

ROYAL AUSTRALASIAN COLLEGE OF SURGEONS



**PUBLIC CALL FOR EVIDENCE ON THE HEALTH EFFECTS OF ALCOHOL
CONSUMPTION**

Submission to the National Health and Medical Research Council

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INTRODUCTION

Established in 1927, the Royal Australasian College of Surgeons (RACS) is the leading advocate for surgical standards, professionalism and surgical education in Australia and New Zealand. RACS is a not-for-profit organisation representing more than 7,000 surgeons and 1,300 surgical trainees. Approximately 95 per cent of all surgeons practising in Australia and New Zealand are Fellows of the College (FRACS).

EXECUTIVE SUMMARY

The harmful use of alcohol is a significant contributor to the global burden of disease, and its misuse substantially contributes to social disruption, injury and death. While there is some evidence that small amounts of alcohol consumption may have health benefits, overwhelmingly the evidence points to the short and long-term health risks commensurate with increased consumption of alcohol.

Alcohol misuse is a causal factor in more than 200 diseases and injury conditions, including cirrhosis of the liver, inflammation of the gut and pancreas, heart and circulatory problems, sleep disorders, male impotency, and eye disease. Excessive alcohol consumption also raises the overall risk of cancer, including cancer of the mouth, throat, oesophagus, liver, breast and bowel.

In Australia about half the reported cases of interpersonal violence, domestic violence and sexual assault are related to excessive alcohol consumption. Alcohol-fuelled incidents are also a factor in up to two thirds of police callouts and around half of homicides.

Since the corporate responsibility of the alcohol industry is to increase profits for its shareholders, governments should exercise considerable caution to ensure that harm minimisation remains at the core of legislative objectives, and that public health is prioritised over financial benefit.

Government agencies monitor and report incidents of alcohol-related harm and some of the costs associated with alcohol abuse, however, agencies do not monitor or report the total costs to the community through alcohol related trauma and law enforcement, meaning we do not have a complete picture of the harm caused by alcohol in terms of its costs and effects on society.

RACS therefore supports mandatory collection of data on whether alcohol use is a factor in emergency department presentations, either by the patient or another individual, and mandatory collection of alcohol sales dates.

RACS endorses preventative measures as the best way to reduce alcohol-related harm (the H.O.T. issues of reduced trading hours and outlet density, and a volumetric tax on alcohol). We support coordinated efforts between governments, health professionals, health services and community organisations to reduce alcohol related harm and injury with evidence-based policy reform. We congratulate the National Health and Medical Research Council for being a leader in such reforms.

EVIDENCE OF THE HEALTH EFFECTS OF ALCOHOL CONSUMPTION

Thank you for the opportunity to provide citations of relevant published studies on the health risks and/or benefits of alcohol consumption. Below is a collated list of the publications which RACS considers relevant to this evaluation, many of which are listed in our position paper.

1. Alcohol in our lives: Curbing the harm - A Report on the review of the Regulatory Framework for the sale and Supply of Liquor [Internet]. Wellington: Law Commission; 2010 Apr. Report 114. Available from: <http://www.austlii.edu.au/nz/other/lawreform/NZLCR/2010/114.pdf>
2. Allan J, Clifford A, Ball P, Alston M, Meister P. 'You're less complete if you haven't got a can in your hand': Alcohol consumption and related harmful effects in rural Australia: The role and influence of cultural capital. *Alcohol and Alcoholism*. 2012 Jul 4; 47(5):624–9. DOI: 10.1093/alcalc/ags074
3. Annual Update of Key Results 2013/14: New Zealand Health Survey [Internet]. Wellington: Ministry of Health; 2014 Dec 11. Available from: <http://www.health.govt.nz/publication/annual-update-key-results-2013-14-new-zealand-health-survey>
4. Australian Government Department of Health. Technical Report No 3, Preventing alcohol-related harm in Australia: a window of opportunity (including addendum for October 2008 to June 2009) [Internet]. Canberra: Commonwealth of Australia; 2009. Available from: [http://www.health.gov.au/internet/preventativehealth/publishing.nsf/Content/09C94C0F1B9799F5CA2574DD0081E770/\\$File/alcohol-jul09.doc](http://www.health.gov.au/internet/preventativehealth/publishing.nsf/Content/09C94C0F1B9799F5CA2574DD0081E770/$File/alcohol-jul09.doc)
5. Australian Guidelines to Reduce Health Risks from Drinking Alcohol [Internet]. Canberra: National Health and Medical Research Council; 2009 Feb. Available from: https://www.nhmrc.gov.au/files_nhmrc/publications/attachments/ds10-alcohol.pdf
6. Babor, T, et al. Alcohol: No Ordinary Commodity. Second Edition [Internet]. New York: Oxford University Press; 2010. Available from: http://www.ndphs.org///documents/2253/Babor_alc%20no%20ordinary%20comm%20second%20edition.pdf
7. Brown K. Association between alcohol sports sponsorship and consumption: A systematic review. *Alcohol and Alcoholism*. 2016 Feb 23; 51(6):747–55. DOI: 10.1093/alcalc/aggw006
8. Chikritzhs T, Catalano P, Pascal R and Henrickson N. Predicting alcohol-related harms from licensed outlet density: a feasibility study [Internet]. Hobart: National Drug Law Enforcement Research Fund; 2008 Jan. Monograph Series No. 28. Available from: www.ndlerf.gov.au/pub/Monograph_28.pdf
9. Chong EW, Kreis AJ, Wong TY, Simpson JA, Guymer RH. Alcohol consumption and the risk of age-related Macular degeneration: A systematic review and Meta-Analysis. *American Journal of Ophthalmology*. 2008 Apr; 145(4):707–15.e2. DOI: 10.1016/j.ajo.2007.12.005
10. Claydon C, Webb K, Jefferson A, Garcia J. National Drug Strategy Household Survey detailed report 2013 [Internet]. Canberra: Australian Institute of Health and Welfare; 2014. Drug statistics series no. 28. Cat. no. PHE 183. Available from: <http://www.aihw.gov.au/WorkArea/DownloadAsset.aspx?id=60129549848>
11. Connor J, Casswell S. Alcohol-related harm to others in New Zealand: evidence of the burden and gaps in knowledge [Internet]. *NZMJ*. 2012 Aug 24; Vol 125 No 1360. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/22932651>
12. Dearden J, Payne J. Alcohol and homicide in Australia [Internet]. Canberra: Australian Institute of Criminology; 2009 Jul. Trends & issues in crime and criminal justice no. 372. Available from: http://www.aic.gov.au/publications/current_series/tandi/361-380/tandi372.aspx

13. Gao C, Ogeil, R, Lloyd B. Alcohol's burden of disease in Australia [Internet]. Canberra: Foundation for Alcohol Research and Education and VicHealth in collaboration with Turning Point; 2014. Available from: <http://fare.org.au/2014/07/alcohols-burden-of-disease/>
14. Global status report on alcohol and health [Internet]. Switzerland: World Health Organization; 2014 ed. Available from: http://apps.who.int/iris/bitstream/10665/112736/1/9789240692763_eng.pdf?ua=1
15. Global strategy to reduce harmful use of alcohol [Internet]. Switzerland: World Health Organization; 2010. Available from: http://www.who.int/substance_abuse/activities/gsrhuae/en/
16. Harper C. The neurotoxicity of alcohol. *Human & Experimental Toxicology*. 2007 Mar 1; 26(3):251–7. DOI: 10.1177/0960327107070499
17. Havard A, Shakeshaft AP, Conigrave KM. Prevalence and characteristics of patients with risky alcohol consumption presenting to emergency departments in rural Australia. *Emergency Medicine Australasia*. 2012 Feb 14; 24(3):266–76. DOI: 10.1111/j.1742-6723.2012.01537.x
18. Howard SJ, Gordon R, Jones SC. Australian alcohol policy 2001–2013 and implications for public health. *BMC Public Health*. 2014 Aug 15; 14(1). DOI: 10.1186/1471-2458-14-848
19. IARC Monographs on the Evaluation of Carcinogenic Risks to Humans Volume 96 Alcohol consumption and ethyl carbamate [Internet]. Lyon, France: International Agency for Research on Cancer Working Group; 2010. Available from: <http://monographs.iarc.fr/ENG/Monographs/vol96/mono96.pdf>
20. Jayasekara H, Ferris J, Matthews S, Livingston M, Lloyd B. Trends in alcohol-attributable morbidity and mortality for Victoria, Australia from 2000/01 to 2009/10. *Journal of Public Health*. 2013 Jun 30; 36(3):399–407. DOI: 10.1093/pubmed/fdt063
21. Jernigan D, Noel J, Landon J, Thornton N, Lobstein T. Alcohol marketing and youth alcohol consumption: A systematic review of longitudinal studies published since 2008. *Addiction*. 2016 Nov 8. DOI: 10.1111/add.13591
22. Jiang H, Livingston M, Room R. Alcohol consumption and fatal injuries in Australia before and after Major Traffic safety initiatives: A time series analysis. *Alcoholism: Clinical and Experimental Research*. 2015 Jan;39(1):175–83. DOI: 10.1111/acer.12609
23. Jiang H, Livingston M, Room R, Dietze P, Norstrom T, Kerr WC. Alcohol consumption and liver disease in Australia: A time series analysis of the period 1935-2006. *Alcohol and Alcoholism*. 2013 Sep 19;49(3):363–8. DOI: 10.1093/alcalc/agt143
24. Jones SC, Magee CA. Exposure to alcohol advertising and alcohol consumption among Australian adolescents [Internet]. *Alcohol and Alcoholism*, 46 (5), 630-637. Available from: <http://ro.uow.edu.au/cgi/viewcontent.cgi?article=2848&context=hbspapers>
25. Kavanagh AM, Kelly MT, Krnjacki L, Thornton L, Jolley D, Subramanian SV, Turrell G, Bentley RJ. Access to alcohol outlets and harmful alcohol consumption: a multi-level study in Melbourne, Australia. *Addiction*. 2011 Oct; 106(10):1772-9. DOI: 10.1111/j.1360-0443.2011.
26. Lai HMX, Sitharthan T, Huang QR. Exploration of the Comorbidity of alcohol use disorders and mental health disorders among inpatients presenting to all hospitals in New South Wales, Australia. *Substance Abuse*. 2012 Apr; 33(2):138–45. DOI: 10.1080/08897077.2011.634967
27. Laslett, AM, Catalano P, Chikritzhs Y, Dale C, Doran C, Ferris J, Jainullabudeen T, Livingston M, Matthews S, Mugavin J, Room R, Schlotterlein M, Wilkinson C. Surveying the range and

- magnitude of alcohol's harm to others [Internet]. *Addiction*. 2011 Aug 5;106(9):1603–11. DOI: 10.1111/j.1360-0443.2011.03445.x
28. Laslett AM, Ferris J, Dietze P, Room R. Social demography of alcohol-related harm to children in Australia. *Addiction*. 2012 Mar 21; 107(6):1082–9. DOI: 10.1111/j.1360-0443.2012.03789.x
 29. Livingston M. A longitudinal analysis of alcohol outlet density and assault. *Alcohol: Clinical and Experimental Research*. 2008; 32:1074–9. DOI: 10.1111/j.1530-0277.2008.00669.x
 30. Livingston M. Alcohol outlet density and assault: a spatial analysis. *Addiction*. 2008; 103:619–28. DOI: 10.1111/j.1360-0443.2008.02136.x
 31. Livingston M, Wilkinson C. Per-capita alcohol consumption and all-cause male mortality in Australia, 1911–2006. *Alcohol and Alcoholism*. 2012 Nov 21; 48(2):196–201. DOI: 10.1093/alcalc/ags123
 32. Lloyd B, Barratt MJ, Ferris J, Best D, Lubman DI. Factors influencing mortality among alcohol and drug treatment clients in Victoria, Australia: The role of demographic and substance use characteristics. *Australian & New Zealand Journal of Psychiatry*. 2013 May 29; 47(9):859–67. DOI: 10.1177/0004867413491155
 33. Magnus A, Cadilhac D, Sheppard L, Cumming T, Pearce D, Carter R. The economic gains of achieving reduced alcohol consumption targets for Australia. *American Journal of Public Health*. 2012 Jul; 102(7):1313–9. DOI: 10.2105/ajph.2011.300453
 34. Manning M, Smith C, Mazerolle P. Trends & issues in crime and criminal justice series: The societal costs of alcohol misuse in Australia No. 454 [Internet]. Canberra: Australian Institute of Criminology; 2013 Apr. Available from: <http://www.aic.gov.au/publications/current%20series/tandi/441-460/tandi454.html>
 35. Miller PG, Coomber K, Staiger P, Zinkiewicz L, Toumbourou JW. Review of rural and regional alcohol research in Australia. *Australian Journal of Rural Health*. 2010 Jun 20; 18(3):110–7. DOI: 10.1111/j.1440-1584.2010.01133.x
 36. Ministerial Forum on Alcohol Advertising and Sponsorship: Recommendations on alcohol advertising and sponsorship [Internet]. Wellington: Ministry of Health; 2014 Dec 17. Available at: <http://www.health.govt.nz/publication/ministerial-forum-alcohol-advertising>
 37. Morgan A, McAtamney A. Key issues in alcohol-related violence. Research in practice no. 4 [Internet]. Canberra: Australian Institute of Criminology; 2009 Dec. Available from: <http://www.aic.gov.au/publications/current%20series/rip/1-10/04.html>
 38. Ogeil RP, Room R, Matthews S, Lloyd B. Alcohol and burden of disease in Australia: The challenge in assessing consumption. *Australian and New Zealand Journal of Public Health*. 2015 Feb 25; 39(2):121–3. DOI: 10.1111/1753-6405.12308
 39. O'Leary CM, Bower C. Guidelines for pregnancy: What's an acceptable risk, and how is the evidence (finally) shaping up? *Drug and Alcohol Review*. 2011 Sep 29; 31(2):170–83. DOI: 10.1111/j.1465-3362.2011.00331.x
 40. O'Rourke S, Ferris J, Devaney M. Beyond pre-loading: Understanding the associations between pre-, side- and back-loading drinking behavior and risky drinking. *Addictive Behaviors*. 2016; 53 (2016) 146–154. DOI: 10.1016/j.addbeh.2015.07.008
 41. Pandeya N, Wilson LF, Webb PM, Neale RE, Bain CJ, Whiteman DC. Cancers in Australia in 2010 attributable to the consumption of alcohol. *Australian and New Zealand Journal of Public Health*. 2015 Oct; 39(5):408–13. DOI: 10.1111/1753-6405.12456

42. Pilgrim JL, Gerostamoulos D, Drummer OH. 'King hit' fatalities in Australia, 2000–2012: The role of alcohol and other drugs. *Drug and Alcohol Dependence*. 2014 Feb; 135:119–32. DOI: 10.1016/j.drugalcdep.2013.11.019
43. Prevalence of fetal alcohol syndrome (FAS) in a population-based sample of children living in remote Australia: The Lililwan Project. *Journal of Paediatrics and Child Health*. 2015 May; 51:4–5. DOI: 10.1111/jpc.12913_12
44. Rehm J, Mathers C, Popova S, Thavorncharoensap M, Teerawattananon Y, Patra J. Global burden of disease and injury and economic cost attributable to alcohol use and alcohol-use disorders [Internet]. *The Lancet*. 2009 Jun; 373(9682):2223–33. Available from: [http://www.thelancet.com/journals/lancet/article/PIIS0140-6736\(09\)60746-7/abstract](http://www.thelancet.com/journals/lancet/article/PIIS0140-6736(09)60746-7/abstract) DOI: [http://dx.doi.org/10.1016/S0140-6736\(09\)60746-7](http://dx.doi.org/10.1016/S0140-6736(09)60746-7)
45. Roozen S, Peters G-JY, Kok G, Townend D, Nijhuis J, Curfs L. Worldwide prevalence of fetal alcohol spectrum disorders: A systematic literature review including Meta-Analysis. *Alcoholism: Clinical and Experimental Research*. 2016 Jan; 40(1):18–32. DOI: 10.1111/acer.12939
46. Slack A, Nana G, Webster M, Stokes F, Wu J. Costs of Harmful Alcohol and Other Drug Use. Final Report [Internet]. Wellington: Business and Economic Research Limited; 2009. Report to Ministry of Health and Accident Compensation Commission. Available from: http://www.springhilltrust.co.nz/assets/files/BERL-200907-Costs_of_Harmful_Alcohol.pdf
47. Sutherland GT, Sheedy D, Kril JJ. Using autopsy brain tissue to study alcohol-related brain damage in the Genomic age. *Alcoholism: Clinical and Experimental Research*. 2013 Aug 27; 38(1):1–8. DOI: 10.1111/acer.12243
48. White J, Lynn R, Ong S, Whittington P. The Effectiveness of Alcohol Pricing Policies: Reducing harmful alcohol consumption and alcohol-related harm [Internet]. Wellington: Ministry of Justice; 2014. Available from: <https://www.justice.govt.nz/assets/Documents/Publications/effectiveness-of-alcohol-pricing-policies.pdf>