

Under-aged Drinking Among 14–17 year olds and Related Harms in Australia

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Summary Points

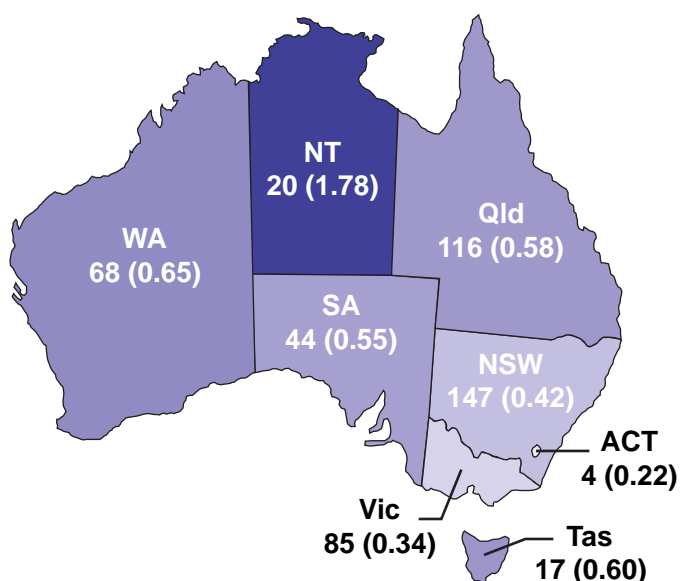
- Over 80% of all the alcohol consumed by 14–17 year olds is drunk at risky/high risk levels for acute harm.
- Over the ten years 1993–2002, an estimated 501 under-aged drinkers (aged 14–17yrs) died from alcohol-attributable injury and disease caused by risky/high risk drinking in Australia.
- Over 3,300 14–17 year olds were hospitalised for alcohol-attributable injury and disease in 1999/00.
- Teenage males are three and a half times more likely than females to die from alcohol-attributable injury.
- Most states/territories indicate increased numbers of alcohol-attributable hospitalisations in recent years.
- Nationally, numbers of alcohol-attributable deaths for 14–17 year olds have declined steadily since 1990.
- Teenagers who live in non-metro areas have higher rates of alcohol-attributable death than their city counterparts.

Introduction About two thirds of Australian teenagers aged 14–17 years drink alcohol and one in five of these teenagers drinks at least weekly (AIHW, 2002). Consumption of alcohol by teenagers is associated with a range of adverse health outcomes, particularly injury. Research also suggests that teenage drinking is predictive of problematic alcohol use in later years. For teenagers, the most common means of obtaining alcohol is from friends or relatives (69%). Despite the illegality of sales to minors across all Australian jurisdictions, about 47% of 14–17 year olds have purchased alcohol from a retail outlet (AIHW, 2002). According to the Australian School Students Alcohol and Drug surveys, the estimated proportion of current drinkers among 14–17 year olds has steadily increased since the 1990s (White, 2001).

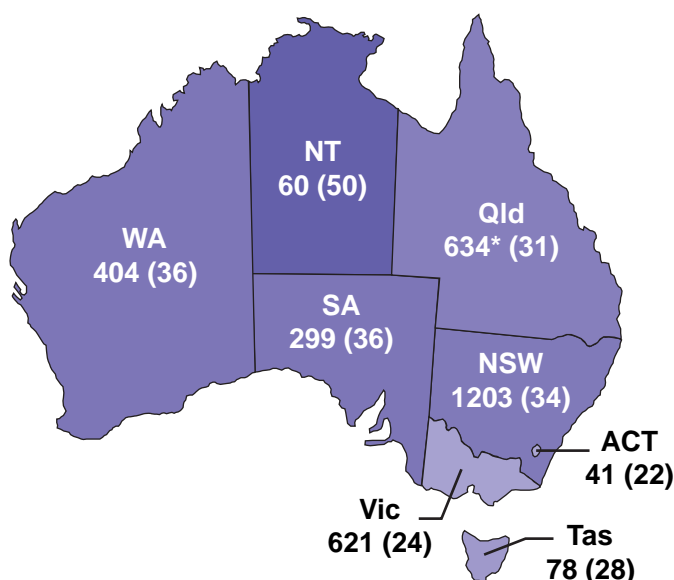
The purpose of this Bulletin is to document levels of consumption and alcohol-attributable harms for under-aged drinkers who consume alcohol at risky and high risk levels. Estimates of numbers of deaths and hospitalisations are based on the aetiologic fraction method for quantifying alcohol caused mortality and morbidity (see English *et al.*, 1995) and are considered 'alcohol-attributable' (i.e. caused) as opposed to simply 'alcohol-related'. Rates shown are age specific to the 14–17 year old residential population. Data were provided by the Australian Bureau of Statistics (ABS) and the Australian Institute of Health and Welfare (AIHW). Unfortunately, hospitalisation records specifically distinguishing 14–17 year olds in Qld was unavailable for

all years. Age specific data for WA hospitalisations was only available for 1999/00.

From 1993 to 2002 (10 years), an estimated 501 14–17 year olds (0.48 per 10,000 14–17 year old Australian residents) died as a result of alcohol-attributable injury and disease – about 13% of all deaths in that age group. The absence of age specific data for Queensland precludes accurate estimation of total numbers of alcohol-attributable hospitalisations for Australia in 1999/00. However, using the assumption that the rate of alcohol-attributable hospitalisations for Queensland teenagers compared with the national average was equivalent to that for deaths in that state (i.e. 1.2 times the national average), the national rate of alcohol-attributable hospitalisations for 14–17 year olds in 1999/00 would have been in excess of 3,300.



Map 1: Estimated numbers and rates of alcohol-attributable deaths for 14–17 year olds over the last ten years, 1993–2002



Map 2: Estimated numbers and rates of alcohol-attributable hospitalisations for 14–17 year olds in 1999/00

Alcohol consumption among 14–17 year olds

As shown in Figure 1, the 2001 National Drug Strategy Household Survey (NDSHS) indicated that about 23% of 14–17 year olds drank in excess of the NHMRC 2001 safe drinking guidelines for *acute* harm at least once a month, which is slightly higher than the estimate for all ages (20%) (Chikritzhs *et al.*, 2003). However, the *amount* of alcohol consumed at risky/high risk levels for acute harm by 14–17 year olds was substantially higher than for the general population. Some 82% of 14–17 year olds drank at levels that placed them at risk or high risk of experiencing acute harm compared with about 62% for all ages (Figure 2). The proportion of the 14–17 year old population that drank at risky/high risk levels for *chronic* harm was much less than for *acute* harms (about 3% for males and 9% for females in 2001). Nevertheless, there was some indication that increasing numbers of teenage girls were drinking consistently at high levels, and thereby placing themselves at risk of long-term harm. Comparisons between the 1998 and 2001 NDSHS have indicated that the proportion of female teenagers drinking in excess of safe drinking levels for *chronic* harm increased from 1% to 9%. Conversely, the proportion of under-aged males drinking at these levels declined from 4.3% to 2.7% (Chikritzhs *et al.*, 2003).

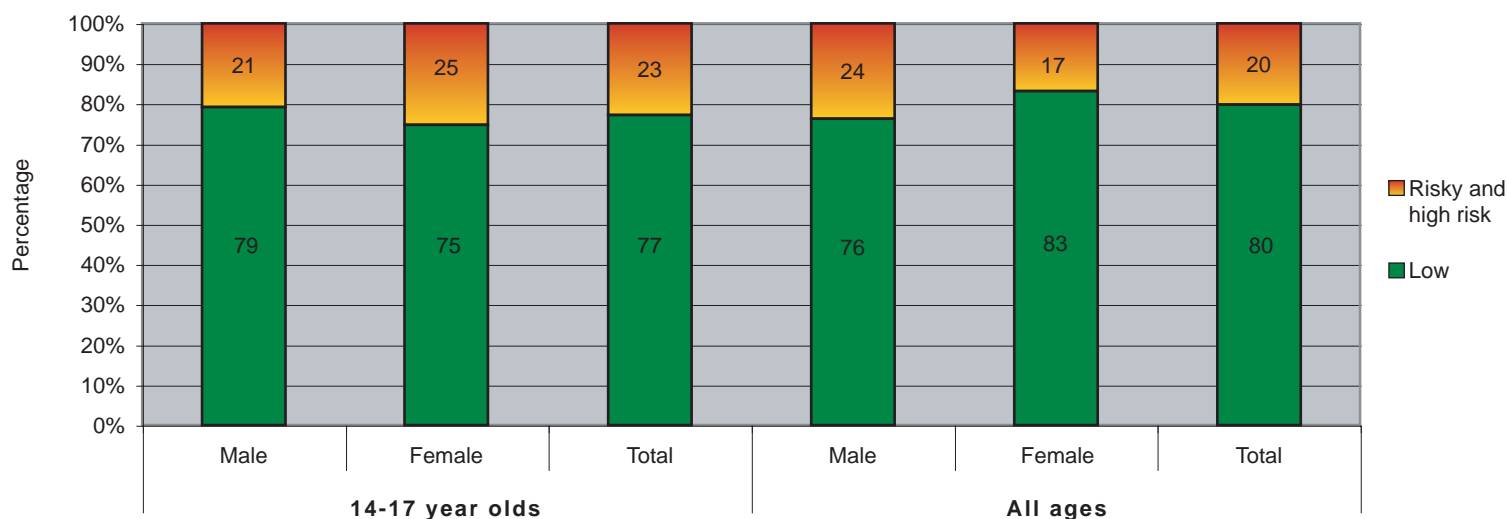


Figure 1: Proportion of the 14–17 year old population drinking at low and risky/high risk levels for *acute* harm, compared with all ages, males and females, 2001

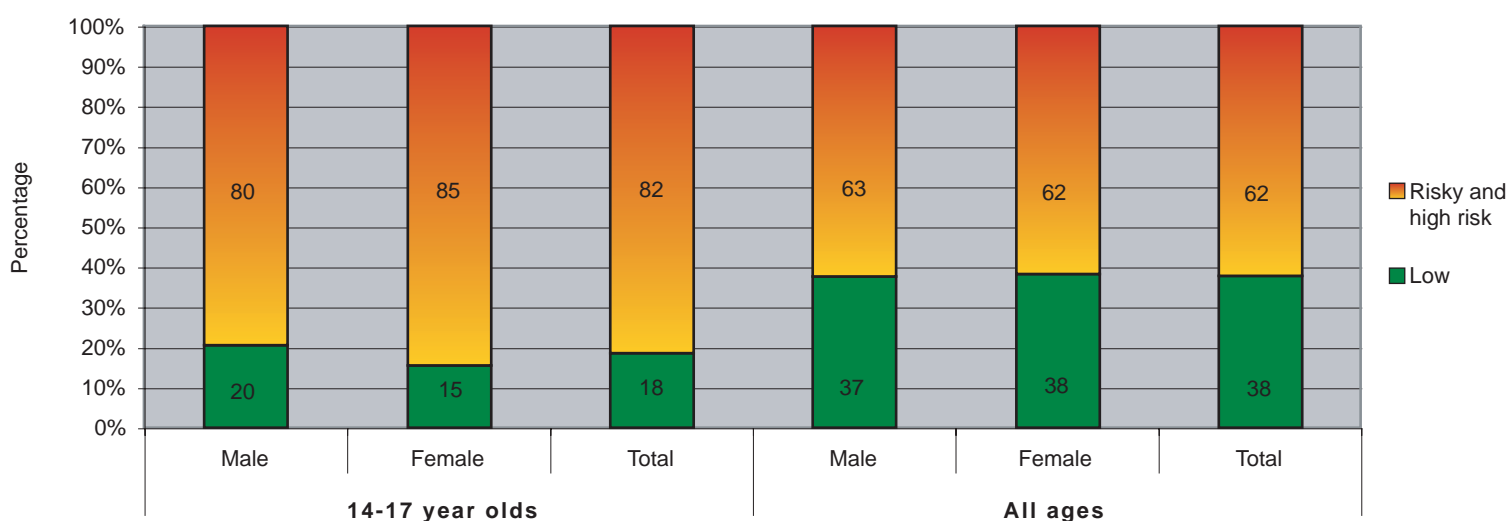


Figure 2: Proportion of alcohol drunk at low and risky/high risk levels for *acute* harm by 14–17 year olds compared with all ages, males and females, 2001

Male and female alcohol-attributable deaths

Nationally, male alcohol-attributable death rates among 14–17 year olds are about 3.4 times greater than for females in this age group. Both male and female death rates have declined markedly since 1990 – males by about 41% and females by 46%. It should be noted that small numbers of alcohol-attributable deaths preclude presentation of state-wide trends; however, state and territory trends in hospitalisations have been shown in Figure 5.

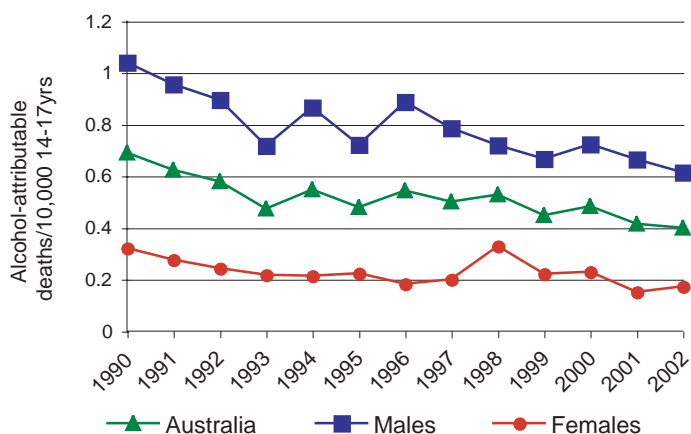


Figure 3: National trends in alcohol-attributable deaths for 14–17 year olds, males and females, 1990–2002

Metropolitan and non-metropolitan alcohol-attributable deaths

The rate of alcohol-attributable death among 14–17 year olds who live in non-metropolitan areas of Australia is about 1.7 times greater than for their city dwelling counterparts. Alcohol-attributable deaths for 14–17 year olds in both metropolitan and non-metropolitan areas have declined since 1990 – although there has been considerable variation among non-metropolitan deaths.

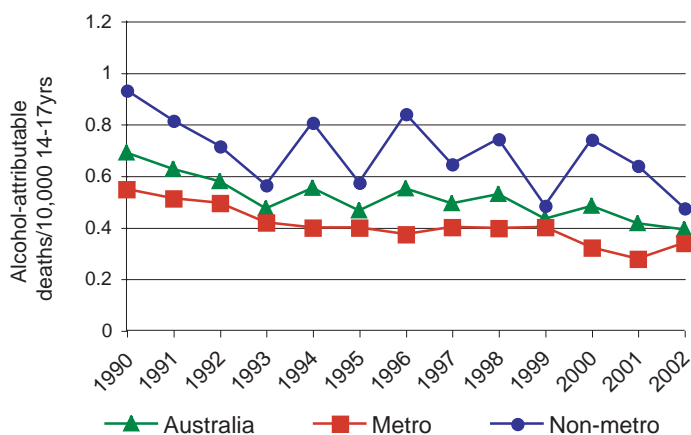


Figure 4: Trends in national, metro and non-metro alcohol-attributable deaths for 14–17 year olds, 1990–2002

Common causes of alcohol-attributable death and hospitalisation for 14–17 year olds

The most common cause of death due to risky/high risk drinking among Australian teenagers is non-pedestrian road injury (i.e. passenger or driver of a vehicle). Suicide is the second most common cause of death – particularly for females. The top 5 causes of injury account for over 90% of all deaths caused by drinking among

teenagers. Fall and assault injuries are particularly common causes of hospitalisation for males. For females, alcohol abuse is the most common cause of alcohol-attributable hospitalisation.

Table 1: Top 5 causes of alcohol-attributable death and hospitalisation (%), males and females

	Deaths (%)	Hospitalisations (%)
Males		
1	Road injury 56	Falls 26
2	Suicide 13	Assault 22
3	Pedestrian RI 11	Alcohol abuse 18
4	Assault 7	Road injury 16
5	Drowning 5	Pedestrian RI 3
Females		
1	Road injury 43	Alcohol abuse 37
2	Suicide 21	Suicide 18
3	Assault 12	Assault 11
4	Pedestrian RI 9	Falls 12
5	Drowning/Fire 7	Alcohol poisoning 6

Based on aggregate of all episodes from 1993–2002 and 1993/94–1999/00

Trends in alcohol-attributable hospitalisations, states and territories

Figure 5 (overleaf) shows trends in alcohol-attributable hospitalisations for male and female 14–17 year olds by jurisdiction. Several jurisdictions show increasing trends in hospitalisations. Further investigation is needed to explain these changes, but they may be in part due to problematic alcohol taxation and aggressive marketing by the liquor industry – particularly for spirit based ready-to-drink beverages. NAIP has been unable to obtain specific year-of-age data necessary for estimating under-aged hospitalisations for some states in some years and after 1999/00. This will be remedied in future bulletins.

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Figure 5: Alcohol-attributable hospitalisations for 14–17 year olds, males and females, 1993/94–1999/00

Legend: ■ males; ● females. Y Axis: Alcohol-attributable hospitalisation rate per 10,000 14–17 yr olds.

