Trends in estimated alcohol-attributable deaths and hospitalisations in Australia, 1996-2005

Summary Points

- Over the last 10 years (1996–2005), an estimated 32,696 Australians aged 15 years and older died from alcohol-attributable injury and disease caused by risky/high risk drinking.
- An estimated 813,072 Australians aged 15 years and older were hospitalised for alcohol-attributable injury and disease over the 10–year period 1995/96 to 2004/05.
- In 2005, estimated alcohol-attributable death rates in the NT, Tas, the ACT, SA and Qld exceeded the national average. The NT, Qld and NSW also exceeded the national average for alcohol-attributable hospitalisations.
- Male death rates showed generally declining trends in most states/territories, except the ACT and Tas which both indicated more upward trends since the late 1990s.
- Female death rates declined steadily in the larger states/territories. Downward trends were less consistent in the NT, Tas and the ACT.
- Rates of alcohol-attributable hospitalisations increased in all jurisdictions, especially in Vic, Tas, the NT and the ACT.
- In 2005, the most common cause of alcohol-attributable death was alcoholic liver cirrhosis. Other common causes of death included non-pedestrian road injury, haemorrhagic stroke, suicide and colon cancer.
- Alcohol dependence, falls, assaults and alcohol abuse were the most common causes of alcohol-attributable hospitalisation in 2004/05.
- The ACT was the only jurisdiction where overall alcohol-attributable deaths increased between 1996 and 2005, a larger increase than for non-alcohol-attributable deaths.
- Vic had the largest increase in alcohol-attributable hospitalisations in the country from 1995/96 to 2004/05. Relative to non-alcohol-attributable hospitalisations, increases in alcohol-attributable hospitalisations were larger in the ACT, NSW, Vic and Tas.
- In WA, the rate of increase in alcohol-attributable hospitalisations between 1995/96 and 2004/05 was substantially lower than the concurrent increase in non-alcohol-attributable hospitalisations.

Introduction

Alcohol was estimated to cost the Australian community some $15 billion in 2004/05 – about twice the social cost of illicit drug use (Collins & Lapsley, 2008). Alcohol is a major cause of death and injury for many Australians and especially “at-risk” populations such as young, elderly and Indigenous populations (see previous NAIP bulletins).

This bulletin shows trends in estimated population adjusted rates of deaths and hospitalisations attributable to risky/high risk alcohol consumption (based on NHMRC 2001 drinking guidelines) across all jurisdictions for a period of 10 years (1996-2005). The rates shown here are for adults (15+ years) and are based on the aetologic fraction method for quantifying alcohol-attributable mortality and morbidity (English et al. 1995; WHO 2000). As such, these rates are considered estimates of deaths and hospitalisations ‘caused’ as opposed to the more loosely defined estimates of ‘alcohol-related’ events. Rates have been directly age-standardised to the 2006 national population aged 15 years and older (ABS 2008).

This Bulletin also includes estimates of non-alcohol-attributable deaths and hospitalisations as a comparison measure (page 4). Non-alcohol-attributable conditions were those not currently considered to be attributable to either alcohol or tobacco use (changes in population tobacco use may influence underlying mortality/morbidity trends). Non-alcohol-attributable conditions include for example; pancreatic cancer, unspecified dementia, and cataracts but exclude tobacco-attributable conditions such as lung cancer, peptic ulcer, chronic bronchitis, peripheral vascular disease, renal pelvic cancer and bladder cancer.

Map 1: Estimated numbers and age standardised population rates (per 10,000) of alcohol-attributable deaths for adults (15+ years), 2005

Map 2: Estimated numbers and age standardised population rates (per 10,000) of alcohol-attributable hospitalisations for adults (15+ years), 2004/05
Figure 1: Alcohol-attributable deaths for adults (15+ years), males and females, 1996–2005

Legend: □ males; ● females. Y Axis: Alcohol-attributable death rate per 10,000 15+ yr olds.
Figure 2: Alcohol-attributable hospitalisations for adults (15+ years), males and females, 1995/96–2004/05
Legend: □ males; ○ females. Y Axis: Alcohol-attributable hospitalisation rate per 10,000 15+ yr olds.

* Rates for the NT (00/01-04/05), Qld (02/03-04/05) and the ACT (04/05) had to be estimated as parts of the data could not be obtained. The rate for the NT (98/99) was extrapolated as data was unavailable for that year.
Trends in alcohol-attributable deaths and hospitalisations

As shown in Figure 1 (overleaf) all jurisdictions, except Tas and the ACT, indicated declining trends in alcohol-attributable deaths for males. Deaths among females also declined but were less consistent in the NT, ACT and Tas. All states and territories showed increasing trends in alcohol-attributable hospitalisation rates between 1995/96 and 2004/05 but trends appeared markedly steeper for Vic, Tas, the NT and the ACT.

Causes of alcohol-attributable death and hospitalisation

In 2005, the most common cause of death due to risky/high risk drinking was alcoholic liver cirrhosis. The top 5 types of disease and injury account for about 54% of all deaths attributable to risky/high risk drinking in that year. The most common conditions leading to hospitalisation in 2004/05 were alcohol dependence, falls, assault and alcohol abuse and accounted for about 61% of all alcohol-attributable hospitalisations in that year. A breakdown of the most common conditions by sex is shown in Table 1 below.

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

<table>
<thead>
<tr>
<th></th>
<th>Deaths (%)</th>
<th>Hospitalisations (%)</th>
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<tbody>
<tr>
<td><strong>Males</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Alc. liver cirrhosis</td>
<td>25</td>
<td>Alc. dependence</td>
</tr>
<tr>
<td>2. Non-pedestrian RI</td>
<td>12</td>
<td>Falls</td>
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<tr>
<td>3. Suicide</td>
<td>7</td>
<td>Alcohol abuse</td>
</tr>
<tr>
<td>4. Haemorrhagic stroke</td>
<td>6</td>
<td>Non-pedestrian RI</td>
</tr>
<tr>
<td>5. Colon cancer</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td><strong>Females</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Alc. liver cirrhosis</td>
<td>22</td>
<td>Alc. dependence</td>
</tr>
<tr>
<td>2. Haemorrhagic stroke</td>
<td>9</td>
<td>Falls</td>
</tr>
<tr>
<td>3. Female breast cancer</td>
<td>7</td>
<td>Alcohol abuse</td>
</tr>
<tr>
<td>4. Colon cancer</td>
<td>7</td>
<td>Assault</td>
</tr>
<tr>
<td>5. Non-pedestrian RI</td>
<td>5</td>
<td>Suicide</td>
</tr>
</tbody>
</table>

Based on 2005 (deaths) and 2004/05 (hospitalisations) data

Change in alcohol- and non-alcohol-attributable rates

A comparison of 1996 and 2005 death rates (Fig 3) indicates that apparent declines in alcohol-attributable deaths for most states/territories exceeded concurrent changes in non-alcohol-attributable deaths (which have typically increased). The exception was the ACT which recorded a 12% increase in alcohol death rates compared with an 8% increase for non-alcohol-attributable death rates. Conversely, the percentage change in alcohol-attributable hospitalisation rates from 1995/96 to 2004/05 (Fig 4) appeared to exceed the percentage change in non-alcohol-attributable hospitalisation rates in all jurisdictions except Qld and WA. At more than double the national average, Vic recorded the largest increase in alcohol-attributable hospitalisation rates. The ACT, NSW, Vic and Tas all reported increases in alcohol-attributable hospitalisation rates that were at least twice as large as the concurrent increases in non-alcohol-attributable hospitalisation rates from 1995/96 to 2004/05.

References
