

POLICY REVIEW

National Drinking Guidelines

KEY POINTS

- Drinking guidelines are intended to provide information to the general public on the relationship between alcohol consumption and health outcomes, as well as to encourage informed choices and reduce risk of harm.
- A single set of internationally applicable guidelines on alcohol consumption does not exist. Responsibility for issuing recommendations rests with national governments.
- There is wide variation across national alcohol guidelines, but most quantitative guidelines offer recommendations around daily consumption, and set higher limits for men than for women, which reflects the scientific evidence on health outcomes.
- Most countries base their guidelines on the balance of scientific evidence on potential health harms and benefits
 associated with alcohol consumption; however, a few have chosen a "low-risk" approach that emphasizes risk of
 individual illnesses.
- While drinking guidelines are aimed at the general healthy adult population, some also address those individuals for whom risk may be heightened, or situations and contexts in which the likelihood of harmful outcomes is increased.
- Drinking guidelines are an important part of multi-component government strategies aimed at reducing harmful drinking, and are most useful when accessible and realistic, provide guidance to which consumers can relate, and are relevant to prevailing drinking patterns and culture.

Harmful drinking is prominently included in current efforts to address global health.

Goal 3 of the Sustainable Development Goals 2015 - 2030 (SDGs) addresses good health and well-being, and includes as one of its targets to "strengthen the prevention and treatment of substance abuse, including ... the harmful use of alcohol" [1]

The WHO Global Action Plan for the Prevention and Control of Noncommunicable Diseases calls for at least a 10% relative reduction in the harmful use of alcohol, as appropriate, within the national context. This approach is in keeping with the WHO Global Strategy to Reduce the Harmful Use of Alcohol, which offers a comprehensive roadmap to assist in reaching this target.

INTRODUCTION

Health promotion efforts by governments aim to encourage lifestyles and choices that support the health and wellbeing of citizens. Such efforts include providing recommendations about diet and exercise, offering advice on how to avoid diseases, and are part of a comprehensive multi-component effort to support the wellbeing of populations.

Recommendations around alcohol consumption are no different. Drinking guidelines are issued by government bodies in countries around the world to provide information on the relationship between drinking and potential outcomes, and are intended to support individual choices around drinking in a way that minimizes the likelihood of harm. Guidelines are a tool that can help modify risky consumption patterns and reduce harmful drinking.

This document offers an overview of national drinking guidelines where they exist. It highlights the various elements included, and examines some of the similarities and differences in messages and how they are communicated.

NATIONAL DRINKING GUIDELINES

The responsibility for issuing and communicating advice on alcohol consumption rests with national governments.

- To date, no internationally applicable recommendation or guideline on alcohol consumption has been issued by the World Health Organization (WHO) or other international body.
- While WHO has issued clinical guidelines and recommendations that relate to alcohol use disorders, for example, these
 are typically tools for use in primary care¹ and do not apply to the general population.

How drinking guidelines are positioned varies across countries and often reflects prevailing views on the role of alcohol in society, the issuing government body, and broader health promotion efforts.

- Recommendations around drinking may be part of broader nutritional or dietary guidelines, as is the case in the United States and the Netherlands.
- In other countries, such as the United Kingdom, guidelines are designed to be stand-alone recommendations that focus
 exclusively on alcohol.
- Countries like Switzerland, on the other hand, address alcohol consumption under the umbrella of a national drugs or addiction strategy.
- In a few countries, such as Namibia and Mauritius, drinking guidelines are part of the national strategy to address noncommunicable diseases.

Currently, 41 countries around the world issue drinking guidelines that offer quantitative recommendations on drinking levels (Figure 1).

- These recommendations are offered in terms of units or drinks with advice to keep drinking below these thresholds.
- To assist in relating these units to actual levels of consumption and their relationship with health outcomes, guidelines are accompanied by standard units that are defined in terms of equivalent grams of ethanol.
- There is also considerable variation in standard drink definitions, which can be as low as 8 and as high as 20 grams of ethanol, although most countries that define standard units set them at 10 grams of ethanol.
- Further information on standard drinks or units across countries can be found in IARD's table of drinking guidelines for the general population.

Most drinking guidelines provide recommendations on daily levels of consumption, which are easier to monitor and more relevant to people's drinking behavior.

• Currently, 35 countries with quantitative limits (85%) offer daily recommendations.

¹ For example: Screening and brief intervention for alcohol problems in primary health care: the Alcohol Use Disorders Identification Test (AUDIT Accessed online at <u>www.who.int/substance_abuse/activities/sbi.en/</u>

- A few (7, or 18%) supplement daily with weekly recommendations (Canada, France, New Zealand, Poland, Serbia, Slovenia and Spain).
- Only 6 countries (Austria, Czech Republic, Denmark, Ireland, Malta, and the United Kingdom) currently confine their recommendations to weekly drinking limits only.

Further information is provided in Figures 2 and 3 and IARD's online table Drinking guidelines for the general population.

Instead of quantitative limits, some countries offer more general or "directional" advice that broadly reminds consumers about avoiding particular drinking patterns and contexts or circumstances in which risk is increased. These guidelines stop short of recommending quantitative drinking limits.

• The following example from Norway illustrates such a guideline.

"It is difficult to know when alcohol consumption for the individual is too high. And men and women react differently to alcohol, partly because of different body mass and physiology. It also matters how we drink. Binge-drinking, at least five drinks on the same occasion, increases both the risk of accidents and health hazards" ((Av-og-til), unofficial translation).

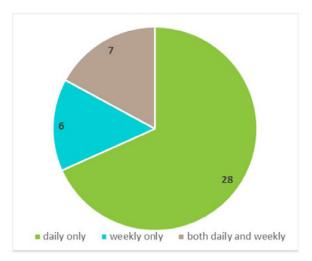


Figure 1. Number of countries with offering quantitative daily and weekly recommdenations (N=41 countries).

Whether daily or weekly, quantitative drinking guidelines span a wide range of recommended levels of drinking, which differ for men and women.

- Depending on country of origin, daily recommendations can range from 8 to 40.5 grams of ethanol for men (Figure 2), but most countries cluster around the ranges of 10 to 20 grams per day (44%) or 21 to 30 grams per day (36%) (Table 1).
- For women, the range is narrower and between 8 and 27 grams of ethanol per day (Figure 2), although the majority of guidelines (86%) confine limits for women to the range of 10 to 20 grams of ethanol per day (Table 1).
- Where weekly recommendations are provided (including in those countries that offer both daily and weekly figures), consumption levels range from 112 to 280 grams per week for men, and from 112 to 170 grams per week for women (Figure 3).

Consumption level (g ethanol per day)	Men		Women	
	No. of countries	%	No. of countries	%
< 10	1	3%	3	8%
10 to 20	16	44%	31	86%
21 to 30	13	36%	1	3%
31 to 40	4	11%	0	0%

Table 1. Recommended daily consumption level bands in current national drinking guidelines.

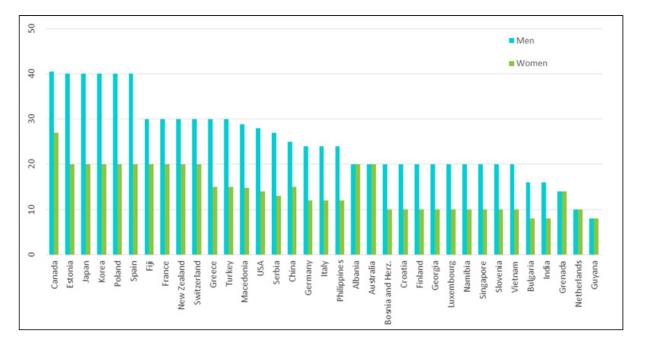


Figure 2: Daily recommendations for alcohol consumption in national drinking guidelines by country (g ethanol day).

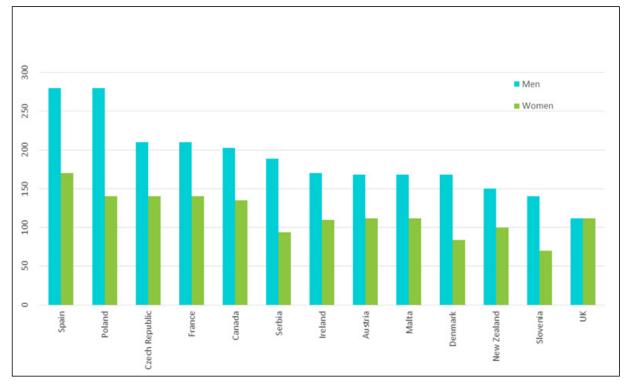


Figure 3: Weekly recommendations for alcohol consumption in national drinking guidelines by country (g ethanol week).

Most countries that issue quantitative guidelines set higher recommended limits for men than for women.

- This distinction reflects the physiological differences between men and women, and differences in alcohol metabolism.
- Because of these differences, risk of harmful health outcomes sets in at lower levels of drinking for women than for men.
- Despite these significant gender differences, 6 out of the 41 countries that issue quantitative drinking guidelines set the same recommended limits for both men and women. These are Albania, Australia, Grenada, Guyana, Netherlands, and the United Kingdom.

Two main approaches have been used by individual governments in setting drinking guidelines and recommendations: a "low-risk" strategy, and a "health behavior" strategy that balances risks and benefits against each other.

- "Low-risk" drinking recommendations are intended to minimize risk of any individual illness that may be associated with drinking, and focus on the lowest quantitative threshold for harm.
 - The emphasis is on the lowest level of consumption at which alcohol-related risk of illness increases, notably risk of developing certain cancers.
 - Because of the focus on an individual disease, benefits to health are largely discounted in this approach.
 - This approach has been used by the governments of Australia, Canada, and the United Kingdom, although these
 three sets of guidelines currently differ significantly with regard to recommended levels, daily and/or weekly
 recommendations, and whether they differentiate between men and women.
- The second approach is intended to reflect the net balance of all potential health risks and benefits associated with drinking.
 - Underlying this approach is a balancing of the available scientific evidence on the protective effect of alcohol consumption, notably for cardiovascular outcomes and Type II diabetes.
 - This approach reflects the range of consumption levels over which the risk of premature death from all possible alcohol-related causes (all-cause mortality) is lower than risk from not drinking at all.
- There is currently considerable scientific and political debate around which of these approaches is best suited to serve the needs of educating individuals about the relationship between drinking and outcomes, and about reducing harmful drinking.

While the main focus of national drinking guidelines is on the general healthy adult population of a country, some governments also include advice to those groups of individuals who may be at increased risk of harm from drinking due to personal characteristics, contexts, or behaviors.

"At-risk" groups include young people, older adults, pregnant women, or individuals whose health status raises the
potential for harmful outcomes from drinking. The following offers an overview of recommendations for these groups.

Young people:

- Ongoing physiological development, inexperience with drinking, and a general tendency to take risks may increase the likelihood of young people experiencing harm relating to their drinking patterns.
- Some countries simply advise children and/or adolescents not to drink at all (e.g., China, Macedonia, Slovenia), while others offer this advice to all young people under the legal age (e.g., Australia, Canada, United States, Spain, New Zealand).
- · Australia offers specific recommendations for different age groups:
- "For children and young people under 18 years of age, not drinking alcohol is the safest option. A. Parents and carers should be advised that children under 15 years of age are at the greatest risk of harm from drinking and that for this age group, not drinking alcohol is especially important. B. For young people aged 15-17 years, the safest option is to delay the initiation of drinking for as long as possible." ((National Health and Medical Research Council (NHMRC) 2009), p. 4)

Older adults:

• Physiological changes in old age may increase sensitivity to the effects of alcohol, and many older adults may be at increased risk of harm from drinking due to failing health or interactions with medications.

- Some countries, like Italy, for example, recommend lower levels of consumption for older adults; older men are advised to drink no more than 12 grams per day, rather than up to the 24 gram per day threshold recommended for men in the general adult population (Ministry of Health 2015).
- Other governments advise older adults to be aware of how their bodies react to alcohol. Denmark's guideline, for instance, recommends that the elderly be "especially careful with alcohol" (National Health Board 2015).

Pregnancy:

- One of the most frequently included special recommendations relates to drinking during pregnancy, which has the potential to place the developing fetus at risk of severe mental and behavioral deficits.
- At least 45 countries issue such recommendations in their advice on drinking, whether as part of general drinking guidelines, or as stand-alone recommendations around pregnancy.
- Recommendations almost universally take a precautionary approach, advising pregnant women to refrain from drinking altogether.
- However, some guidelines, like those in the United Kingdom, also provide additional useful information, such as reassuring women that consuming small amounts before they were aware that they were pregnant is unlikely to cause harm.

Harm to others:

- While most national drinking guidelines focus almost exclusively on the drinker and on individual risk, a few countries, for example, Canada and Australia, also consider risk and harm to others, often in the preambular text to guidelines.
- This includes accidents and injuries, violence, and "harm to family members, (including children) and to friends and workmates, as well as to bystanders and strangers" (National Health and Medical Research Council (NHMRC)), p. 28).
- It is important to note, however, that associations are not equivalent to causation; an association of drinking with social harm does not mean that drinking causes it

Contexts

There are specific contexts and unique circumstances in which the consumption of alcohol is not advisable, or should be reduced. Some national guidelines also afford these special attention, most commonly including the following:

- · Caution about operating machinery (Canada, United States, Mexico, New Zealand, Spain, Switzerland, Suriname);
- Taking medications (Canada, United States, Mexico, New Zealand, Switzerland, United Kingdom);
- Living with or being at increased risk of certain medical conditions, including alcohol use disorders (Canada, United States, Estonia, Mexico, Namibia, New Zealand, United Kingdom); and
- Working or studying (Suriname, Switzerland, Spain, Canada).

IMPACT OF DRINKING GUIDELINES

While drinking guidelines are part of a comprehensive health promotion strategy, the evidence on their effectiveness for changing behavior is not strong.

- Most efforts to measure impact typically have been limited to assessing knowledge and awareness of recommended limits among the public.
- Accurate knowledge of recommended drinking levels is generally below half of surveyed populations (Bowden, Delfabbro et al. 2014, Gilson, Bryant et al. 2014, Sprague and Vinson 2015, Coomber, Jones et al. 2016), although it may increase over time with regular information campaigns (Gronbaek, Stroger et al. 2002).
- Some studies report that heavier drinkers, in particular, are less likely to accurately recall the recommendations made in drinking guidelines (Livingston 2012, Coomber, Jones et al. 2016).
- Research also suggests that people often lack the necessary understanding of standard units required to reconcile their own drinking with official recommendations (de Visser and Birch 2012, Coomber, Jones et al. 2016).

 As a result, guidelines may be disregarded because they do not seem personally relevant (Gill and O'May 2007, Lovatt, Eadie et al. 2015).

Nevertheless, guidelines can be useful tools for delivering valuable health information to the public. The most comprehensive drinking guidelines:

- · Are relevant to personal circumstances and prevailing drinking patterns;
- · Provide clear and accessible advice, making it comprehensible to the general public;
- · Offer realistic rather than aspirational recommendations;
- · Relate to other health-related behaviors and lifestyles;
- · Reflect good and complete scientific evidence on both harms and benefits.
- Guidelines that are overly complicated, or seem unrealistic or culturally irrelevant run the risk of being misunderstood or ignored.

One of the challenges for governments lies in how best to communicate drinking guidelines.

- Efforts are needed to maximize the likelihood that guidelines are used and understood by ensuring that individuals:
 - Know that drinking guidelines exist and understand what the specific recommendations are;
 - · Understand the health risks and benefits of drinking; and
 - · Can relate guidelines and levels of consumption to their own drinking.
- Particular attention is needed to communicating guidelines to those individuals who are most likely to benefit from the advice and from changing their drinking patterns, notably heavy chronic drinkers or those engaging in heavy episodic drinking.

FINAL REMARKS

Despite the significant and wide variation that currently exists across national drinking guidelines, such advice offers an important vehicle for health promotion. Consumers look to governments, as well as healthcare providers, for information around health risks and health-enhancing behaviors.

Any advice provided to consumers on drinking, as on other health- and lifestyle-related issues, is of most use if it acknowledges that individuals have the ability to make responsible and informed choices.

Governments have a responsibility to provide populations with accurate, succinct, and culturally appropriate information that is rooted in scientific evidence.

Future research should aim to evaluate guidelines' impact on changing drinking patterns in order to assess their potential relative contribution to national strategies and global efforts to address harmful drinking, such as measurable targets under the Sustainable Development Goals and the Noncommunicable Diseases Global Monitoring Framework.

NATIONAL DRINKING GUIDELINES

- Agency against Drug and Alcohol Abuse (Sedqa) It's not the drinking.. It's how we're drinking. Author.
- Av-og-til. "Sometimes without alcohol." Retrieved March 31, 2016, from http://avogtil.no/.
- Canadian Centre on Substance Abuse (2013). Low-risk alcohol drinking guidelines. Author.
- Croatian National Institute of Public Health (2002). Dietary guidelines for adults, Author.
- Department of Public Health (2008). Recommendations on healthy nutrition in Albania, Author.
- Federal Center for Health Education. "Know Your Limit." Retrieved March 15, 2016, from <u>http://www.kenn-dein-limit.</u> de/.
- Federal Ministry for Labour Health and Social Affairs (2015). What is "normal" drinking? Author.
- Federal Office for Public Health (2015). "How much is too much?": New alcohol prevention campaign.
- Food and Nutrition Research Institute. "Myths and truths about alcohol." Retrieved April 13, 2016, from <u>http://</u> <u>www1.fnri.dost.gov.ph/index.php?option=com_</u> <u>content&task=view&id=1263&Itemid=246.</u>
- Government of Grenada (2006). Food-based dietary guidelines for Grenada.
- Health Service Executive and H. P. Unit A quick question: Drinking self-assessment guide. Author.
- Institute for Mental Health (2014). Respossible drinking guidelines.
- Institute for Public Health (2004). Guide on nutrition for the adult population, Author.
- Korea Health Promotion Foundation (2013). Low-risk drinking guidelines, Author.
- Ministry of Health. (14 October 2015). "Alcohol and dependence: Advice for all." Retrieved March 31, 2016, from <u>http://www.sante.public.lu/fr/prevention/modes/alcool/conseils/index.html.</u>
- Ministry of Health (2004). Food-based dietary guidelines for Guyana, Author.
- Ministry of Health (2006). Guidelines for healthy eating for the Bulgarian population aged 18-65, Author.
- Ministry of Health (2006). Nutrition guidelines for Turkey, Author. Ministry of Health (2013). Eating for Healthy Adults.
- Ministry of Health (2014). Nutrition guidelines for the population of Macedonia, Author.
- Ministry of Health. (2015). "Healthy living: Alcohol." Retrieved March 30, 2016, from <u>http://www.salute.gov.it/portale/salute/</u> p1_5.jsp?lingua=italiano&id=81&area=Vivi_sano.
- Ministry of Health and Chinese Nutrition Society (2007). Chinese dietary guidelines, Author.
- Ministry of Health and Medical Services. "Alcohol: Healthy you." Retrieved April 14, 2016, from <u>http://www.health.gov.fj/?page_id=3863'\l'2.</u>
- Ministry of Health and Social Services (2013). Nutrition

guidelines for prevention and management of noncommunicable diseases., Author.

- Ministry of Health and Welfare (1999). Dietary guidelines for adults in Greece.
- Ministry of Health Labor and Welfare A Basic Direction for Comprehensive Implementation of National Health Promotion. *Ministerial Notification No.* 430 of 10 July 2012.
- Ministry of Health, S. S. a. E. "Healthy lifestyles: Risky and harmful alcohol consumption." Retrieved March 30, 2016, from <u>http://www.estilosdevidasaludable.msssi.gob.es/</u> consumo/queSaber/home.htm.
- Ministry of Health, S. S. a. E. "National Drugs Plan, Information on drugs and other addictive behaviors: Alcohol " Retrieved March 30, 2016, from <u>http://www.pnsd.msc.es/ciudadanos/</u> informacion/alcohol/home.htm.
- Ministry of Labor Health and Social Affairs (2005). Healthy eating - the main key to health, Author.
- Ministry of Social Affairs, H., and Women's Rights,. "Alco-Info-Service: Evaluate your drinking." Retrieved January 29, 2016, from <u>http://www.alcool-info-service.fr/</u>.
- National Drug Dependence Treatment Center. (August 10, 2013). "Alcohol web India: Useful tips for lower-risk drinking." Retrieved April 14, 2016, from <u>https://www.alcoholwebindia.</u> in/content/useful-tips-lower-risk-drinking-1.
- National Health and Medical Research Council (NHMRC) (2009). Australian guidelines to reduce health risks from drinking alcohol, Author.
- National Health Board. (2015). "Official dietary guidelines." Retrieved March 30, 2016, from <u>http://www.</u> <u>sundhedsstyrelsen.dk/da/sundhed/alkohol</u>.
- National Institute for Health and Welfare (2016). Factsheet: Alcohol health risks for healthy adults. Author. Helsinki, Finland.
- National Institute of Nutrition. "10 tips on proper nutrition for period 2013–2020." Retrieved February 15, 2016, from <u>http://www.10lkdd.viendinhduong.vn/loi-khuyen-so-10.html</u>.
- National Institute of Public Health. "Risky alcohol consumption." Retrieved 30 March 2016, from <u>http://www.nijz.si/sl/tvegano-pitje-alkohola</u>.
- National Institute of Public Health (2007). Assessment of alcohol consumption.

Nutrition Center (2016). Guidelines: Five piece disk.

- State Agency for Prevention of Alcohol Related Problems National programme for preventing and resolving alcoholrelated problems for the years 2011-2015, Author.
- U.K. Department of Health (2016). Chief Medical Officers' Alcohol Guidelines Review: Summary of the proposed new guidelines, Author.
- U.S. Department of Agriculture (2010). Dietary guidelines for Americans. U. S. D. o. H. a. H. Services. Washington, DC, U.S. Government Printing Office.

REFERENCES

- Bowden, J. A., P. Delfabbro, R. Room, C. L. Miller and C. Wilson (2014). "Alcohol consumption and NHMRC guidelines: Has the message got out, are people conforming and are they aware that alcohol causes cancer?" Australian and New Zealand Journal of Public Health 38(1): 66-72.
- Coomber, K., S. C. Jones, F. Martino and P. G. Miller (2016). "Predictors of awareness of standard drink labelling and drinking guidelines to reduce negative health effects among Australian drinkers." *Drug and Alcohol Review*.
- de Visser, R. O. and J. D. Birch (2012). "My cup runneth over: Young people's lack of knowledge of low-risk drinking guidelines." *Drug and Alcohol Review 31*(2): 206-212.
- Gill, J. and F. O'May (2007). "How 'sensible' is the UK Sensible Drinking message? Preliminary findings amongst newly matriculated female university students in Scotland." *Journal* of Public Health (Oxford) 29(1): 13-16.

- Gilson, K. M., C. Bryant and F. Judd (2014). "Exploring risky drinking and knowledge of safe drinking guidelines in older adults." Substance Use and Misuse 49(11): 1473-1479.
- Gronbaek, M. N., U. Stroger, H. Strunge, L. Moller, V. Graff and L. Iversen (2002). "[Impact of a 10-year nation-wide campaign on knowledge of sensible drinking limits in Denmark]." Ugeskrift Laeger 164(49): 5782-5786.
- Livingston, M. (2012). "Perceptions of low-risk drinking levels among Australians during a period of change in the official drinking guidelines." *Drug and Alcohol Review* 31(2): 224-230.
- Lovatt, M., D. Eadie, P. S. Meier, J. Li, L. Bauld, G. Hastings and J. Holmes (2015). "Lay epidemiology and the interpretation of low-risk drinking guidelines by adults in the United Kingdom." *Addiction* 110(12): 1912-1919.
- Sprague, D. J. and D. C. Vinson (2015). "Patient Perceptions of risky drinking: Knowledge of daily and weekly low-risk guidelines and standard drink sizes." *Substance Abuse*.

Reviews

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