTD beverages have an own price elasticity of -0.4 (that is consumption of RTDs declines by 4 per cent for a 10 per cent increase in prices). RTDs have different patterns of cross-price elasticity, being complements to some products (eg a reduction in RTD consumption may also be reflected in a reduction in beer consumption) and a substitute for other products. On balance, the cross-price elasticity estimates are assumed to be zero.

Impact of the proposed change on RTD prices.

A survey of RTD prices was undertaken covering 20 products listed in retail outlet websites. The price and alcohol content of those products was obtained and products were weighted according to industry information of total sales of RTD drinks accounted for by products in particular alcohol strength ranges.

This modelling resulted in a weighted average price increase for RTDs of 9.4 per cent.

Impact of the proposed change on RTD sales volume.

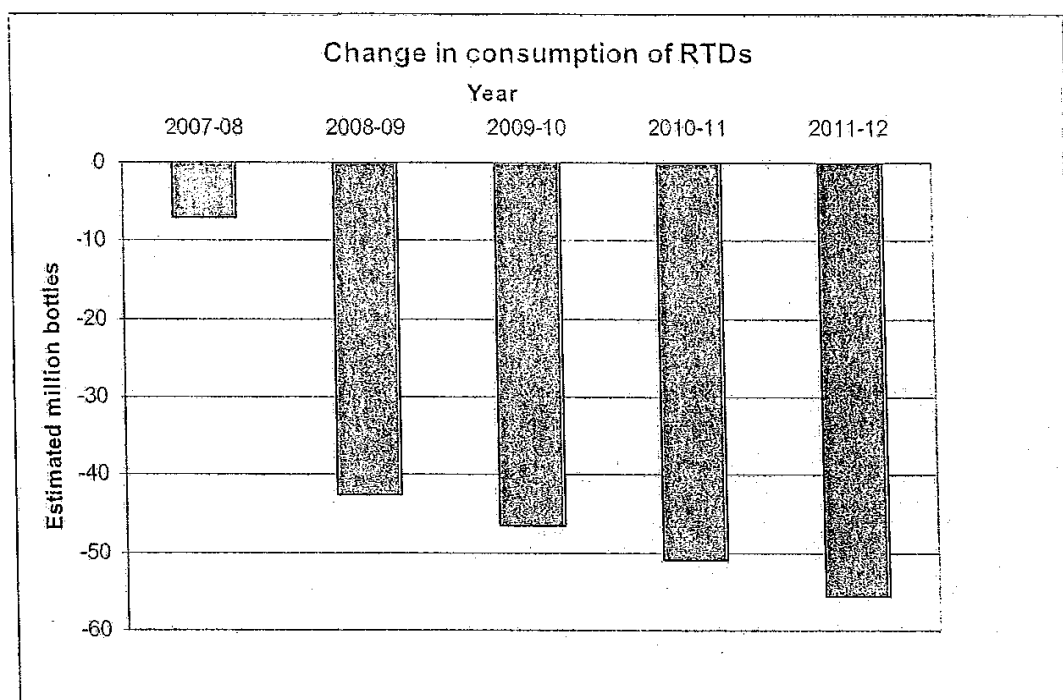
The impact on the volume of 'other excisable beverages' consumed, in terms of litres of pure alcohol and using a more identifiable base expressed as the estimated number of bottles (assuming an average alcohol content of 5% and packaging in 375ml bottles) of RTDs, is shown in Table 1.

Table 1: Change in consumption of RTDs

| | Alcohol (Litres) | Bottles (million) |
|---------|---------------------|----------------------|
| 2007-08 | -132,000 | -7.0 |
| 2008-09 | -800,000 | -42.7 |
| 2009-10 | -873,000 | -46.6 |
| 2010-11 | -954,000 | -50.9 |
| 2011-12 | -1,041,000 | -55.5 |

Excluding Customs clearances

Chart 1 shows the impact of the excise change on the level of RTD consumption.



FINANCIAL IMPLICATIONS

The financial implications of this change in taxation treatment is as released on page 22 of Budget Paper 2 in the 2008-09 budget. These impacts are shown in Table 2:

Table 2: Proposal - increase excise on other excisable beverages

| \$ million | 2007-08 | 2008-09 | 2009-10 | 2010-11 | 2011-12 |
|---|-------------|--------------|--------------|--------------|--------------|
| Revenue | | | | | |
| Australian Taxation Office | 95.9 | 628.1 | 704.0 | 787.3 | 830.6 |
| Australian Customs Service | 2 | 12 | 12 | 12 | 12 |
| Total revenue | 97.9 | 640.1 | 716.0 | 799.3 | 892.6 |
| Expense (payments to the States) | 8.7 | 57.1 | 64.0 | 71.6 | 80.1 |

Term of Reference J: The effect of alternative means of limiting excessive alcohol consumption and levels of alcohol related harm among young people

Several alternative factors to reducing excessive alcohol consumption have been examined and discussed in recent literature.

Alcohol advertising and promotions

The nature of, and exposure to alcohol advertising and promotions has become more diverse and prevalent with the emergence of electronic and other communication mediums. Greater exposure to alcohol promotions has been associated with more positive attitudes to alcohol and drinking behaviours, increased product recognition and drinking.⁵⁷ A recent study into the in-store promotion and display of ready-to-drink beverages found that more than 40 per cent of all glass-door display refrigerators in participating bottle-shops were dedicated to the storage and display of these products⁵⁸. Further, of the staff interviewed at bottle-shops more than half believed that ready-to-drink products were marketed particularly to girls, and those under the age of 18 years.

Research has shown that alcohol advertising bans decrease alcohol consumption.⁵⁹

Later studies have suggested significant effects of alcohol advertising on alcohol-related problems.... Countries with partial restrictions had 16 per cent lower alcohol consumption rates and ten per cent lower motor vehicle fatality rates than did countries with no restrictions, and countries with complete bans on television advertisements had 11 per cent lower consumption rates and 23 per cent lower motor vehicle fatalities than did countries with partial restrictions...After accounting for regional price differences and population variables such as income and religion, increases in alcohol advertising were found to be significantly related to increases in total and night-time vehicle fatalities across US states...It was estimated that a total ban on alcohol advertising might reduce motor vehicle fatalities by as much as 5,000 to 10,000 lives per year.⁶⁰

Early intervention and treatment

Studies have shown that brief interventions have proven effectiveness in reducing hazardous alcohol consumption.⁶¹ Brief interventions have also been shown to be cost-effective⁶² and therefore clearly represent a useful strategy to reduce the rates of alcohol abuse. A range of treatments for alcohol problems including brief interventions for hazardous drinkers or

57 Babor et al. 2003

58 Smith A, Edwards C & Harris W 2005. Bottleshop and 'ready-to-drink' alcoholic beverages. *Health Promotion Journal of Australia*, 16(1):32-36.

59 Saffer H & Dave D 2002. Alcohol consumption and alcohol advertising bans. *Applied Economics*, 34(11):1325-1334.

60 Anderson P & Baumberg B 2006, *Alcohol in Europe: a public health perspective. A report for the European Commission*, Institute of Alcohol Studies, UK, June.

61 Bien TH, Miller WR & Tonigan JS 1993. Brief interventions for alcohol problems: a review, *Addiction*, 88, 315-336.

62 Wutzke SE, Shiell A, Gomel MK & Conigrave KM 2001. Cost effectiveness of brief interventions for reducing alcohol consumption. *Social Science and Medicine*, 52, 863-870.

intensive treatments for people who are alcohol dependent, have been demonstrated to be effective.^{63 64}

Drinking context

Drinking settings and leisure environments function as important determinants of the level and type of risk associated with alcohol consumption. It is assumed that risk can be significantly reduced when training in responsible service of alcohol (e.g. not serving drunk people; not engaging in promotions and other practices that encourage risky consumption; engaging skilled crowd controllers) is combined with enforcement strategies (e.g. through police and licensing authority activity). The promotion of guidelines on responsible service of alcohol is one such strategy.

Drink driving

The effectiveness of random breath testing to reduce drinking driving is dependent on the probability of detection. There is substantial evidence that random breath testing loses much of its effect if levels of enforcement are too low or if the enforcement effort is insufficiently well targeted.⁶⁵ In light of this, it has been recommended that:

*All States should increase highly visible stationary RBT [random breath testing] to a level equivalent to one test per licence holder per year. This could be accomplished in a cost effective manner by using general duties police, and possibly also booze buses, and by utilising the management techniques embodied in the random roadwatch program.*⁶⁶

Education and persuasion

Education and persuasion strategies to reduce harmful alcohol consumption can include mass media communication, communicating guidelines on low risk drinking, and school based programs. A current example of a school based program is the School Health and Alcohol Harm Reduction Project (SHAHRP)⁶⁷. This project was aimed at reducing alcohol-related harm amongst secondary students in Perth. The program involved an alcohol harm minimisation classroom intervention conducted in two phases over a 2 year period. The intervention included skill rehearsal, discussions based on scenarios, and individual and group decision making exercises among activities. The outcomes of the program found that students participating in the SHAHRP program developed significantly greater alcohol-related knowledge and significantly safer alcohol-related attitudes than students not taking part. Further, students participating in the intervention consumed significantly less alcohol than the control students (31% difference). Students participating in the program were also less likely to consume alcohol at risky levels when followed up 20 months later.

63 Gomel MK, Wutzke SE, Hardcastle DH, Lapsley H & Reznik RB 1998. Cost effectiveness of strategies to market and train primary health care physicians in brief intervention techniques for hazardous alcohol use. *Social Science and Medicine*, 47:203-211.

64 Wutzke SE, Shiell A, Gomel MK & Conigrave KM 2001. Cost effectiveness of brief interventions for reducing alcohol consumption. *Social Science and Medicine*, 52, 863-870.

65 Henstridge J, Homel R & Mackay P 1997. The Long-Term Effects of Random breath testing in Four Australian States: A Time Series Analysis, Federal office of Road Safety, April.

66 Henstridge et al. 1997

67 McBride N, Farrington F, Midford R, Meuleners L & Phillips M. 2004. Harm minimisation in school drug education: final results of the School Health and Alcohol Harm Reduction Project (SHAHRP). *Addiction*, 99:278-291.

Health advisory labels on packaged alcohol

The Council of Australian Governments (COAG) agreed on 26 March 2008, to ask the Australia New Zealand Food Regulation Ministerial Council (Ministerial Council) to request Food Standards Australia New Zealand (FSANZ) raise a proposal to consider mandatory health advisory labels on packaged alcohol.

Whilst there are no statutory timeframes for consideration of a proposal, development of a draft standard would generally take from nine months to 12 months or more, depending on the complexity of the proposal. FSANZ would need to consider the timing of such work in the context of its current workload. Any consideration by FSANZ of mandatory health advisory labels on packaged alcohol would be subject to FSANZ's statutory requirements that standards be based on risk analysis using the best available scientific evidence and be subject to an appropriate regulatory impact assessment.

The Alcohol Advisory Council of New Zealand (ALAC) has lodged an Application (A576) with FSANZ to require a health advisory label on alcoholic beverage containers advising of the risks of consuming alcohol when planning to become pregnant and during pregnancy. FSANZ is currently preparing a Draft Assessment Report which is expected to be released in mid-2008. It is not possible to 'piggyback' any consideration of a mandatory health warning on packaged alcohol onto the current process.

The National Health and Medical Research Council began reviewing the *Australian Alcohol Guidelines* earlier this year. The current *Australian Alcohol Guidelines* (2001) state that women who are pregnant or might soon become pregnant may consider not drinking at all, but if they choose to drink, should have less than seven standard drinks over a week and no more than two standard drinks on any one day.

On 13 October 2007, the NHMRC issued revised draft guidelines, titled *Australian alcohol guidelines for low-risk drinking*, for public consultation. The draft guideline for women who are pregnant, are planning a pregnancy or are breastfeeding is: 'Not drinking is the safest option'. FSANZ have stated they will consider the revised guidelines during the assessment of the ALAC Application.

Alcohol products sold in the United States of America have been required to carry a pregnancy health statement since 1989. Other countries requiring health warning statements on labels about the consumption of alcohol during pregnancy.