



Proposed Australian Guidelines to Reduce Health Risks from Drinking Alcohol

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This submission to the National Health and Medical Research Council (NHMRC) Proposed Australian Guidelines to Reduce Health Risks from Drinking Alcohol, mirrors, as close as practicable, the online portal submission as required by the NHMRC.

MAGICapp

1. Please indicate which format you read the guideline in.

- MAGICapp
- PDF report
- Both formats
- No comment

[Response: PDF report]

2. The draft guidelines are presented in a new IT platform, MAGICapp. Please indicate how strongly you agree with the following statement: *The draft Australian Guidelines to Reduce Health Risks from Drinking Alcohol are easy to navigate in MAGICapp.*

- Strongly agree
- Agree
- Neither agree nor disagree
- Disagree
- Strongly disagree
- No comment

[Response: No comment]

Plain English summary

3. Please indicate how strongly you agree with the following statement: *The Plain English summary is clear, simple and easy to understand.*

- Strongly agree
- Agree
- Neither agree nor disagree
- Disagree**
- Strongly disagree
- No comment

[Response: Disagree]

4. Do you have any comments on how the Plain English summary could be improved?

Efforts to address alcohol misuse and promote sensible consumption guidelines must be backed by peer-reviewed, evidence-based research. I do not believe that the 'guidelines are based on a thorough evaluation of the evidence'.

I submit, as a member of The Brewers Association, that The Brewers Association supports evidenced-based guidelines for the moderation of alcohol consumption. We have a long commitment to supporting documented measures to promote responsible drinking in the marketing and sale of our products, and through our significant funding of DrinkWise. Supported with seed-funding from the Federal Government, DrinkWise was established in 2005 by participants in the alcohol industry with the purpose of pursuing an ongoing programme of targeted campaigns, education initiatives and resources to help bring about a healthier and safer drinking culture in Australia.

The draft Guideline 1 is purportedly based on the results of modelling carried out by the Alcohol Research Group of the University of Sheffield (SARG). In the Draft Guidelines this is listed in the References as 'The University of Sheffield: Mortality and Morbidity risks from alcohol consumption in Australia: Analyses using an Australian adaptation of the Sheffield Alcohol Policy Model (v2.7) to inform the development of new alcohol guidelines. Sheffield: The University of Sheffield; 2019'. I understand that this work was derived from earlier work undertaken in the UK for pricing policies for alcohol, with implications for assessing the effect of alcohol on the morbidity and mortality of the community. For example, the most widely quoted application has been to examine the possible effects of "minimum unit prices" for alcohol, a policy change that the SARG has become closely associated with.

Documentation for the Sheffield Model (any version) appears to not be readily available. It is unlikely that the Model (v2.7) has been independently reviewed, and it is not clear that it is capable of being independently reviewed. From a scientific perspective, this raises great concern as an unverifiable source lacking in independent evaluation for its validity or appropriateness for the drinking guidelines.

I consider that this is a poor process for what should be an evidence-based document and is therefore should be of great concern for the academics on the NHMRC Committee. I strongly urge the NHMRC to remedy this situation, either by making the model openly available for independent assessment, or by refraining from using it.



Introduction

5. Do you have any comments on how the Introduction could be improved?

The NHMRC has the stated objective of “*assist[ing] the general public in understanding the risks of alcohol-related harm and to support informed decision-making based on this advice.*” Efforts to address alcohol misuse and articulate consumption guidelines must be backed by sound, evidence-based and peer-reviewed published research. This is not supported by the modelling contained within the report. Figures 5.5.1. and 5.5.2. on pages 30 and 31 of the Draft Guidelines, presumably derived from the work of SARG, clearly show that **excessive** consumption of alcohol is linked with increased risk, however the effects are less clear at lower and moderate levels of consumption.

I reiterate that the NHMRC should focus on the stated aim of the guidelines: “*assist[ing] the general public in understanding the risks of alcohol-related harm and to support informed decision-making*” through evidence-based modelling and advice.

To avoid undermining the stated purpose of the guidelines this sentence should reflect the vast evidence base available in this area of research, and hence should be revised to read “**Excessive** alcohol consumption is linked with increased risk of injury, chronic disease and premature death.”

Background

6. Do you have any comments on how the Background could be improved?

The Draft Guidelines are flawed by the adopted premises and interpretations. The Draft Guidelines are ‘Australian Guidelines to Reduce Health Risks from Drinking Alcohol’ whereas the former guidelines in 2001 were ‘Australia Alcohol Guidelines: Health Risks and Benefits’. Brewers Association members recognise that the harmful use of alcohol is a societal issue that the NHMRC seeks to address through the provision of risk-minimising alcohol consumption guidelines. We endorse and support the desire to modify risky patterns of consumption. According to ABS and AIHW statistics, the work by health advocates, communities, DrinkWise and the alcohol industry over the last decade has been successful in contributing to and reflecting long term attitudinal change with respect to Australia’s drinking culture. In Australia we have been successful in reducing our annual consumption of over 13 litres per capita in the 1970s to 9.5 litres per capita. Significant gains have been made in improving Australia’s drinking culture, including reductions in underage drinking, an increase in the age of initiation, and reductions in harmful drinking patterns among young adults and the broader population.

While there is further work to be done in ensuring that harm mitigation efforts are targeting vulnerable groups, I support the Brewers Association in urging the NHMRC to contextualise the guidelines in light of record low rates of teenage drinking, declining levels of harmful consumption and per capita consumption continuing a 50-year trend of moderation.



Understanding risk

7. Please indicate how strongly you agree with the following statement. *The Understanding risk section is clear, simple and easy to understand.*

- Strongly agree
- Agree
- Neither agree nor disagree
- Disagree
- Strongly disagree**
- No comment

[Response: Strongly disagree]

8. Do you have any comments on how the Understanding Risk section could be improved?

The problems with the Draft Guidelines are less to do with style of presentation or ease of reading, but flawed premises, interpretations and approach. The Draft Guidelines are 'Australian Guidelines to Reduce Health Risks from Drinking Alcohol' whereas the former guidelines in 2001 were 'Australia Alcohol Guidelines: Health Risks and Benefits'.

I believe that the aim of the Guidelines should be 'to provide the consumer with information on the risks and benefits of alcohol consumption so that one is able to enjoy alcohol without increasing their relative risk of total mortality'. The stated aim under Guideline One results in a flawed approach, as it is only directed to reducing the risk of harm from alcohol from individual causes. This leads to the faulty conclusion that 'The less you choose to drink, the lower your risk of alcohol-related harm'. A corollary is that the less time you spend outside the lower your chance of getting skin cancer, or the less you drive your car, the lower your chance of having an accident. We should instead ensure the importance of 'making an informed choice' and ensuring that the guidelines 'provide a balanced and evidence-based approach to both the risks and benefits of alcohol consumption and health.'

I believe that the NHMRC Guidelines in 2001 were based on a thorough review of the evidence obtained from epidemiological studies. The advice of 4 standard drinks for men (with over 6 being considered hazardous), and 2 standard drinks for women (with over 4 being considered hazardous), was easily understood by the drinking public of Australia. The Guidelines included a suggestion of two alcohol free days which was not backed by any evidence but was promoted for the arguable purpose of moderation. Nonetheless this part of the Guidelines was not backed by scientific data, and my concern is that the subsequent reviews by the NHMRC have elevated this disregard for peer-reviewed evidence to an artform. On this particular issue of alcohol-free days, I refer to case-control study undertaken by Rodney Jackson et al (see citation 1) in 1991 of heart attack victims in men and women in Auckland who drank 15-35 drinks per week and who had a reduction of about 40% for fatal heart disease compared to lifelong abstainers. In this study there was a higher incidence of heart attack in those who had not been drinking in the preceding 24 hours.

An immediate, "acute" effect in alcohol preventing a heart attack was claimed, possibly mediated by effects on blood coagulation. Regular drinkers who consumed one or two drinks in the preceding 24 hours were less likely to suffer a major coronary event than regular drinkers who had not imbibed during that period, with women having only about half the risk.

In general, the deleterious impacts of alcohol consumption arise at higher levels of consumption (perhaps except for certain malignancies such as breast cancer). I recall that risk was



explained better in the 2001 Guidelines in terms of differentiating between relative risk and absolute risk. For instance, from the epidemiological studies, breast cancer risk appears to be increased in a linear fashion with alcohol consumption, but the absolute risk is small compared with the risk of sustaining cardiovascular disease. The risk for public health is that these Draft Guidelines emphasise a focus on harm only and seek to downplay or ignore the benefits of alcohol in moderation.

The graphs in 5.5.1 and 5.5.2 are unreferenced but are presumably from the Sheffield Alcohol Policy Model (v2.7). Furthermore, in the preceding section 5.4 ('Where has the evidence changed') the writers quote University of Sydney 2018 which is not a peer-reviewed published article. It appears to be simply an 'Evidence Evaluation Report', and I feel that this again should be a source of concern to the academics on the working committee for the NHMRC. It looks like they have delegated their investigation of the accumulated data to the University of Sydney.

In the next sentence the Committee says that the 'peak protection at around ½-1 standard drink per day'. The NHMRC seems to rely for this statement on their reference on Page 22 from Di Castelnuovo et al, 2006 (see citation 2). This paper also shows that the benefit from drinking alcohol extends out to 2.5 drinks/day for women and 4 for men. This fundamentally, in my mind, highlights the difference in thinking between the Alcohol Working Committee of the NHMRC and how many epidemiologists would look at the data. In other words, if your relative risk of mortality is the same as a non-drinker at 2.5 drinks/day (for women) and 4 (for men), this should represent a reasonable basis for informed decision-making for consumers and those advising consumers. Data examined in this and other meta-analyses from longitudinal and cohort studies, have informed drinking guidelines in other jurisdictions, with different outcomes as shown in the 2001 NHMRC Guidelines, and the Guidelines as shown on Page 17, namely the US (2012 recommendation) and New Zealand (2015 recommendation).

Guideline One: Reducing the risk of alcohol related harm over a lifetime

9. Do you have any comments on how the evidence has been used to develop the recommendation for Guideline One?

In the Draft Guideline One, I contend that the evidence, as submitted, is inadequate to support the statement that *"for both men and women, the lifetime risk of dying from alcohol-related disease or injury remains below a level of 1 in 100 if no more than ten standard drinks are consumed each week and no more than 4 standard drinks are consumed on any one day"*. If the Sheffield Model (v2.7) could be shown to be an accurate reflection of the conclusions from the meta-analyses of the longitudinal studies, such as those of Di Castelnuovo et al (see citation 2) and Ronskley et al (see citation 3), who is to say that the 1 in 100 threshold is appropriate? Many people would accept a higher risk profile than this, and therefore I think that it is better that the consumer is provided with a more informed and credible approach such as was developed in the 2001 NHMRC Guidelines which were based on evidence in peer-reviewed journal articles and not from an assessment done by the University of Sydney.

This approach of minimising '*lifetime risk of dying from alcohol-related disease*' is confusing, as it is adopting a focus on avoiding harm, such as avoiding an increase risk of breast cancer. This approach ignores the positive health effects in a much larger group of drinkers who will benefit from alcohol consumption (highlighting the distinction between absolute risk and the relative risk). Assuming an increase in relative risk for breast cancer with alcohol consumption, the balance to be weighed is that the absolute risk is small, compared to the absolute benefit anticipated from protection against cardiovascular disease. Therefore, a focus on all-cause mortality data is so important to this debate, and it is what I believe that most Australians would like to know. It is apparent that many people will be concerned about a cited increase in relative risk of an adverse condition, but it is arguable that they don't want to focus on reducing the risk

of a specific condition if their overall risk of mortality increases. It is equivalent of the NHMRC suggesting that to avoid the risk of skin cancer one should stay indoors, while ignoring the impact of not having adequate levels of Vitamin D.

I highlight the statement in the Draft Guidelines on Page 19, namely justifying their conclusion that the guideline should be the same for men and women, “Men, however, tend towards higher levels of risk-taking behaviours than women, and, as a result, they have a greater overall risk of immediate harm from drinking (e.g. road crashes, falls, self-harm).” This is inconsistent with most epidemiological studies on all-cause mortality and alcohol consumption (such as Di Castelnuovo et al, see citation 2), and I understand is also inconsistent with the Table 1 in the Sheffield Alcohol Policy Model (v2.7), which finds different levels of consumption for men and women.

The apparent objective of the Guidelines is to reduce risk of specific adverse conditions as much as possible, by encouraging consumers to drink extremely modestly. However, problems from harm arise from higher levels of alcohol consumption. The risk of pushing people to even lower levels of consumption than has already been achieved in recent years is that modest and moderate drinkers may not benefit from the protection afforded by daily drinking. I submit that this could reasonably represent an adverse public health consequence of the Draft Guidelines.

I further submit that there was a lack of reasonable evidence to change the NHMRC Guidelines in 2009. As highlighted in a paper by Prof Peter Thompson of University of Western Australia in the MJA in 2013 (see citation 4), undue reliance was paid to the meta-analysis by Fillmore K, Kerr W, Stockwell T, et al, *Addict Res Theory* 2006, with the additional paper of Fillmore KM, Stockwell, Chikritzhs T, et al, *Ann Epidemiol* 2007. This meta-analysis presented a reinterpretation of previous studies which focused on the so-called “sick quitter” hypothesis first developed in 1988 by Shaper et al. Thompson highlights the importance of subsequent meta-analysis in dispelling this “sick quitter” myth.

I turn to the important issue of individual under-reporting of alcohol consumption. I think that we can be confident that under-reporting is a reality. One study in the US compared self-reporting with the national consumption (in the US) and concluded that consumers report about half of their intake. For instance, in Australia, the ABS concludes (for 2017-18) that we are consuming 9.51 litres per capita for all over the age of 15, which is the equivalent of 951 standard drinks per year for the population who actually drink (around 80%). This is the equivalent of 3.7 standard drinks per day for 5 days per week, the maximum consumption frequency recommended in the 2001 guidelines. Given that this is the actual level of consumption, the NHMRC is risking pushing drinkers towards more modest levels of consumption which may result in a higher level of all-cause mortality, especially if consumption is not spread through the week. Because the longitudinal and cohort studies are based on self-reporting, it is likely that the nadir of the 'U-shaped' curve is further to the right than is reported in the studies. For completion, we can all agree that we will never be able to achieve randomised prospective studies of the effects of alcohol consumption.

These Draft Guidelines are even more complicated than the revised Guidelines of 2009 which would still be considered by many Australians consumers as being intuitively unrealistic (and curious for the equality recommendation for gender). The Draft Guidelines quote that *‘Every drink above this level increases the lifetime risk of alcohol related disease and injury. This includes the risk of dying from alcohol-related disease or injury.’* The risk that comes with oversimplification is a loss of credibility. The discrepancy between the differing consumption risks for men and women outlined in the SARG modelling report, and the advice provided in the evidence-backed 2001 Guidelines, is such that the blanket recommendation offered by the Draft Guidelines runs the risk of raising serious doubts about the credibility of the Guidelines.



10. Is there any evidence relevant for this guideline that has been missed? If so, please provide the citation(s).

I consider it in the interests of Australians to have transparently developed, scientifically validated, consistent and meaningful alcohol consumption guidelines. This is exemplified in a paper published in the Medical Journal of Australia by Prof Peter Thompson titled “J-curve revisited: cardiovascular benefits of moderate alcohol use cannot be dismissed” (see citation 4). Thompson cites the paper published in 2011 in the British Medical Journal by Ronksley et al (see citation 3), stating that it was the ‘most complete meta-analysis to date. It found no differences in the extent of relative risk reduction in cardiovascular disease mortality when classification adjustments were made to address the sick quitter misclassification hypothesis. Of the 4235 studies considered and 84 studies involving over one million people included in the final analysis, the pooled estimates showed a lower risk of all cause mortality for drinkers compared with non-drinkers (relative risk, 0.87; 95% CI, 0.83–0.92).’ As stated above, Thompson contends, as I do, that there was no need to change the excellent NHMRC Guidelines presented in 2001 which should continue to inform the consumers of Australia in terms of moderation, and which can reasonably be expected to achieve a relative risk of mortality as least as good, if not better, than that non-drinkers.

I provide the citations of the papers which I have quoted in my contributory statements above.

1. Jackson, R., Scragg, R., Beaglehole, R., British Medical Journal 1991, 303, 211-216.
2. Di Castelnuovo A, Costanzo S, Barnardo V, et al. Alcohol dosing and total mortality in men and women: an updated meta-analysis of 34 prospective studies. Arch Intern Med 2006; 166; 2437-2445.
3. Ronksley PE, Brien SE, Turnetr BJ, et al. Association of alcohol consumption with selected cardiovascular disease outcomes: a systemic review and meta-analysis. BMJ 2011; 342:d671
4. Thompson P. J-curve revisited: cardiovascular benefits of moderate alcohol use cannot be dismissed. Medical Journal of Australia, 2013; 198(8)

11. Do you have any editorial or readability comments on the sections that make up Guideline One?

No comment

Guideline Two: Children and young people under 18 years of age

12. Do you have any comments on how the evidence has been used to develop the recommendation for Guideline Two?

No comment

13. Is there any evidence relevant for this guideline that has been missed? If so, please provide the citation(s).

No comment



14. Do you have any editorial or readability comments on the sections that make up Guideline Two?

No comment

Guideline Three: Pregnancy and breastfeeding

15. Do you have any comments on how the evidence has been used to develop the recommendation for Guideline Three?

No comment

16. Is there any evidence relevant for this guideline that has been missed? If so, please provide the citation(s).

No comment

17. Do you have any editorial or readability comments on the sections that make up Guideline Three?

No comment

Appendix 1: Drinking frequency

18. Do you have any comments on how the Drinking frequency section could be improved?

No comment

Appendix 2: Administrative report

19. Do you have any comments on how the Administrative report could be improved?

No comment

Appendix 3: Glossary

20. Are there any additional terms that should be added to the glossary?

No comment

Appendix 4: Abbreviations and acronyms

21. Are there any additional abbreviations or acronyms that should be added to this section?

No comment

Appendix 5: Australian standard drinks

22. Do you have any comments on how the Australian standard drinks section could be improved?

No comment

