

Trends in estimated alcohol-attributable deaths in Australia, 1996-2010:

Alcoholic liver disease, liver cancer, and colorectal cancer

OVERVIEW

- Over 16,000 Australians died from alcoholic liver disease, alcohol-attributable liver cancer or colorectal cancer between 1996 and 2010. That's more than 1,000 people each year, on average.
- Male alcohol-attributable death rates were about twice that for females.
- Tasmania had the highest rates of alcohol-attributable deaths in Australia.

Alcoholic Liver Disease Trends (1996-2010)

- On average, 2 Australians died from alcoholic liver disease every day (10,728 in total).
- National alcoholic liver disease death rates remained relatively consistent over time.
- Male death rates were about twice that for females.
- The Northern Territory had the highest rates of alcoholic liver disease in Australia.

Liver Cancer Trends (1996-2010)

- 1,397 Australians died from liver cancer.
- Alcohol-attributable liver cancer death rates appeared to increase overall.

Colorectal Cancer Trends (1996-2010)

- 5 Australians died every week from colorectal cancers attributable to risky and high risk drinking (4,179 in total).
- Alcohol-attributable colorectal cancer death rates declined.
- Male alcohol-attributable death rates were about 1.3 times greater than for females.
- Tasmania had the highest rates of alcohol-attributable deaths in Australia.
- Annual rates of alcohol-attributable colorectal cancers appeared to be declining faster for Australian males than for females.

Trends in Alcoholic Liver Disease Deaths

Figure 1 shows either stable or slightly decreasing trends in deaths from alcoholic liver disease for both males and females across all jurisdictions. This is in keeping with recent trend analyses showing a decline in national death rates for alcoholic liver diseases but increasing rates of hospitalisation, a likely result of enhanced treatment and screening (Liang et al. 2011). Overall, male death rates due to alcoholic liver disease declined while female rates remained relatively stable.

Trends in Alcohol-Attributable Liver Cancer Deaths

As shown in Figure 2, the national trend demonstrated increases in alcohol-attributable liver cancer deaths for both males and females. Of particular note, after 2003 alcohol-attributable liver cancer deaths for males declined in the Northern Territory. In South Australia there was an apparent increase in alcohol-attributable liver cancer deaths for males starting from 2003, while female rates remained relatively stable.

Trends in Alcohol-Attributable Colorectal Cancer Deaths

Colorectal cancer death rates declined steadily across all states and territories (Figure 3) despite age-standardised incidence rates for the disease showing no change over the same time period (AIHW, 2012). This may be due in part to improvements in the detection, treatment and surgical outcomes for the disease (ABS, 2005). In some states and territories, female rates were also on par with or greater than male rates. Overall, rates of alcohol-attributable colorectal cancers for Australian males declined more rapidly than for females. The relative risk for rectal cancer at risky and high-risk levels of alcohol intake is in fact substantially higher for females (25.7) than for males (1.5) (Corrao, 1999). It is not certain what gives rise to this gender difference, although factors such as weight, metabolism and hormones may be likely contributors.

Background

In July 2012, the World Health Organization (WHO) identified alcohol consumption as a leading risk factor for developing non-communicable preventable diseases such as cancers and liver disease. Many of these conditions are long-term (or chronic) and arise from ongoing exposure to alcohol.

This bulletin shows trends in estimated population adjusted rates of deaths attributable to risky/high risk alcohol consumption (based on NHMRC 2001 drinking guidelines for males and females) for three chronic conditions: alcoholic liver disease (ICD-10 code: K70), liver cancer (C22) and colorectal cancer (C18-C20). The rates shown are crude rates of mortality per 100,000 adults (15+ years) and are based on ABS data. Alcoholic liver disease is a wholly alcohol attributable condition whereas liver and colorectal cancers are only partially attributable to alcohol. Estimated numbers of deaths from liver cancer and colorectal cancers due to risky/high risk alcohol consumption were calculated using the aetiologic fraction method for quantifying alcohol-attributable mortality (English et al. 1995; WHO 2000). The alcohol aetiologic fraction for partially attributable conditions varies over time, age and sex, and by state/territory depending on the estimated prevalence of alcohol consumption in the population. Death rate trends over a period of 15 years (1996-2005) have been estimated for all Australian jurisdictions and nationally.

References

See website (http://ndri.curtin.edu.au/local/docs/pdf/naip/naip013_references.pdf)

Citation

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Alcoholic Liver Disease Deaths



For state-by-state alcoholic liver disease death numbers, see: http://ndri.curtin.edu.au/local/docs/pdf/naip/naip013_fig1_data.pdf

Figure 1: Alcoholic liver disease deaths attributable to alcohol for adults (per 100,000, 15+yrs), by gender, 1996-2010 (Data source: Based on ABS data)

Alcohol-Attributable Liver Cancer Deaths



For state-by-state alcoholic-attributable liver cancer death numbers, see: http://ndri.curtin.edu.au/local/docs/pdf/naip/naip013_fig2_data.pdf

Figure 2: Liver cancer deaths attributable to alcohol for adults (per 100,000, 15+ yrs) by gender, 1996-2010 (Data source: Based on ABS data)

Alcohol-Attributable Colorectal Cancer Deaths



For state-by-state alcohol-attributable colorectal cancer death numbers, see: http://ndri.curtin.edu.au/local/docs/pdf/naip/naip013_fig3_data.pdf

Figure 3: Colorectal cancer deaths attributable to alcohol for adults (per 100,000, 15+ yrs), by gender, 1996-2010 (Data source: Based on ABS data)