Alcohol in Moderation

May 2025

International Digest on alcohol and health and the responsible consumption of alcohol

Contents

AIM Digest

E: info@alcoholinmoderation.com

Websites:
www.alcoholinmoderation.com
www.drinkingandyou.com
www.alcoholresearchforum.org

AIM Subscription Levels:

Individual: GBP 900-
USD 1,250-
Euro 1000-

Silver: GBP 1,500-
USD 2,500-
Euro 2,000-

Gold: GBP £3,000-
USD 5,000-
Euro 4,000-

Platinum: available on request.

Please contact Zoe@alcoholinmoderation.com for information about AIM's subscription levels.

Please make cheques/drafts in British pounds sterling, dollars or Euros payable to AIM Digest at the above address

Henk Hendriks - **Co-director**
E: henk@alcoholinmoderation.com

Creina Stockley - **Co-director**
E: creina@alcoholinmoderation.com

Alison Rees - **Editor**
E: alison@alcoholinmoderation.com

Zoe Westwood – **Finance and subscriptions**
E: zoe@alcoholinmoderation.com

Scotland

From June 2, alcohol may be consumed on ScotRail trains between 10am and 9pm. The Scottish Government introduced a "temporary" ban in November 2020 as part of covid restrictions. There is no evidence that the alcohol ban on ScotRail services led to a reduction in anti-social behaviour on trains and the ban has being widely ignored by passengers, with Trade union chiefs also saying the policy is "unenforceable".

Ontario

Ontario Premier Doug Ford has called on his fellow premiers in Canada to join his province and others in taking steps to remove barriers to the free flow of goods and workers within Canada, pitching it as a way to shore up the economy against the effects of American tariffs.

On alcohol, long a point of contention in interprovincial trade talks, the legislation would introduce an interprovincial direct-to-consumer sales model so that Ontario residents could buy directly from producers in other provinces, and Ontario producers could sell directly to consumers elsewhere in Canada.

Ireland

In Ireland, Deputy PM, Simon Harris, has indicated that a plan to introduce health labels on alcoholic drinks is to be delayed. Labels that showed the calorie content in drinks along with the grams of alcohol, were set to become a legal requirement for producers in May 2026. However, Mr Harris told the lower house of parliament that there is now a very new trade environment and the matter will be looked at again given the concerns within the industry.

Alaska

From August 1 2025, Alaska will be the first state in the US to require health warning signs in bars and liquor stores linking excessive alcohol consumption to colon and breast cancer. The signs themselves must be at least 14 inches (35.6 cm) by 11 inches (28 cm) and be "conspicuous" to visitors.

The legislation was passed unanimously in the state senate and became law without Governor Mike Dunleavy's signature. Although similar legislation had cleared the House last year, it failed to gain the governor's approval at the time due to missing the deadline.

Northern Ireland

The Democratic Unionist Party (DUP) is blocking efforts to introduce a minimum price for alcohol, according to senior sources in the Stormont executive. The party, once synonymous with temperance has said it has "concerns about the limited evidence of the positive impact of this policy in tackling problem drinking". Former DUP health minister Jim Wells has said that he encountered resistance from party colleagues when he previously sought to progress measures aimed at reducing alcohol-related deaths and hospital admissions. He explained that opposition to minimum unit alcohol pricing was a result of lobbying from the drinks industry, along with the policy's potential impact on "loyalist, working class communities".

Alcohol and cancer risk: what you need to know

Authors Pearson, H.
Citation Nature 2025 (639) 290-292. doi.org/10.1038/d41586-025-00729-5.

Feature This feature article written by a senior editor of Nature is intended to explain at what level of drinking cancer risks start to rise.

Forum Summary

This brief feature article by Pearson (2025) is an elaboration of the 2025 US Surgeon General's Advisory on Alcohol and Cancer Risk (U.S. Surgeon General, 2025). It describes the opinions of selected epidemiologists, all with a long track record of publishing on the adverse effects of alcohol consumption and human health. There are minimal references cited, and careful consideration of the text suggests that references and peer-reviewed evidence from earlier research are disregarded. The text is also emotive.

The feature article summarizes what the 2025 US Surgeon General's Advisory has concluded, namely:

- It emphasises the potential adverse effects of light to moderate alcohol consumption on the approximately seven alcohol-related cancers;
- Conversely, it downplays alcohol's potential beneficial health effects on, and decreased risk for other non-communicable diseases such as cardiovascular diseases (CVD) and diabetes mellitus type II, cognitive decline and dementias, as well as kidney cancer and non-Hodgkin lymphoma (Bagnardi et al., 2015);
- Fails to discuss total mortality;
- Fails to discuss a healthy lifestyle;
- Incorrectly implies that cancer risk from alcohol is equivalent to tobacco smoking and asbestos exposure; and
- Ill-considers references to calculating absolute risk estimates.

A more appropriate conclusion to Helen Pearson's article is: 'the whole evidence base for moderate drinking and improved health is scientifically sound'.

Forum critique

Background

This brief three-page feature article by Pearson (2025) is an elaboration of the US Surgeon General's Advisory on Alcohol and Cancer Risk (U.S. Surgeon General, 2025) published earlier in January 2025 , which is a public statement that calls Americans' attention to an urgent public health issue and provides recommendations on how it should be addressed. Unlike the Surgeon General's Report (2016) , the Surgeon General's Advisory (2025) is a non-systematic review, which does not have to disclose search strategies or methods or inclusion criteria, and where evidence considered came from "resources suggested by a wide range of subject matter experts", an approach that is neither comprehensive nor objective and has the potential of introducing bias.

The feature article describes the opinions of various alcohol epidemiologists, all with a long track record of publishing on the adverse effects of alcohol consumption and human health. There were minimal references cited, and careful consideration of the text suggests that references and peer-reviewed evidence from much earlier research were disregarded.

Also, instead of simply writing scientific fact, the language of this feature article is emotive and fear-mongering.

Critique

Emphasis on only the potential adverse health effects of any alcohol consumption

The feature article summarizes what the US Surgeon General's Advisory on Alcohol and Cancer Risk (2025) has concluded, namely, it emphasises only the potential adverse effects of light to moderate alcohol consumption on the approximately seven alcohol-related cancers. Indeed, cancer is not a single disease and the other 100+ known cancers such as ovary, prostate, stomach, uterus, and bladder, appear not to be adversely affected by alcohol consumption.

Failure to acknowledge any positive health effects from light to moderate alcohol consumption

The feature downplays alcohol's potential decreased risk for other non-communicable diseases. Despite being well documented for three or more decades, this feature disappointingly fails to acknowledge that there is a beneficial association between light to moderate alcohol consumption and CVD (Mostofsky et al., 2016). CVD is currently the leading cause of death globally and is projected from the Global Burden of Disease (GBD) Study 2019 to remain so into the 2050s (Chong et al. 2024). Other beneficially associated diseases include diabetes mellitus type II (Li et al., 2025), cognitive decline and dementia (Zarezadeh et al., 2024), and renal disease including renal cancer (Song et al., 2012). Evidence for a beneficial association comes from both epidemiology and sound experimental and clinical science of mechanisms for such beneficial associations. The inclusion of only comments from Professors Jurgen Rehm and Timothy Naimi (of the Canadian Centre for Substance Abuse; CSA) who are authors of the controversial Canada's Guidance on Alcohol and Health: Final Report (Paradis et al., 2023) and the related recent Interagency Coordinating Committee on the Prevention of Underage Drinking (ICCPUD) Study on Alcohol Intake and Health (Shield et al., 2025), is also disappointing as is the unquestioning acceptance of repeatedly invalidated theories such as the sick quitter hypothesis, socio-economic bias and underestimation of alcohol consumption and cursory comment on the relevance of alcohol consumption patterns. Furthermore, the commentary omitted that Health Canada has not adopted CCSA's recommendations to change the drinking guidelines.

Failure to discuss total mortality

The most glaring omission is failure to discuss total mortality, the overall outcome, or a summation of all the pros and cons of alcohol consumption. There is a continuum of convincing evidence available showing that total mortality is associated with alcohol consumption in a J-shaped way (Bryazka et al., 2022). This means that when one is drinking lightly to moderately one has a lower risk of dying whereas when one is not drinking or drinking more than moderately one has a higher risk of dying.

Consequently, the entire evidence base around moderate drinking is not 'scientifically frail', as stated by Naimi (2025), but it is a science-based reality as shown in The National Academies of Sciences, Engineering, and Medicine's Review of Evidence on Alcohol and Health (National Academies of Sciences, Engineering, and Medicine, 2025); this review is a key resource for the U.S. Department of Health and Human Services (HHS) and U.S. Department of Agriculture (USDA) as they co-develop the Dietary Guidelines for Americans, 2025-2030.

Failure to discuss healthy lifestyle

The difference with modifiable lifestyle factors such as drinking alcohol is that it is a choice to drink, as it is for the other lifestyle factors listed; a voluntary rather than involuntary risk factor. Having a healthy lifestyle, however, does not guarantee that a person will not get a cancer, a CVD or another non-communicable disease, for example, but it reduces the overall risk of premature disability and death by improving general health. Furthermore, people do not drink for their health but choose to drink to relax and socialise. Relaxation and socialisation, inherent in a good quality of life, contribute positively to health and well-being as highlighted in the US Rancho Bernardo Study (Chan et al., 2009, Richard et al. 2019).

In conclusion, when the risk for one or more specific diseases/disorders marginally increases with light to moderate alcohol consumption, whereas that of others decreases to enable and enhance enjoyment of life, why would we treat drinking a light to moderate amount of alcohol as a generally unhealthy choice? The reason is, of course, that there is no scientific basis to do so.

Incorrectly implies cancer risk from alcohol is equivalent to tobacco smoking and asbestos exposure

As with the consumption of most foods, beverages, and drugs, including over-the-counter and prescription medications and recreational drugs, there is a dose-dependent relationship. Heavy alcohol consumption, whether regular or binging, and alcohol abuse are increasing the risks for alcohol-related cancers. Consequently, the IARC categorized alcoholic beverages (IARC, 1988) as carcinogenic, irrespective of dose, as the IARC has been doing with the majority of substances it has investigated.

For each of the seven alcohol-related cancers, the dose-response relationship is different, and is also influenced by an individual's other risk factors for the cancer. The leading lifestyle risk factors for cancer include tobacco use, obesity, unhealthy diets, lack of physical activity and exposure to UV radiation, as well as alcohol consumption. The environmental risk factors include certain infections, chemical pollutants, and ionising radiation. Further, there are other non-modifiable risk factors for cancer such as age, genetics and hormones. IARC categories, however, do not provide information about the magnitude or level of risk.

Pearson (2025), however, incorrectly implies that cancer risk from alcohol is equivalent to tobacco smoking and asbestos exposure. These risk factors only share the same IARC category, but the specific risks and levels of cancer they cause differ. Indeed, according to the IARC (2012) and WHO (2015), tobacco is the greatest modifiable risk factor and hence preventable cause of cancer worldwide, estimating that it causes up to 1.5 million cancer deaths each year. Tobacco is also a major modifiable risk factor for cardiovascular diseases (CVD) . Conversely, light to moderate alcohol consumption is repeatedly reported in the medical and scientific literature as one of the five favourable or healthy lifestyle risk factors on healthy ageing and life expectancies (Li et al., 2018, Mahler et al., 2022).

Ill-considered reference to calculating absolute risk estimates

Pearson (2025) also refers to an Australian study from the Surgeon General's Advisory as the source for calculating absolute risk estimates (Sarich et al., 2025), to suggest that other studies may not have appropriately accounted for potential confounding in their calculations. This is an ill-considered choice, particularly because the authors of this Australian study acknowledge that there is potential confounding or bias in their estimates, and that the relationship between alcohol consumption and cancer risk varies across regions, "due in part to regional variation in gene polymorphisms that relate to the metabolism of alcohol".

This Australian study also had a low response rate of 19%. Furthermore, the analytical results showed that the risk of being diagnosed with an alcohol-related cancer did not increase until after 30 g/day, compared to those drinking to 3.5 drinks/week. There were a large number of analyses in the main paper and the supplement with this same result, which were explored in various models and sensitivity analyses.

Additional Comments

Forum Member Ursini considers that "rather than biased, but I believe the judgment of the feature article should be far more critical. While evidence-based medicine (EBM) aims to protect human health, it must not conflict with the solid foundation of basic scientific evidence, validated cultural and ethical traditions, and common sense.

The debate surrounding alcohol consumption has been raised many times, particularly regarding the type of drink and the manner of consumption. Drawing conclusions based solely on the average weekly ethanol intake from any source is an oversimplification and cannot be deemed scientifically sound.

From a mechanistic standpoint, there is no single experimental study demonstrating that ethanol itself causes cancer in animals. The actual mutagenic agent is acetaldehyde. While this is correct, it is also important to consider that Homo sapiens has a substantial aldehyde dehydrogenase (ALDH) activity, which dramatically increased nearly one million years ago in hominids. This mutation conferred a significant evolutionary advantage for obvious reasons. Additionally, aldehydes are naturally present in dairy products, fruits, and vegetables, contributing to their aroma. Should we then classify all aldehydes as mutagens and carcinogens at high doses only because the aldehydic group is chemically reactive?

Another significant bias (or deliberate omission?) in the article is its complete failure to acknowledge wine as part of a diet that is healthier when it includes moderate wine consumption. I prefer not to refer strictly to the Mediterranean diet but rather to a broader non-Western dietary approach. In my opinion, Ancel Keys did not discover a "magic diet"; rather, he revealed how poorly Americans were eating—and drinking.

For decades, basic scientific research has provided data on the pro-atherogenic modification of LDL and the protective role of wine when consumed with food. A more epistemologically correct approach to public health should prioritize confirming basic science through epidemiological research—not merely counting deaths and hypothesizing mechanisms of disease and mortality.

The scientific hierarchy must follow the logical progression:

1. Basic Science —>
2. Mechanistic Insights —>
3. Epidemiological Studies & Meta-Analyses

Instead, we often see large-scale epidemiology applied to heterogeneous populations across different societies, increasing the risk of misleading conclusions. Do you recall the fluctuating and often contradictory conclusions drawn from studies on dietary fat, beta-carotene, red meat, eggs, coffee, sweeteners, Maillard reaction products, etc.?

The issue of the low or moderate dose is always open, and hormesis is not just a curiosity discovered by a toxicologist; it is a matter of life and health.

I am always open to further discussion on these issues and eager to contribute to a non-paternalistic approach to public communication regarding scientific matters."

Forum Member Skovenborg suggests that "the feature by Helen Pearson incorporates many examples of 'well-meaning' anti-alcohol bias that are common in research and messaging around low-level drinking. The level of anti-alcohol bias seems to be growing and could contribute to the distrust of other, more objective, information that people need to prevent alcohol-related problems.

There are two apparent biases in the feature article as follows:

1. The narrow and selective list of experts interviewed and quoted regarding the level of drinking at which cancer risks start to rise, suggests a bias or conflict of interest regarding alcohol research, for example,

- Dr Timothy Naimi is an author of the Canadian Centre on Substance Use and Addiction (CCSA) recommendations Canada's Guidance on Alcohol and Health: Final Report to inform the 2023 Canadian alcohol guidelines suggesting that "two alcoholic drinks per week equals low risk". He is also quoted as stating "The bottom line is that alcohol is a generally unhealthy substance".
- Professor Emmanuela Gakidouis is one of the leading authors of The Global Burden of Disease (GBD) Study 2016. These authors "found that risk increases monotonically with dose and the minimal exposure to risk was zero drinks per day" (Griswold et al. 2019). Furthermore, in Hydes et al. (2019), the GBD Study 2016 is quoted as "robust evidence that low levels of alcohol intake do not provide any protective health benefits."
- Dr Helen Croker is Assistant Director of Research and Policy at the World Cancer Research Fund who endorses the current World Health Organization's position of "no safe level of alcohol consumption".
- Professor Jürgen Rehm is an author of the Interagency Coordinating Committee on the Prevention of Underage Drinking (ICCPUD) Study on Alcohol Intake and Health (Shield et al., 2025) to inform the Dietary Guidelines for Americans 2025-2030, that concluded "among the U.S. population, the risk of dying from alcohol use begins at low levels of average use".
- Professor Nick Sheron is a hepatologist and an author of the controversial paper (Hydes et al., 2019) that compared wine and cigarettes related to cancer risk. These authors suggested that "one bottle of wine is associated with the same cancer risk as five cigarettes (men) or ten cigarettes (women) per week".

2. The eight references are mostly biased against even moderate alcohol consumption, for example,

- The US Surgeon General's Advisory on Alcohol and Cancer Risk (Office of the US Surgeon General, 2025).
- The list of IARC Group 1 Carcinogens includes alcohol. Tobacco and asbestos are included as other group 1 carcinogens but not, for example, air pollution, wood dust or salted fish. This suggests an intention to frame alcohol as a particularly dangerous carcinogen on par with tobacco and asbestos.
- The World Cancer Research Fund & American Institute for Cancer Research's Alcoholic Drinks and the Risk of Cancer (WCRF, 2018). According to this report "Scientists expect that other cancer types will be added", however, in the quote, there is no mention of cancer types associated with lower risk from consumption of alcohol, such as Non-Hodgkin lymphoma (UK cases in 2021: 13,512 cases), renal cancer (12,192 cases) and thyroid cancer (4,040 cases). In comparison, there were 11,090 cases of alcohol-associated Head and neck cancers.
- Of the 19 authors of reference Sohi, et al. (2024), five are WHO staff members and three are WHO consultants.
- In comparison to these references, the landmark report from the National Academies of Sciences, Engineering, and Medicine (2024) was not quoted nor even mentioned, which concluded:
- Conclusion 5-1: The committee concludes that compared with never consuming alcohol, consuming a moderate amount of alcohol was associated with a higher risk of breast cancer (moderate certainty).
- Conclusion 5-2: The committee concluded that, among moderate alcohol consumers,

higher versus lower amounts of moderate alcohol consumption were associated with a higher risk of breast cancer (low certainty).

- Conclusion 5-3: The committee determined that no conclusion could be drawn regarding the association between moderate alcohol consumption compared with lifetime non-consumers and risk of colorectal cancer.
- Conclusion 5-4: The committee concluded that among moderate alcohol consumers higher versus lower amounts of moderate alcohol consumption were associated with a higher risk of colorectal cancer (low certainty).
- Conclusion 5-5: The committee determined that no conclusion could be drawn regarding an association between moderate alcohol consumption and oral cavity, pharyngeal, oesophageal, or laryngeal cancers.
- In addition, the feature article states that "another murky area is how risks change with age. The chances of developing cancer rise with age, as the body's ability to metabolize alcohol drops, so it's likely that alcohol would be having more of a risk as we get older, Croker says." This statement is incorrect: www.bmj.com/content/365/bmj.l4304/rr-16. There are at least 14 references stating that the often-repeated assertion of diminished hepatic metabolic efficiency with increasing age is a myth. The landmark study by Vestal et al. was published in 1977. Thus, is this incorrect statement from Dr Croker a result of plain ignorance of the scientific literature on alcohol metabolism and age or is it an example of common ageism?"

Forum Member Ellison states that he is "always interested in articles by health writers when judged according to the "scientist" with whom they primarily communicated to reach their conclusions. It is clear in the publication by Helen Pearson that there was very strong input by a Canadian-based 'scientist' who appears to spend his time seeking to 'find holes' in the massive amount of scientific data showing that moderate drinkers, especially those who consume an alcoholic beverage with their meals, have less heart disease, ischaemic stroke, diabetes, and dementia. Further, such moderate drinkers have lower total mortality rates, in other words, more healthy years of life, than do people who are very similar in all of their lifestyle characteristics except that they abstain from any alcohol consumption.

When considering the health effects of alcoholic beverages, I often think about the excellent, unbiased studies of the late clinical and research cardiologist and epidemiologist, Arthur L. Klatsky MD, who based his work on the immense number of participants (>400,000) in the Californian Kaiser Permanente Research Bank. In some of the most thoroughly examined and analysed datasets of people who reported that they consumed '1 or 2 drinks/day', those also reporting alcohol misuse made up all of those who later developed cancer or hypertension. Those whose extensive records revealed no such findings of alcohol misuse had the same risk as abstainers (Klatsky et al., 2006, Klatsky and Udaltsova, 2013, Klatsky et al., 2014).

Of course, the number of drinks over a week or other time period reported in epidemiologic studies is far from adequate to judge the health effects of alcohol consumption [although I do not know people who consume "alcohol", but those who drink beverages containing alcohol]. We also know that the type of beverage, and especially the pattern of drinking, are as important as the number of drinks drunk. Scientific studies continue to demonstrate that positive health effects occur mainly in drinkers who consume light-to-moderate amounts regularly, without binge drinking, and with food. This is especially the case when the beverage consumed is wine.

Hundreds of scientists publish sound and unbiased articles on the positive and/or negative health effects of the consumption of alcohol-containing beverages. Luckily, some of these scientists are members of our Forum and continue to provide accurate and balanced information on this topic. We trust that journalists and science writers will take advantage of such reliable sources to assure that the information upon which they base their articles is scientifically accurate and unbiased."

Forum member Teissedre suggests that "regarding wine specifically, and cancers per se, it should also be emphasised that some synergistic habits, both good and bad, can be essential for the initiation and development of cancerous tumours. The effect of alcohol on cancer risk will depend, therefore. on the context, such as alcohol with or without a meal, the nature of the foods consumed (e.g., processed and red meats, the addition of aflatoxins and salt) as well as concomitant tobacco smoking. The average consumption of omega-6/omega-3 acids in habitual diets should also be considered. It is suggested that more than one-third of all cancers could be prevented by a healthy diet, regular physical activity, and no weight gain. Since cancer is a multifactorial disease, a person with a healthy diet, who exercises regularly, maintains a healthy body mass index (BMI), and who regularly and moderately consumes wine during a meal may be less likely to develop cancer than a person who does not drink alcohol but does not have a healthy diet, has a sedentary lifestyle and is overweight.

There is insufficient data, however, to affirm that moderate red wine consumption during meals in the frame of a healthy lifestyle is associated with an increased risk of cancer. Conversely, we know that this practice is beneficial for cardiovascular diseases, diabetes mellitus, and other chronic and degenerative diseases, and possibly for some cancers. For this reason, therefore, the relationship between alcohol consumption and cancer should continue to be explored. We should remember that it is easy to draw the wrong conclusion when a particular factor related to eating and drinking habits, such as wine consumption, is analysed out of context without taking cultural and culinary habits into account.

Only scientific evidence accumulated from an unbiased selection of epidemiological, extensive animal, cell culture, and human clinical studies will not promulgate misinformation. Indeed, all recent population studies show a significant and meaningful reduction in the risk of cardiovascular disease and total mortality from moderate consumption of alcoholic beverages such as wine (Teissedre et al., 2018, 2020).

The Organisation International de la Vigne et du Vin (OIV) has subsequently adopted the following resolution entitled Recommendation on the evaluation/ assessment and the communication of epidemiological studies concerning the consumption of grapes, wine and other vitivinicultural products (OIV-SECSAN 711-2022). The key points of this resolution adopted by its 51 member states has six key recommendations regarding such scientific communication as follows:

1. Analysis and limits

A statistical analysis should be completed with biological interpretation. The data collected or obtained during an epidemiological study must be analysed in conformity with the study protocol. Nonetheless, data collected in a study may legitimately be analysed to evaluate hypotheses that were not explicitly formulated in the initial protocol, or for a secondary purpose different from that originally intended. Any significant change from the statistical methodology described in the study protocol must be expressly mentioned in any publication or presentation of the study results.

2. Quality control for the study

The quality of the data collected, obtained, produced or published during or as part of an epidemiological study should be guaranteed.

3. Scientific integrity

All study results regardless of whether the funders are public or private, are under the scientific supervision of the epidemiologist who is the principal investigator, and not of the funder, and the results should be published if their scientific validity is sufficient. Before submitting for publication any requests to hide the results or change or attenuate the content of a report or to delay publication must be categorically rejected.

As generally requested, the authors of epidemiological articles should report their possible conflicts of interest and inform who funded the research.

Furthermore, in order to ensure the above criteria, an assessment of the risk of bias in accordance with the well-acknowledged guidelines per study design should be conducted.

Therefore, any communication on epidemiological studies concerning the consumption of grapes, wine and other vitivinicultural products, should consider the following criteria:

4. Impartiality

Users of published epidemiological studies should consider that results generally constitute only a small part of the information available, and some bias may affect the choice of data published, in selecting results that agree with the epidemiologist's point of view and not mentioning those that contradict it. This type of partiality or bias must be avoided.

5. Balance

Any communication must describe every aspect of the epidemiological study in an honest and balanced manner, without taking any other interests, especially non-scientific, into account.

6. Good practices

All communication should use clear, precise, sincere, and confident information. It should be trustworthy, transparent, and impartial, and take into account that science is a process of collecting data and building strong evidence and must not contain speculations on what may be or may not be relevant in the future."

Forum member Waterhouse strongly believes that "Helen Pearson's opinion piece is another example of shoddy scholarship, accepted unquestioned by the complicit editors at Nature, because they are applying biased standards to the health effects of alcohol. Ultimately, this will only add fuel to the fire that is burning down respect for science and scientists. Perhaps they have not noticed that science is losing respect among the public who feel the "experts" are telling them what they want them to believe, not the truth. This is a prime example of misinformation from the experts who deliberately obscure decades of solid data showing that moderate alcohol consumption has a net health benefit and focus solely on relatively minor issues. It is bad enough to be fighting TikTok 'health experts' these days, but it is very disheartening to find that respectable scientists are joining the misinformation train. This arrogance by some has resulted in nearly the total loss of biomedical research funds in the USA right now, and we scientists everywhere must be honest with the public and demand that of each other or expect more of the same."

Forum member Djousse states that "it is of great concern to see a misuse of absolute measures of effect such as the absolute risk or lifetime risk by a peer-reviewed journal such as Nature. It is important to emphasize the importance of the two key qualities of an effect measure, namely the validity and the precision, in scientific inference. Assuming that the authors addressed the validity issue via customary methods during the design, conduct, and data analyses, it is critically important to report the effect measure with its precision so that the reader can correctly interpret the results and draw a valid conclusion. Merely reporting the proportion of people with cancer in different groups is insufficient to interpret the data. For example, Pearson reported in the current editorial that "… This showed that around 17 out of 100 women who drink either nothing or less than one standard US drink per week (14 g ethanol) would develop such a cancer in their lifetime. This was taken as the baseline level of risk. This number rose to nearly 22 out of 100 women who have two drinks per day (28 g ethanol) on average. Therefore, five more women would develop cancer owing to the higher level of alcohol consumption." The absence of any measure of precision (i.e., standard deviation, 95% confidence interval -CI) around the proportions (17% or 22%) diminishes the utility of the reported proportions and provides no support for the conclusion of "… five more women would develop cancer owing to the higher level of alcohol consumption". While the crude difference between 17 percent and 22 percent is five, a measure of precision is required to know whether such a difference is statistically significant.

For example, using the approximation formula of the standard deviation [square root of [p*(1-p)/n)] where p is the proportion or risk and n is the sample size, 17 women out of 100 would have a 95% CI of 0.11 t0 0.26 while 22 women out of 100 would have a 95% CI of 0.15 to 0.31. Since these confidence limits overlap, one cannot conclude that there is a statistically significant difference between the two groups of women. In Contrast, 1700 cases of cancer out of 10,000 women (17%) and 2200 out of 10,000 (22%) would have non-overlapping 95% CIs [0.16 to 0.18 and 0.21 to 0.23, respectively] using the approximation formula above. Unfortunately, such critical details that are necessary for the correct interpretation of the data are omitted in a peer-reviewed journal such as Nature.

I also agree with comments from our other colleagues."

Forum member Goldfinger considers that "the cancer narrative seems to have overwhelmed the 'literature', as well as the 'hearts and minds' of those reporting on alcohol and health. Even as the NASEM report reinforces the j-shaped relationship between moderate beverage alcohol and total mortality and the salutary effect on cardiovascular disease, the position of the WHO and others spouting that any beverage alcohol is dangerous for human consumption, is gaining traction. If their concern is wholly correct on cancer, the simple question to the alcohol and cancer proponents is… what is best, to avoid cancer or live longer?

Cardiovascular disease is the leading cause of death worldwide, and the literature has been most consistent with a reduced incidence of cardiovascular events and death with moderate beverage alcohol consumption.

I strongly concur with the comments put forward by our other colleagues to date."

Forum member Harding endorses the comments made by other Forum members and states that he has looked at all the references cited by Pearson (2025). "It seems that the entire rationale for the assertion that alcohol consumption causes cancer is based on epidemiological associations. Generally speaking, 'relative risk' is assumed to be 'real risk', without much, or indeed any, examination of supporting evidence. Association and causation are assumed to be the same thing. This is not the right way of going about things unless the objective is simply to present alcohol as a universal human carcinogen.

Sir Austin Bradford-Hill (1965) knew that it was not the right way, too. This is why he identified seven criteria that should be applied to epidemiological data to assess causation. The cited US Surgeon General's Advisory, Alcohol and Cancer Risk (Office of the US Surgeon General, 2025) addressed this directly (page 7), with a general account of how the Bradford Hill criteria apply to the body of evidence on alcohol consumption and cancer risk overall. This is not right either, because it is known that alcohol has different effects, depending on the nature of the cancer. So, what is needed is an analysis of how the Bradford Hill criteria apply to individual cancers.

For example, the body of evidence on the effect of alcohol consumption and breast cancer would certainly struggle to fulfil the criterion of consistency and of biological plausibility. Indeed, the cited reference 6, which is specifically on breast cancer says, 'the mechanisms underlying the alcohol-breast cancer association are not entirely clear'. Nor is the actual relationship between alcohol and breast cancer 'entirely clear'. A 2019 study on about half a million Britons found no evidence of a causal association between alcohol consumption and breast cancer (Ingold et al. 2019). A French study on wine consumption had already come to the same conclusion (Bessaoud and Daurès, 2008). Further, wine appeared to offer a degree of protection as an intake of 15g/day reduced the risk of breast cancer by about 40%, and higher intakes did not increase risk at all. A US study found zero risk of breast cancer among wine drinkers (Newcomb et al., 2009).

Further, alcohol consumption appears to convey a degree of protection for some cancers (e.g. kidney (Yuan et al. 2021, Lee et al. 2007), thyroid (Meinhold et al., 2009, Hong et al., 2017), blood cancers (Chiu et al., 1999, Morton et al., 2005, Gatspur et al., 2012, Ji et al., 2014) and multiple myeloma (Psaltopoulou et al., 2015), with wine seeming to be particularly beneficial (e.g. colorectal cancer (Crockett et al., 2011, Park et al., 2009), prostate (Schoonen et al., 2005), and even after the disease has been diagnosed (Downer et al., 2019), lung cancer (Chao et al., 2008, Brenner et al., 2019), and stomach cancer (Barstad et al., 2005).

All this demonstrates that the conclusions drawn by Pearson (2025) are deeply flawed.

Contrast this with the 'biggest controversy', which, according to Pearson (2025), 'is whether low or moderate alcohol consumption has a protective effect against heart disease and stroke', which has 'not gone away completely'. No, it hasn't. According to Jürgen Rehm (quoted on page 291 in Pearson's article), 'The Alcohol-Ischaemic Heart Disease relationship (meaning the protective effect of low to moderate consumption) fulfils all criteria for a causal association proposed by Hill' (Roerecke and Rehm, 2014).

So, in my estimation, the central message of Helen Pearson's article, 'The bottom line is that alcohol is a generally unhealthy substance', is just plain wrong. It isn't."

Forum member McIntosh declares that "The article by Helen Pearson examines a very narrow literature on the harms of alcohol use. It is narrow because the papers in this literature focus exclusively on cancer and mortality, leaving out mechanisms where alcohol use could have an impact on the longevity of respondents who do not die of cancer. It also ignores the possible effects of alcohol on the living who suffer from diseases other than cancer, like dementia, heart disease, diabetes, or stroke.

Clearly, mortality is important, but this is an end-of-life event. Most people are not near the end of their lives and their concerns about the effects of drinking alcohol will be concentrated on how alcohol use affects their health. The important questions here are: does alcohol actually have an adverse effect on health?; and which diseases are most likely to become more or less prevalent in those who use alcohol?

There is not much research that focuses on these questions, and the paper being reviewed here certainly tells us nothing about them. However, these are easy issues to deal with because most countries collect high-quality sample survey data on the health of their population. In Canada, the Canadian Community Health Survey is administered every three or four years, and in the USA, the Behavioural Risk Factor Surveillance System (BRFSS) survey is carried out annually. This is the largest US survey and it is used here to show how alcohol affects diseases and health in the USA.

In the table below logistic regressions are carried out on cancer and three other diseases as well as self-reported health data from BRFSS survey for the year 2022. The survey asks respondents questions like "have you ever been told that you have cancer?" There are responses to the three other prominent diseases but no information on dementia, at least for the entire sample. Respondents are also asked to rate their health on a scale from 1 to 5. This variable is referred to as self-reported health and is widely collected by other countries.

The alcohol variable is a quadratic function of the number of days per week that the respondent drank an alcoholic beverage. This is more reliable than the number of drinks consumed per day or week ; there is a much higher response rate for the frequency variable than the quantity, there is no disagreement about how much respondents consume, and there are likely to be fewer recall errors .

In Table 1 below the odds of getting a disease are plotted against the number of respondent drinking days. For cancer, there is a significant decrease in the risk of getting cancer for days under five but a significant increase as drinking becomes more frequent relative to not drinking. On the other hand, for the other three diseases, there are major declines in risk as drinking becomes more frequent. Diabetes exhibits the largest response to alcohol; respondents who drink six days a week are one-third as likely to have diabetes as those who never drink. CVD is also much less likely among the more regular drinkers.

The survey also asks respondents about their health. It generates a five-category measure of self-reported health. Like many of the studies on all-cause mortality the response is a highly significant J-shaped curve with the largest benefits accruing to those who drink about four times a week. Moderate alcohol use unambiguously improves perceived health, and while it leads to slightly higher cancer probabilities, the detrimental effect of cancer on health is the smallest of the four diseases considered here. The real villains are diabetes and coronary heart disease, but these two diseases are the most likely to be prevented by regular drinking.

Table 1

Age and Gender Adjusted Odds For Cancer, Diabetes, Coronary Heart Disease, and Stroke For Males and Females over 50.

Days	Cancer	Diab.	CHD	Stroke
0	1.00	1.00	1.00	1.00
1	0.95	0.69	0.95	0.81
2	0.94	0.49	0.92	0.69
3	0.96	0.38	0.89	0.62
4	0.98	0.34	0.88	0.60
5	1.01	0.32	0.87	0.61
6	1.06	0.33	0.86	0.67
7	1.11	0.37	0.87	0.78

Table notes. Sample size = 221561. The entries in the table are averages of pj(n)/pj(0) where pj(n) is the probability of having disease j given n days per week of alcohol consumption. Data source: BRFSS 2022.

These results are based on recent US data, however, similar results were obtained using the Canadian Community Health Survey for 2017-18. The only difference was that cancer responded positively to alcohol use. See McIntosh (2017). In Table 1, both genders are pooled, however; there are no significant differences between males and females in their response to alcohol consumption. It should also be noted that within the literature on cancer mortality two competing risk studies, Baer et al. (2011) and Bergmann (2013), found beneficial effects due to moderate alcohol consumption.

The overwhelming conclusion that can be drawn from this table is that alcohol consumption is beneficial to individual health. The Pearson message, representing the views of the anti-alcohol lobby, is that even low levels of alcohol consumption are, on balance, harmful. This is a gross distortion of the truth. Table 1 confirms this. Additionally, one of the papers she cites computes years of life lost to cancer deaths which are attributed to alcohol use but does not include years of life gained from the lower death rates from cardiovascular diseases due to alcohol consumption. This is bad science and produces unreliable results.

References

Bagnardi, V., Rota, M., Botteri, E., Tramacere, I., Islami, F., Fedirko, V., Scotti, L., et al. (2015). Alcohol consumption and site-specific cancer risk: a comprehensive dose-response meta-analysis. Br J Cancer, 112(3), 580–593. doi.org/10.1038/bjc.2014.579

Baer, H.J., Glynn, R.J., Hu, F.B., Hankinson, S.E., Willett, W.C., Colditz, G.A., Stampfer, M., & Rosner, B. (2011) Risk factors for mortality in the nurses' health study: a competing risks analysis. Am J Epidemiol, 173(3):319-29. doi.org/10.1093/aje/kwq368

Barstad, B., Sørensen, T.I., Tjønneland, A., Johansen, D., Becker, U., Andersen, I.B., & Grønbaek M. (2005) Intake of wine, beer and spirits and risk of gastric cancer. Eur J Cancer Prev, 14(3), 239-43.

Bergmann, M.M., Rehm, J., Klipstein-Grobusch, K., Boeing, H., Schütze, M., Drogan, D., Overvad, K., et al. (2013) The association of pattern of lifetime alcohol use and cause of death in the European prospective investigation into cancer and nutrition (EPIC) study. Int J Epidemiol. 42(6):1772-90. doi.org/10.1093/ije/dyt154

Bessaoud, F., & Daurès, J.P. (2008) Patterns of alcohol (especially wine) consumption and breast cancer risk: a case-control study among a population in Southern France. Ann Epidemiol, 18(6), 467-75.

Brenner, D.R., Fehringer, G., Zhang, Z.F., Lee, Y.A., Meyers, T., Matsuo, K., Ito, H., et al. (2019). Alcohol consumption and lung cancer risk: A pooled analysis from the International Lung Cancer Consortium and the SYNERGY study. Cancer Epidemiol, 58:25-32.

Breslow, R.A., Graubard, B.I. (2008) Prospective study of alcohol consumption in the United States: quantity, frequency, and cause-specific mortality. Alcohol Clin Exp Res, 32, 513-21

Bryazka, D., Reitsma, M. B., Griswold, M. G., Abate, K. H., Abbafati, C., Abbasi-Kangevari, M., Abbasi-Kangevari, Z., et al. (2022). Population-level risks of alcohol consumption by amount, geography, age, sex, and year: a systematic analysis for the Global Burden of Disease Study 2020. Lancet (London, England), 400(10347), 185–235. doi.org/10.1016/S0140-6736(22)00847-9

Center For Disease Control. (2022) Behavioural Risk Factor Surveillance System.

Chan, A.M., von Mühlen, D., Kritz-Silverstein, D., & Barrett-Connor, E. (2009) Regular alcohol consumption is associated with increasing quality of life and mood in older men and women: the Rancho Bernardo Study. Maturitas, 62(3):294-300. doi.org/10.1016/j.maturitas.2009.01.005

Chao, C., Slezak, J.M., Caan, B.J, & Quinn, V.P. (2008) Alcoholic beverage intake and risk of lung cancer: the California Men's Health Study. Cancer Epidemiol Biomarkers Prev, 17(10):2692-99.

Chiu, B.C., Cerhan, J.R., Gapstur, S.M., Sellers, T.A., Zheng, W., Lutz, C.T., Wallace, R.B., & Potter, J.D. (1999) Alcohol consumption and non-Hodgkin lymphoma in a cohort of older women. Br J Cancer, 80(9), 1476-82.

Chong, B., Jayabaskaran, J., Jauhari, S.M., Chan, S.P., Goh, R., Kueh, M.T.W., Li, H., et al. (2024) Global burden of cardiovascular diseases: projections from 2025 to 2050. Eur J Prev Cardiol. doi.org/10.1093/eurjpc/zwae281

Crockett, S.D., Long, M.D., Dellon, E.S., Martin, C.F., Galanko, J.A., & Sandler, R.S. (2011) Inverse relationship between moderate alcohol intake and rectal cancer: analysis of the North Carolina Colon Cancer Study. Dis Colon Rectum, 54(7), 887-94.

Downer, M.K., Kenfield, S.A., Stampfer, M.J., Wilson, K.M., Dickerman, B.A., Giovannucci, E.L., Rimm, E.B., et al. (2019) Alcohol Intake and Risk of Lethal Prostate Cancer in the Health Professionals Follow-Up Study. J Clin Oncol, 37(17), 1499-1511.

Gapstur, S.M., Diver, W.R., McCullough, M.L., Teras, L.R., Thun, M.J., & Patel, A.V. (2012) Alcohol intake and the incidence of non-hodgkin lymphoid neoplasms in the cancer prevention study II nutrition cohort. Am J Epidemiol, 176(1), 60-69.

GBD 2016 Alcohol Collaborators (2018) Alcohol use and burden for 195 countries and territories, 1990–2016: a systematic analysis for the Global Burden of Disease Study 2016. Lancet, 392,1015-35.

Graff-Iversen, S., Jansen, M.D., Hoff, D.A., Høiseth, G., Knudsenm G.P., Magnus, P., Mørland, J., et al. (2013) Divergent associations of drinking frequency and binge consumption of alcohol with mortality within the same cohort. J Epidemiol Community Health, 67(4), 350-57.

Griswold, M., & Gakidou, E., GBD 2016 Alcohol Collaborators (2019) Alcohol and the global burden of disease - Authors' reply. Lancet, 15393(10189):2391-92.

Hernandez, J.B.R., & Kim, P.Y. (2025) Epidemiology morbidity and mortality. [Updated 2022 Oct 3]. In: StatPearls [Internet]. Treasure Island (FL): StatPearls Publishing; 2025 Jan. ncbi.nlm.nih.gov/books/NBK547668/

Hill, A.S. (1965) The environment and disease: association and causation? Proceedings of the Royal Society of Medicine, 58(5), 295-300.

Hong, S.H., Myung, S.K., Kim, H.S., Korean Meta-Analysis (KORMA) Study Group. (2017) Alcohol intake and risk of thyroid cancer: A meta-analysis of observational studies. Cancer Res Treat, 49(2), 534-47.

Hydes, T.J., Burton, R., Inskip, H., Bellis, M.A., & Sheron, N. (2019) A comparison of gender-linked population cancer risks between alcohol and tobacco: how many cigarettes are there in a bottle of wine? BMC Public Health, doi.org/10.1186/s12889-019-6576-9

International Agency for Research on Cancer. (2012) Personal habits and indoor combustions. Volume 100E. IARC monographs on the evaluation of carcinogenic risks to humans. Lyon: IARC, 2012.

International Agency for Research on Cancer (1988) Alcohol Drinking IARC Monographs on the Evaluation of the Carcinogenic Risks to Humans. Lyon: IARC, 2012

Ingold, N., Amin, A., Drenos, F. (2019) Alcohol causes an increased risk of head and neck but not breast cancer in individuals from the UK Biobank study. medRxiv, doi.org/10.1101/19002832

Ji, J., Sundquist, J., & Sundquist, K. (2014) Alcohol consumption has a protective effect against hematological malignancies: a population-based study in Sweden including 420,489 individuals with alcohol use disorders. Neoplasia, 16(3), 229-34, 234.e1. doi.org/10.1016/j.neo.2014.03.003.

Klatsky, AL. (2002) Alcohol and cardiovascular disease. A historical overview. Ann NY Acad Sci, 957, 7-15.

Klatsky, A.L., Gunderson, E.P., Kipp, H., Udaltsova, N., & Friedman, G.D. (2006) Higher prevalence of systemic hypertension among moderate alcohol drinkers: An exploration of the role of underreporting. J Studies Alcohol, 67(3), 421-28. doi.org/10.15288/jsa.2006.67.421.

Klatsky, A.L. & Udaltsova, N. (2013) Commentaries. Addiction, 108: 1549-52. doi.org/10.1111/add.12157

Klatsky, A.L., Udaltsova, N., Li, Y., Baer, D., Tran, N.H., & Friedman, G.D. (2014) Moderate alcohol intake and cancer: the role of underreporting. Cancer Causes Control, 25(6), 693-9. doi.org/10.1007/s10552-014-0372-8.

Lee, J.E., Hunter, D.J., Spiegelman, D., Adami, H.O., Albanes, D., Bernstein, L., van den Brandt, P.A., et al. (2007). Alcohol intake and renal cell cancer in a pooled analysis of 12 prospective studies. J Natl Cancer Inst, 99(10), 801-10.

Li, X., Hur, J., Smith-Warner, S. A., Song, M., Liang, L., Mukamal, K. J., Rimm, E. B., & Giovannucci, E. L. (2025). Alcohol intake, drinking pattern, and risk of type 2 diabetes in three prospective cohorts of US women and men. Diabetes Care. doi.org/10.2337/dc24-1902

Li, Y., Pan, A., Wang, D.D., Liu, X., Dhana, K., Franco, O.H., Kaptoge, S., et al. (2018) Impact of Healthy Lifestyle Factors on Life Expectancies in the US Population. Circulation, 138(4), 345-55.

Mahler, L., Sebo, P., Favrod-Coune, T., Moussa, A., Cohidon, C., & Broers, B. (2022) The prevalence of five lifestyle risk factors in primary care physicians: A cross-sectional study in Switzerland. Prev Med Rep, 26, 101740.

McIntosh, J. (2017) Alcohol and Canadian health. Global J Health Sci, 9(5). doi.org/10.5539/gjhs.v9n5p96

Meinhold, C.L., Park, Y., Stolzenberg-Solomon, R.Z., Hollenbeck, A.R., Schatzkin, A., Berrington, de., & Gonzalez, A. (2009) Alcohol intake and risk of thyroid cancer in the NIH-AARP Diet and Health Study. Br J Cancer, 101(9), 1630-34.

Morton, LM., Zheng, T., Holford, T.R., Holly, E.A., Chiu, B.C., Costantini, A.S., Stagnaro, E., … & InterLymph Consortium. (2005) Alcohol consumption and risk of non-Hodgkin lymphoma: a pooled analysis. Lancet Oncol, 6(7):469-76.

Mostofsky, E., Chahal, H. S., Mukamal, K. J., Rimm, E. B., & Mittleman, M. A. (2016). Alcohol and immediate risk of cardiovascular events: a systematic review and dose-response meta-analysis. Circulation, 133(10), 979–987. doi.org/10.1161/circulationaha.115.019743

National Academies of Sciences, Engineering, and M. (NASEM). (2025). Review of Evidence on Alcohol and Health. The National Academies Press. Washington, DC., 1–254.

Newcomb, P.A., Nichols, H.B., Beasley, J.M., Egan, K., Titus-Ernstoff, L., Hampton, J.M., & Trentham-Dietz, A. (2009) No difference between red wine or white wine consumption and breast cancer risk. Cancer Epidemiol Biomarkers Prev, 18(3), 1007-10. doi.org/10.1158/1055-9965.EPI-08-0801. Erratum in: Cancer Epidemiol Biomarkers Prev. 2009 May;18(5):1667.

Paradis, C., Butt, P., Shield, K., Poole, N., Wells, S., Naimi, T., Sherk, A., & the Low-Risk Alcohol Drinking Guidelines Scientific Expert Panels. (2023). Canada's Guidance on Alcohol and Health: Final Report. Ottawa, Ont.: Canadian Centre on Substance Use and Addiction.

Park, J.Y., Mitrou, P.N., Dahm, C.C., Luben, R.N., Wareham, N.J., Khaw, K.T., & Rodwell, S.A. (2009) Baseline alcohol consumption, type of alcoholic beverage and risk of colorectal cancer in the European Prospective Investigation into Cancer and Nutrition-Norfolk study. Cancer Epidemiol, 33(5), 347-54.

Pearson, H. (2025). Alcohol and cancer risk: what you need to know. In Nature (Vol. 639, Issue 8054, pp. 290–292). doi.org/10.1038/d41586-025-00729-5

Plunk, A.D., Syed-Mohammed, H., Cavazos-Rehg, P., Bierut, L.J., Grucza, R.A. (2014) Alcohol consumption, heavy drinking, and mortality: rethinking the j-shaped curve Alcohol Clin Exp Res, 38, 471-78.

Psaltopoulou, T., Sergentanis, T.N., Sergentanis, I.N., Karadimitris, A., Terpos, E., & Dimopoulos, M.A. (2015) Alcohol intake, alcoholic beverage type and multiple myeloma risk: a meta-analysis of 26 observational studies. Leuk Lymphoma, 56(5), 1484-501.

Richard, E.L., Kritz-Silverstein, D., Laughlin, G.A., Fung, T.T., Barrett-Connor, E., & McEvoy, L.K. (2017) Alcohol intake and cognitively healthy longevity in community-dwelling adults: The Rancho Bernardo Study. J Alzheimer's Dis, 59(3), 803-14. doi.org/10.3233/JAD-161153.

Roerecke, M., & Rehm, J. (2014) Alcohol consumption, drinking patterns, and ischaemic heart disease: a narrative review of meta-analyses and a systematic review and meta-analysis of the impact of heavy drinking occasions on risk for moderate drinkers, BMC Medicine, 12, 182.

Sarich, P., Canfell, K., Egger, S., Banks, E., Joshy, G., Grogan, P., & Weber, M. F. (2021). Alcohol consumption, drinking patterns and cancer incidence in an Australian cohort of 226,162 participants aged 45 years and over. Br J Cancer, 124(2), 513–23. doi.org/10.1038/s41416-020-01101-2

Schoonen, W.M., Salinas, C.A., Kiemeney, L.A., & Stanford, J.L. (2005) Alcohol consumption and risk of prostate cancer in middle-aged men. Int J Cancer, 113(1), 133-40.

Song, D. Y., Song, S., Song, Y., & Lee, J. E. (2012). Alcohol intake and renal cell cancer risk: a meta-analysis. British Journal of Cancer, 106(11), 1881–90. doi.org/10.1038/bjc.2012.136

Substance Abuse and Mental Health Services Administration (US); Office of the Surgeon General (US). Facing Addiction in America: The Surgeon General's Report on Alcohol, Drugs, and Health [Internet]. Washington (DC): US Department of Health and Human Services; 2016 Nov.

Teissedre, P.-L., Rasines-Perea, Z., Ruf, J.-C., Stockley, C., Antoce, A.O., Romano, R., Fradera, U., & Kosti, R.I. (2020) Effects of alcohol consumption in general, and wine in particular, on the risk of cancer development: a review. OENO One, 4, 813-32. doi.org/10.20870/oeno-one.2020.54.4.3569

Teissedre, P.-L., Stockley, C., Boban, M., Gambert, P., Alba, M.O., Flesh, M., & Ruf, J.-C. (2018) The effects of wine consumption on cardiovascular disease and associated risk factors: a narrative review. OENO One, 52, 2, 67-79. doi.org/10.20870/oeno-one.2018.52.1.2129

U.S. Surgeon General. (2025). Alcohol and cancer risk. https://www.hhs.gov/surgeongeneral/reports-and-publications/alcohol-cancer/index.html

World Health Organization (2015) Cancer Prevention. who.int/cancer/prevention/en/

Yuan, H.C., Yu, Q.T., Bai, H., Xu, H.Z., Gu, P., & Chen, L.Y. (2021) Alcohol intake and the risk of chronic kidney disease: results from a systematic review and dose-response meta-analysis. Eur J Clin Nutr, 75(11), 1555-67.

Zarezadeh, M., Mahmoudinezhad, M., Faghfouri, A. H., Mohammadzadeh Honarvar, N., Regestein, Q. R., Papatheodorou, S. I., Mekary, R. A., & Willett, W. C. (2024). Alcohol consumption in relation to cognitive dysfunction and dementia: A systematic review and dose-response meta-analysis of comparative longitudinal studies. Ageing Res Rev, 100, 102419. doi.org/10.1016/j.arr.2024.102419

Comments on this critique by the International Scientific Forum on Alcohol Research were provided by the following members:

Henk Hendriks, PhD, The Netherlands

Creina Stockley, PhD, MBA, Independent consultant and Adjunct Senior Lecturer in the School of Agriculture, Food and Wine at the University of Adelaide, Australia

Fulvio Ursini, Emeritus Professor of Biochemistry, University of Padova, Padova, Italy

Erik Skovenborg, MD, specialized in family medicine, member of the Scandinavian Medical Alcohol Board, Aarhus, Denmark

R. Curtis Ellison, MD, Section of Preventive Medicine/Epidemiology, Boston University School of Medicine, Boston, MA, USA

Pierre-Louis Teissedre, PhD, Faculty of Oenology–ISVV, University Victor Segalen Bordeaux 2, Bordeaux, France

Andrew Waterhouse, PhD, Department of Viticulture and Enology, University of California, Davis.

Luc Djoussé, MD, DSc, Dept. of Medicine, Division of Aging, Brigham & Women's Hospital and Harvard Medical School, Boston, MA, USA

Tedd Goldfinger, DO, FACC, Desert Cardiology of Tucson Heart Center, University of Arizona School of Medicine, Tucson, AZ, USA

Richard Harding, PhD, Formerly Head of Consumer Choice, Food Standards and Special Projects Division, Food Standards Agency, UK

James McIntosh, PhD, Retired Professor of Economics, Concordia University, Montreal, Canada

Matilda Parente, MD, consultant in molecular pathology/genetics and emerging technologies, San Diego, CA, USA

Fulvio Mattivi, MSc, Scientific Advisor, Research and Innovation Centre, Fondazione Edmund Mach, in San Michele all'Adige, Italy

Ramon Estruch, MD, PhD. Associate Professor of Medicine, University of Barcelona, Spain

Giovanni de Gaetano, MD, PhD, Department of Epidemiology and Prevention, IRCCS Istituto Neurologico Mediterraneo NEUROMED, Pozzilli, Italy

Associations of moderate alcohol intake with cerebrospinal fluid biomarkers of Alzheimer's disease: data from the ALBION study

The relationship between alcohol consumption and Alzheimer's disease (AD) pathology remains unclear. A study examined whether the frequency and patterns of alcohol consumption could predict neurodegeneration biomarkers in a cohort of middle-aged adults without dementia.

A total of 195 participants without dementia were included from the ALBION study. Multivariate logistic regression analyses were conducted using drinking frequency subgroups (abstainers, occasional drinkers, and light-to-moderate drinkers) and Mediterranean-Alcohol Dietary Pattern (MADP) adherence subgroups along with cerebrospinal fluid (CSF) AD biomarkers (Tau, phosphorylated tau (PTau) and amyloid beta (Aβ). In these analyses, the abstinence was used as the reference category.

Of the 195 individuals without dementia, 66% were female, with an average age of 65 ± 9.4 years, and they had 13.8 ± 3.6 years of education. The study found that light-to-moderate drinkers (n = 51) were associated with higher Aβ positivity [OR: 2.98 (1.29-6.90)] compared to the abstinence (n = 117). Additionally, high adherence to the MADP was significantly associated with higher Aβ, Tau/Aβ42, and PTau/Aβ42 ratios positivity compared to the abstinence.

Light-to-moderate alcohol intake was associated with higher Aβ deposition in middle-aged individuals without dementia, compared to abstinence. High adherence to the MADP, which indicates low-to-moderate red wine consumption distributing over the week with meals, was associated with a higher Aβ and Tau/Aβ and PTau/Aβ positivity. Therefore, the management of alcohol consumption may help improve AD outcomes even at the preclinical stage.

Source: Drouka, A., Ntetsika, KD., Brikou, D. et al. Associations of moderate alcohol intake with cerebrospinal fluid biomarkers of Alzheimer's disease: data from the ALBION study. Eur J Nutr 64, 142 (2025). doi.org/10.1007/s00394-025-03651-8

Cumulative associations between health behaviours, mental well-being, and health over 30 years

Both the number of risky health behaviours and the duration of exposure to these behaviours over time may increase the risk of later adverse outcomes. Researchers examined cumulative associations of risky health behaviours with both positive and negative aspects of mental well-being and health. Their study has a uniquely long follow-up period of over 30 years, from early adulthood to the beginning of late adulthood.

The data were from the Jyväskylä Longitudinal Study of Personality and Social Development. The participants represent the Finnish age cohort born in 1959. This study utilized data collected at ages 27 (1986), 36 (1995), 42 (2001), 50 (2009), and 61 (2020–2021). Risk scores indicating the current number of risky behaviours of smoking, heavy alcohol consumption, and physical inactivity and their temporal accumulation over time were calculated. The associations of risk scores with mental well-being (depressive symptoms, psychological well-being) and health (self-rated health, number of metabolic risk factors) from age 36 onwards were analysed, adjusted for gender and education.

More current risky behaviours were associated with more depressive symptoms (B = 0.10), lower psychological well-being (B = -0.10), lower self-rated health (B = -0.45), and more metabolic risk factors (B = 0.53). The associations of temporal risk scores with the outcomes were even stronger (depressive symptoms: B = 0.38; psychological well-being: B = -0.15,; self-rated health: B = -0.82; metabolic risk factors: B = 1.49). Among individual behaviours, the temporal risk score of alcohol consumption was negatively associated with most outcomes, while smoking was associated with poorer mental well-being and physical inactivity with poorer health.

The current and temporal accumulation of multiple risky health behaviours were associated with poorer mental well-being and health. Preventing these behaviours early in adulthood and midlife is crucial to avoid their accumulation and subsequent health risks.

Source: Tiia Kekäläinen, Johanna Ahola, Emmi Reinilä, Tiina Savikangas, Marja-Liisa Kinnunen, Tuuli Pitkänen & Katja KokkoCumulative associations between health behaviours, mental well-being, and health over 30 years. Annals of Medicine (2025). doi.org/10.1080/07853890.2025.2479233

Association between alcohol consumption, cognitive abilities, and neuropathologic changes

The long-term impact of excessive alcohol consumption on cognitive abilities and dementia-related neuropathology is unclear. A study analysed the association between alcohol consumption and age-related neuropathologic outcomes in a population-based autopsy study.

The cross-sectional study used data from the Biobank for Aging Studies, classifying participants as never, moderate, heavy, or former drinkers. Alzheimer disease pathology (neuritic plaques, amyloid deposition, and neurofibrillary tangles), Lewy body pathology, transactive DNA-binding protein 43, lacunar infarcts, hyaline arteriolosclerosis, and cerebral amyloid angiopathy were evaluated. Cognitive abilities were rated using the Clinical Dementia Rating Scale Sum of Boxes, and the brain mass ratio was calculated by dividing the brain weight by the participant's height. Family members answered questions about participants' alcohol consumption. The associations between alcohol consumption and neuropathology were analysed and the direct and indirect effects of alcohol on cognition through neuropathologic lesions were evaluated.

1,781 participants were included in the study (mean age 74.9 ± 12.5 years, mean education 4.8 ± 4.0 years, 49.6% women, and 64.1% White). Compared with participants who never consumed alcohol, moderate (odds ratio [OR] 1.60, 95% CI 1.19-2.15), heavy (OR 2.33, 95% CI 1.50-3.63), and former heavy (OR 1.89, 95% CI 1.41-2.54) alcohol consumptions were associated with hyaline arteriolosclerosis while only heavy (OR 1.41, 95% CI 1.10-2.30) and former heavy (OR 1.31, 95% CI 1.02-1.68) alcohol consumptions were associated with neurofibrillary tangles. Former heavy drinking was associated with a lower brain mass ratio (β -4.45, 95% CI -8.55 to -0.35) and worse cognitive abilities (β 1.31, 95% CI 0.54-2.09). The association between impaired cognitive abilities and alcohol consumption was fully mediated by hyaline arteriolosclerosis (β 0.13, 95% CI 0.02-0.22).

Moderate, heavy, and former heavy alcohol consumptions were associated with hyaline arteriolosclerosis and neurofibrillary tangles. Former heavy alcohol consumption was associated with reduced brain mass and cognitive abilities. The association between alcohol and cognitive abilities was fully mediated by hyaline arteriolosclerosis. The authors say that the lack of longitudinal data on alcohol consumption duration restricts the interpretation of the study's findings.

Source: Justo AFO, Paradela R, Gomes Goncalves N, Ribeiro Paes V, Leite REP, Nitrini R, Pasqualucci CA, Ferriolli E, Grinberg LT, Suemoto CK. Association Between Alcohol Consumption, Cognitive Abilities, and Neuropathologic Changes: A Population-Based Autopsy Study. Neurology. 2025 May 13;104(9):e213555. doi.org/10.1212/WNL.0000000000213555

Study finds no direct link between heavy alcohol consumption and dilated cardiomyopathy

A recent study conducted by researchers at The Ohio State University Wexner Medical Center and College of Medicine has found that heavy alcohol consumption does not directly cause dilated cardiomyopathy (DCM), a genetic heart muscle disorder. The study was published in Circulation: Genomic and Precision Medicine.

DCM is characterised by a weakening of the heart muscle and an enlarged left ventricle. It is the leading reason for heart transplants and accounts for roughly half of heart failure cases linked to left ventricular dysfunction. Previous data suggest that approximately 1 in 250 Americans are affected by this condition.

The study examined 1,188 individuals diagnosed with DCM and 1,407 of their first-degree relatives—including children, parents, and siblings. Researchers assessed alcohol use through surveys and analysed genetic data for rare variants associated with DCM.

Despite one-third of participants reporting moderate to heavy alcohol consumption, the study found no direct correlation between alcohol use and DCM. Instead, the presence of specific rare genetic variants was significantly associated with the development of the condition. Alcohol, in contrast, did not appear to play a causal role.

Source: Javier Jimenez et al., Alcohol Exposure Among Patients With Dilated Cardiomyopathy and Their First-Degree Relatives: The DCM Precision Medicine Study, Circulation: Genomic and Precision Medicine (2025). doi.org/10.1161/CIRCGEN.124.004946

Problem drinking and comorbidity with mental ill health

Problem drinking in healthcare workers is highly relevant to study as it could result in personal suffering, as well as inefficiencies in health service delivery. A study investigated the prevalence of nondrinking, drinking, and problem drinking and explored the comorbidity between drinking alcohol and mental illness (burnout and depression) among healthcare workers in Sweden

The cross-sectional study used data from the 2022 Longitudinal Occupational Health survey in Healthcare Sweden of physicians, nurses, and nurse assistants in Sweden (N = 5966). Measures include levels of alcohol use assessed by the Cut, Annoyed, Guilty, and Eye Opener questionnaire, the 12-item Burnout Assessment Tool, and the Symptom CheckList–Core Depression. The likelihood of reporting nondrinking and problem drinking compared to drinking was assessed.

The prevalence of problem drinking among Swedish healthcare workers was 3.7%. Only sex differences were observed for those with a problem drinking, with male nurses and nurse assistants being more likely to report problem drinking. Comorbidity was found between problem drinking and depression but not between problem drinking and burnout.

This study demonstrated that ~3.7% of Swedish healthcare workers had problem drinking and that those also had a higher likelihood of reporting depression but not burnout. Results contribute to new knowledge about the use of alcohol and comorbidities with depression and burnout among healthcare workers in Sweden. Findings could benefit employers in implementing preventive and tailored strategies to preserve the psychosocial well-being of healthcare workers.

Source: Josefina Peláez-Zuberbuhler, Emelie Thern, Håvard R Karlsen, Siw Tone Innstrand, Marit Christensen, Bodil J Landstad, Devy L Elling, Malin Sjöström, Emma Brulin, Problem drinking and comorbidity with mental ill health: a cross-sectional study among healthcare workers in Sweden, Alcohol and Alcoholism, Volume 60, Issue 3, May 2025, doi.org/10.1093/alcalc/agaf016

Global, regional, and national burdens of alcohol-related cirrhosis among women from 1992 to 2021 and its predictions

A study published online in Scientific Reports provides a comprehensive analysis of the global, regional, and national burden of Alcohol-Related Cirrhosis in women from 1992 to 2021, addressing a research gap by focusing on long-term trends specific to women.

Zhou Zhang, from the Hubei University of Medicine in Xiangyang, China, and colleagues used data from the Global Burden of Disease 2021 database to assess trends in age-standardized incidence rates, mortality rates, and disability-adjusted life-years (DALYs) for Alcohol-Related Cirrhosis for women in 204 countries. The estimated annual percentage change (EAPC) method was used to examine temporal trends, and future projections were generated to 2030.

The researchers found that the global age-standardized incidence rates of Alcohol-Related Cirrhosis in women showed a slight decrease between 1992 and 2021, from 3.10 to 2.42 per 100,000 (EAPC, −1.02). There was significant variation across Socio Demographic Index (SDI) regions; in 2021, the highest Alcohol-Related Cirrhosis was in low SDI regions (3.77 per 100,000). There was a global decline noted in mortality and DALYs, but they remained disproportionately high in lower SDI regions. Distinct gender-specific trends were seen, with a marked increase in Alcohol-Related Cirrhosis burden in older age groups. A further decline in Alcohol-Related Cirrhosis burden is predicted by 2030.

The findings highlight both global progress and persistent regional disparities in the burden of Alcohol-Related Cirrhosis among women. Targeted public health interventions, particularly in lower-SDI regions, are essential to address the ongoing burden of this preventable disease.

Source: Zhou Zhang et al, Global, regional, and national burdens of alcohol-related cirrhosis among women from 1992 to 2021 and its predictions, Scientific Reports (2025). doi.org/10.1038/s41598-025-95563-0

Association between type of alcoholic beverage and all-cause mortality. A population-based prospective study

Evidence on the differential relationship between type of alcoholic beverage consumed and mortality remains inconclusive. A paper in the journal, Public Health, evaluated the association between consumption of various alcoholic beverages and all-cause mortality in the Spanish adult population.

The population-based cohort study included 16,130 weekly alcohol drinkers aged ≥15 years who participated in the 2011 Spanish Health Survey or the 2014 European Health Survey in Spain. Data of the participants was linked to mortality data up to December 2022, with a median follow-up time of 8.4 years. A preference for wine, beer, or spirits was defined when more than 50% of alcohol intake was obtained from such beverage. Additionally, total alcohol intake for each beverage type was categorised into four groups: 0 g/day, >0–10, >10–20, >20g/day. Hazard Ratios (HR) were estimated adjusted for sociodemographic factors, lifestyle, health status, alcohol volume intake, and heavy episodic drinking.

Compared to individuals without a beverage preference, the HR (95 % CI) for mortality among those with preference for wine, beer or spirits was 1.09 (0.88–1.35), 1.22 (0.96–1.54), and 1.16 (0.82–1.65), respectively. Among low-risk drinkers (>0–20g/day), those with a preference for beer showed a higher mortality (HR: 1.35 (1.01–1.81)). Compared to participants with zero intake of wine, beer or spirits, those in the highest consumption category (>20g/day) showed no significant differences in mortality by beverage preference.

Preference for wine, beer, or spirits did not show a consistently differential impact on the association between alcohol consumption and all-cause mortality.

Source: Julia Fontán-Vela, Cristina Ortiz, Teresa López-Cuadrado, María Téllez-Plaza, Esther García-Esquinas, Rosario Ortolá, Fernando Rodríguez-Artalejo, Iñaki Galán, Association between type of alcoholic beverage and all-cause mortality. A population-based prospective study, Public Health, Volume 243, 2025, doi.org/10.1016/j.puhe.2025.105728

Associations of alcohol with the human gut microbiome and prospective health outcomes in the FINRISK 2002 cohort

Alcohol remains a global risk factor for non-communicable diseases with the gut microbiome emerging as a novel elucidator. A study published in the European journal of Nutrition investigated how the gut microbiome associates with alcohol on a population level, if there is mediation reflected in health outcomes, and how functional potential is related.

The study sample consisted of 4,575 shallow-shotgun sequenced faecal samples from the FINRISK 2002 cohort (25-74yrs., 52.5% women). Alcohol use was self-reported. Diversity and differential species abundances were analysed and compositional differences were examined. Connections between alcohol, microbiome, inflammatory markers, and outcomes were assessed.

High-risk alcohol consumers had significantly lower bacterial diversity when compared to low-risk consumers (mean±SD: 4.04±0.41 vs. 4.11±0.43). Alcohol also associated with significant shifts in overall composition and differential abundances of 344 species. These shifts were characterised by an increase in relative abundances of Gram-negative bacteria, the top genera of which were Bacteroides and Prevotella, and a decrease in putatively beneficial species in genera such as Lactobacillus, Bifidobacterium, and Akkermansia. Prospective associations with all-cause mortality (HR:1.12 [1.02—1.23]), and liver disease (HR:1.53 [1.22—1.92]) were observed.

The authors conclude that alcohol use is associated with community-level shifts in composition towards enriched Gram-negative bacteria, and diminished levels of putatively beneficial bacteria. Alcohol use associates with a proinflammatory gut microbiome profile that mediates alcohol's effect on incident liver disease risk, possibly via increased proliferation of endotoxins through the gut epithelial lining.

Source: Koponen, K., McDonald, D., Jousilahti, P. et al. Associations of alcohol with the human gut microbiome and prospective health outcomes in the FINRISK 2002 cohort. Eur J Nutr 64, 153 (2025). doi.org/10.1007/s00394-025-03668-z

Global, regional, and national burden of liver cancer due to alcohol use, 1990-2021: results from the Global Burden of Disease study 2021

Liver cancer is a major global health burden, with alcohol use being a well-established risk factor. Researchers analysed the global, regional, and national incidence, prevalence, mortality, and disability-adjusted life years (DALYs) attributable to liver cancer due to alcohol use from 1990 to 2021.

Data on liver cancer due to alcohol use were collected from the 2021 Global Burden of Disease (GBD) study. The changing trend of liver cancer among alcohol users was described. In addition, a hierarchical cluster analysis was employed to study the evolving patterns across diverse GBD regions and conducted a frontier analysis to explore the nexus between the burden and sociodemographic progress.

In 2021, alcohol-related liver cancer globally accounted for 99,544 incidence cases, 132,033 prevalence cases, 92,228 death cases, and 2,316,027 DALYs cases. Males and middle-aged adults emerged as high-risk populations, while regions with a higher sociodemographic index (SDI) were identified as high-risk areas. From 1990 to 2021, both the number of cases and age-standardised rates increased.

The frontier analysis revealed unattained health gains between 1990 and 2021, highlighting disparities in disease burden among countries with varying SDI levels. This analysis further demonstrated an inverse correlation between SDI and alcohol-related liver cancer age-standardized rates, with the age-standardized rates stabilizing once the SDI exceeded 0.40.

The researchers say that alcohol use is a significant contributor to the global burden of liver cancer. Comprehensive policies and interventions targeting alcohol use are needed to reduce the burden of alcohol-related liver cancer.

Source: Wang Q, Jia W, Liu J, Zhao Q, Yang Z. Global, regional, and national burden of liver cancer due to alcohol use, 1990-2021: results from the Global Burden of Disease study 2021. Eur J Gastroenterol Hepatol. 2025 Apr 1;37(4):466-476. doi.org/10.1097/MEG.0000000000002899

Mortality of gastrointestinal cancers attributable to smoking, alcohol, and metabolic risk factors, and its association with socioeconomic development status 2000-2021

Gastrointestinal (GI) cancers account for one-third of global cancer mortality, with nearly half being preventable. This study updates the global burden of GI cancers attributed to major risk factors.

Data from the Global Burden of Disease Study 2021 was used to examine trends in death and age-standardized death rates related to GI cancers caused by smoking, alcohol, high body mass index (BMI), and high fasting blood glucose (FBG) from 2000 to 2021. Trends were analysed based on countries' developmental status using a sociodemographic index (SDI).

In 2021, there were 1.12 million GI cancer deaths related to smoking, alcohol, high BMI, and high FBG, which was 53.6% higher than in 2000. The largest proportion of GI cancer mortality was attributed to smoking (43.3%), followed by alcohol (20.6%), high FBG (20.5%), and high BMI (15.6%). The increases in GI cancer deaths between 2000 and 2021 were related to high BMI (+102.54%) and FBG (+107.69%), particularly in liver and pancreatic cancer. In 2021, GI cancer mortality in low, low-middle, and middle SDI countries represented 44.3% of the global GI cancer mortality attributed to smoking, 41.9% for alcohol, 34.3% for high BMI, and 31.6% for high FBG. Since 2000, these proportions have increased by +4.5% for smoking, +7.6% for alcohol, + 12.3% for high BMI, and +6.4% for high FBG.

From 2000 to 2021, GI cancer mortality increased substantially, driven primarily by obesity and alcohol. Lower SDI countries are increasingly contributing to the global GI cancer burden.

Source: Mortality of Gastrointestinal Cancers Attributable to Smoking, Alcohol, and Metabolic Risk Factors, and its Association With Socioeconomic Development Status 2000-2021. Danpanichkul, Pojsakorn et al. The American Journal of Medicine, Volume 138, Issue 5, 800 - 808.e2. doi.org/10.1016/j.amjmed.2024.12.019

Biases inherent in all-cause mortality studies: implications for shaping the 2025–2030 dietary guidelines for Americans on alcohol consumption

In a commentary, Kevin Shields, Timothy Niami and colleagues argue that the net impact of alcohol on health at low doses depends on the underlying risks of diseases and injuries causally linked to alcohol and thus varies across countries. As such, informing the public about the health risks of alcohol consumption requires country-specific information. The Review of Evidence on Alcohol and Health by the National Academies of Sciences, Engineering, and Medicine (NASEM) aims to inform the 2025–2030 Dietary Guidelines for Americans. The report compares the impact of consuming ≤1 drink/day (≤14 g of ethanol) for women and ≤2 drinks/day (≤28 g of ethanol) for men on all-cause mortality, relative to never consuming alcohol. However, the ability of this analysis to draw conclusions is limited by several factors.

The commentary argues that NASEM all-cause mortality analysis provides little insight how the health of Americans is affected by alcohol consumption at or near the 2020–2025 Dietary Guidelines upper threshold of 2 drinks/day for men and 1 drink/day for women. Moreover, due to the inherent limitations of all-cause mortality analysis, such analyses should not be used to guide alcohol and health recommendations. Instead, cause-specific approaches that model the health impact of alcohol consumption based on specific causes of death should be prioritised.

Source: Shield K, Keyes K, Martinez P, Milam AJ, Rehm J, Naimi TS. Biases inherent in all-cause mortality studies: implications for shaping the 2025-2030 dietary guidelines for Americans on alcohol consumption. Lancet Reg Health Am. 2025 Apr 4;46:101083. doi.org/10.1016/j.lana.2025.101083

Modifiable risk factors and attributable burden of cardiac arrest

Researchers aimed to identify nonclinical modifiable risk factors associated with sudden cardiac arrest (SCA) incidence, and to assess attributable burden.

Data on 125 potentially modifiable risk factors were extracted from the UK Biobank cohort. An association study of these risk factors was conducted, followed by validation of significant associations using Mendelian randomization to identify causal relationships. The attributable burden of SCA was evaluated on the basis of improvements in unfavourable profiles. The researchers also evaluated the attributable burden to be eliminated via improvement of unfavourable profiles.

Of 502,094 individuals, 3,147 developed SCA during a median follow-up duration of 13.8 years. SCA was associated with 56 risk factors spanning lifestyles, physical measures, psychosocial factors, socioeconomic status, and the local environment. Mendelian randomization analysis confirmed protective effects associated with 3 factors (i.e., computer use, and higher rates of consumption of champagne and/or white wine and fruit intake) and adverse effects associated with 6 factors (ie, fed-up feelings, greater arm fat mass and percentage, body mass index, systolic blood pressure, and lower education level). Between 40% (conservative elimination) and 63% (thorough elimination) of SCA cases could be prevented by improving unfavourable profiles, with lifestyle modifications accounting for the largest proportion of preventable cases, followed by improvements in physical measures, psychosocial factors, socioeconomic status, and the local environment.

This large-scale, prospective cohort study offers compelling evidence on the profile of modifiable risk factors and the attributable burden of SCA.

Source: Luo, Huihuan et al. Modifiable Risk Factors and Attributable Burden of Cardiac Arrest: An Exposome-wide and Mendelian Randomization Analysis. Canadian Journal of Cardiology, Volume 0, Issue 0. doi.org/10.1016/j.cjca.2025.02.027

Alcohol-attributable cancer: Update from the Global Burden of Disease 2021 Study

Alcohol is a major risk factor for cancer development. A study aimed to provide the updated global, regional and national burden of alcohol-attributable cancer.

Researchers analysed the Global Burden of Disease Study 2021 to determine the death and age-standardised death rate (ASDR) from alcohol-attributable cancer and the change of these measures between 2000 and 2021 (reflected as annual percent change [APC]), classified by region, nation and country's developmental status, which is based on the sociodemographic index (SDI).

In 2021, there were 343,370 deaths globally from alcohol-attributable cancer, which was an increase from 2000 by 51%. Alcohol-attributable cancer accounted for 3.5% of all cancer deaths. Among alcohol-attributable cancer, liver cancer (27%) accounted for the highest mortality from alcohol, followed by oesophageal (24%) and colorectal cancer (16%). From 2000 to 2021, ASDR from alcohol-attributable cancer decreased (APC: -0.66%). Regionally, from 2000 to 2021, the fastest-growing ASDR was observed in South Asia. Classified by SDI, low (APC: 0.33%) and low-to-middle SDI countries (APC: 1.58%) exhibited an uptrend in ASDR from alcohol-attributable cancer. While the ASDR from all other cancers decreased, ASDR from early-onset (15-49 years) lip and oral cavity cancer increased (APC: 0.40%).

From 2000 to 2021, although the ASDR from alcohol-attributable cancer declined, the total number of deaths continued to rise. This trend was accompanied by variations across sociodemographic groups and cancer types, particularly gastrointestinal cancers. Urgent efforts are needed both globally and at regional levels to address the burden of alcohol-attributable cancers.

Source: Danpanichkul, P., Pang, Y., Díaz, L.A., et al., Alcohol-Attributable Cancer: Update From the Global Burden of Disease 2021 Study. Aliment Pharmacol Ther. doi.org/10.1111/apt.70163

Prevalence of Foetal Alcohol Spectrum Disorders: A pilot study in Western Sweden

A pilot study conducted at the University of Gothenburg estimating the prevalence of foetal alcohol spectrum disorders (FASD) in Sweden. The results indicate that birth defects caused by alcohol consumption during pregnancy may be as common in Sweden as in several other European countries.

The study ran at six schools in western Sweden and constituted an add-on to the regular health check-up for all fourth-grade students. The participants underwent a physical examination, review of medical records and psychological tests of memory, attention, and problem-solving ability. Parents and teachers described the children's behavior and school performance, and the mothers were interviewed about their dietary habits and alcohol consumption during pregnancy.

Of the 206 participants examined, fetal alcohol spectrum disorders (FASD) were found in 19 children. Ten had alcohol-related neurobehavioral disorder, four had partial fetal alcohol syndrome, and five had the most severe variant, fetal alcohol syndrome (FAS). The overall prevalence of FASD in the study group was 5.5%, of which 2.4% had FAS.

The lowest prevalence estimate of FASD in Sweden is similar to that found in other European countries, and four orders of magnitude more common than the prevalence of the diagnosis in official hospital records. The authors argue that a screening procedure for large-scale studies may utilise both behavioural and anthropometric measures, including head circumference, depending on the objective.

Source: Landgren, V., Knez, R., Karlsson, D., Fernmo, S., Johnson, M., Svensson, L. and Landgren, M. (2025), Prevalence of Fetal Alcohol Spectrum Disorders: A Pilot Study in Western Sweden. Acta Paediatr. doi.org/10.1111/apa.70059

Medical research by publication date

Mortality of Gastrointestinal Cancers Attributable to Smoking, Alcohol, and Metabolic Risk Factors, and its Association With Socioeconomic Development Status 2000-2021. Available online 6/01/2025, Version of Record 11/04/2025

Prevalence of Foetal Alcohol Spectrum Disorders: A Pilot Study in Western Sweden published: 08/03/2025

Global, regional, and national burden of liver cancer due to alcohol use, 1990-2021: results from the Global Burden of Disease study 2021. Published: 08/03/2025

Alcohol and cancer risk: what you need to know. Published 11/03/2025

Study finds no direct link between heavy alcohol consumption and dilated cardiomyopathy. Published 28/03/2025

Global, regional, and national burdens of alcohol-related cirrhosis among women from 1992 to 2021 and its predictions. Published 31/03/202

Associations of moderate alcohol intake with cerebrospinal fluid biomarkers of Alzheimer's disease: data from the ALBION study Published on 01/04/2025

Biases inherent in all-cause mortality studies: implications for shaping the 2025–2030 dietary guidelines for Americans on alcohol consumption Published 03/04/2025

Association between alcohol consumption, cognitive abilities, and neuropathologic changes. Published 09/04/2025

Associations of alcohol with the human gut microbiome and prospective health outcomes in the FINRISK 2002 cohort Published: 11/04/2025

Modifiable Risk Factors and Attributable Burden of Cardiac Arrest. Published 17/04/2025

Problem drinking and comorbidity with mental ill health. Published 17/04/2025

Association between type of alcoholic beverage and all-cause mortality. A population-based prospective study Available online 18/04/2025, Version of Record 18/04/2025

Cumulative associations between health behaviours, mental well-being, and health over 30 years. Published online: 24/04/2025

Alcohol-Attributable Cancer: Update From the Global Burden of Disease 2021 Study. Published: 27/04/2025

Gender differences in alcohol-cue-induced craving and heart-rate variability in hazardous drinkers

Alcohol use disorder (AUD) has risen more rapidly in women than men in recent decades. While previous studies identified gender differences in AUD, the mechanisms remain unclear. A study examined gender differences in alcohol cue-induced craving and heart rate variability (HRV) in 114 people who engage in heavy drinking (61 women) using an alcohol-cue reactivity task.

The researchers predicted that men would show stronger cue-induced reward cravings and that women would have more intense relief cravings. Additionally, they expected that the relationship between cue-induced craving and HRV would differ by gender: reward craving in men would correspond with increased HRV, whereas relief craving in women would correlate with decreased HRV. The alcohol cue-reactivity task began with a 75-second relaxation exercise, followed by 30-second presentations of alcohol-related pictures and imagery, and a 120-second session of handling an alcohol beverage. Craving was assessed before and after using the desire for alcohol questionnaire (DAQ), and HRV was continuously recorded via electrocardiograph throughout the task.

The results showed significant increases in both relief and reward craving after the alcohol cue-reactivity task, with no gender differences. Exploratory analysis found that HRV decreased in response to alcohol cues for both genders, with men showing a significantly greater decline during the picture phase. Additionally, those with higher relief craving had lower HRV during the imagery phase compared to the picture phase, regardless of gender.

The study suggests that gender differences in alcohol cue reactivity are more pronounced in HRV than in subjective responses.

Source: Insan Firdaus, Anja C. Huizink, Annet Kleiboer, Anna E. Goudriaan, Anne Marije Kaag, Gender differences in alcohol-cue-induced craving and heart-rate variability in hazardous drinkers, Drug and Alcohol Dependence, Volume 271, 2025, 112662, doi.org/10.1016/j.drugalcdep.2025.112662

New study finds surprising way to curb college-aged drinking harms—without cutting alcohol

A complementary method known as Counter-Attitudinal Advocacy (CAA) has shown promise in helping young adults reduce the negative consequences of heavy drinking—by changing their mindset rather than their alcohol consumption.

In a recent study led by researchers at Brown University's School of Public Health, an intervention using CAA was developed and tested. This approach involves asking individuals to argue in favour of a viewpoint that contradicts their own attitudes or behaviours. Specifically, the intervention challenged favourable beliefs about heavy drinking and the perception that alcohol is central to college life.

The researchers conducted randomised controlled trials with 585 college students at two sites, comparing the CAA intervention to a widely used method called Personalized Normative Feedback (PNF). They assessed the effectiveness of both interventions in reducing weekly alcohol consumption, peak blood alcohol concentration, and alcohol-related consequences, compared to a control group. Weekly drink totals were a key focus, given the common pattern of alternating between binge drinking and abstinence among college students.

Students who received PNF significantly reduced their weekly alcohol intake compared to the control group, while those in the CAA group reported fewer alcohol-related consequences, even if their overall consumption didn't decrease. In other words, CAA helped reduce the harms associated with drinking, rather than the drinking itself.

Kate Carey, co-lead investigator and professor of behavioural and social sciences at Brown, explained that PNF works by showing students how their drinking compares to their peers, often revealing that others drink less than they think. This realisation can motivate behaviour change. CAA, on the other hand, encourages reflection on the reasons it's beneficial to avoid alcohol-related issues—like blacking out or engaging in risky behaviour—and helps participants generate their own strategies to avoid those problems.

Source: Carey, K. B., DiBello, A. M., Hatch, M. R., Weinstein, A. P., & Neighbors, C. (2025). Efficacy of counter-attitudinal advocacy and personalized feedback for heavy-drinking college students. Journal of Consulting and Clinical Psychology. Advance online publication. doi.org/10.1037/ccp0000949

Exposure to zero-alcohol products prompts adolescents to think of alcohol

Zero-alcohol drinks (<0.5 % alcohol by volume) appear and taste like alcoholic drinks; they may feature brands from alcoholic drinks ("brand extensions") or "new-to-world" brands. These drinks are not consistently included within many restrictions aimed at reducing adolescents' exposure to alcohol products and advertising. An online study examined whether adolescents implicitly categorise images of zero-alcohol drinks as alcoholic beverages.

331 Australian adolescents aged 15–17 years participated in an online reaction time experiment. Participants viewed 20 randomly-ordered images of alcohol, zero-alcohol, and soft drink products and were asked to indicate as quickly as possible whether these images made them think of alcohol, with both response time and agreement recorded.

Most images of alcoholic (94.4 %), brand extension zero-alcohol (90.7 %), and "new-to-world" zero-alcohol (85.6 %) drinks prompted participants to think of alcohol, compared to 5.2 % of soft drinks. Compared to alcoholic drinks, participants on average responded 72 ms slower to brand extension zero-alcohol drinks and 215 ms slower to "new-to-world" brand zero-alcohol drinks.

The combination of high levels of agreement and slower reaction times suggest that adolescents categorise zero-alcohol drinks as non-typical alcoholic drinks, rather than soft drinks. Thus, exposure to zero-alcohol drinks had similar effects to exposure to alcoholic drinks. The study authors argue that urgent regulatory action is required to ensure that restrictions on alcohol advertising and availability to minors extend to zero-alcohol drinks.

Source: Ashlea Bartram, Murthy Mittinty, et al., Alcohol advertising in disguise: Exposure to zero-alcohol products prompts adolescents to think of alcohol—Reaction time experimental study, International Journal of Drug Policy, Volume 139, 2025. doi.org/10.1016/j.drugpo.2025.104753

Framing alcohol harm in the UN context – the importance of language

Alcohol is a global health issue with a high level of controversy. After being absent from World Health Organization (WHO) global governing body discussions for about 20 years, alcohol re-entered the agenda in 2005. The expression 'harmful use of alcohol' became the compromise language after hard negotiations, an example of 'adopted language" that has remained for almost 20 years.

An article published in the journal, Global Health, analyses the background and use of the expression 'harmful use of alcohol' in the context of WHO governing bodies, current challenges and implications for public health.

The article is based on textual analysis of source documents from the time periods 2004–2010 and 2019–2022 and the authors' experience from involvement in the global alcohol policy scene for more than 20 years: WHO governing body records and other documents were analysed, as well as Member State and Non-State Actors' positions and contributions in consultations and statements in WHO governing body debates.

The introduction of the concept 'harmful use of alcohol' in WHO documents from 2005 onwards was a political compromise between approaches focussed either on 'alcohol abuse' or a wider concept of harm from alcohol consumption. It has permeated into national alcohol policy documents, academic literature about alcohol harm and UN documents, and been embraced by the alcohol industry. However, it has not prevented and some would argue that it has enabled development of normative statements from WHO that include recommendations for population wide interventions. The relatively new evidence of harm from alcohol at low levels and questioning of evidence suggesting a beneficial effect of moderate use of alcohol together with industry appropriation of 'harmful use' have led to increasing critique of the framing implied by 'harmful use of alcohol'.

The authors conclude that the language used in WHO documents holds political power in that it may influence the subsequent course of events. This is accentuated by the normative role of WHO in global health policy and the uptake of negotiated language beyond WHO documents. In the next five years it will be possible and valuable to examine in more detail the extent to which this power was made manifest and the need and possible ways to effect change.

Source: Bakke, Ø., Casswell, S. Framing alcohol harm in the UN context – the importance of language. Global Health 21, 23 (2025). doi.org/10.1186/s12992-025-01117-4

Are non-drinking adolescents in Sweden using other substances instead of alcohol ?

Recently, the trend toward non-drinking among adolescents in Sweden has increased. A study evaluated the popular view in Sweden that adolescents have replaced alcohol with illicit drugs or other substances, and researchers examined whether the use of illicit drugs, cigarette smoking, and/or snus among moderate and heavy alcohol users has changed.

Data were taken from a large population-based health survey distributed in 1995, 1997, 2001, 2004, 2006, 2008, 2010, 2012, 2014, 2017, and 2020, covering all students in 9th grade (15-16 years) and in 11th grade (17-18 years) in a mid-sized Swedish county.

The proportion of non-drinkers who used other substances was very low varying from 1.1 to 3.3% for illicit drugs, from 1.0 to 7.6% for current smoking and from 1.2 to 6.2% for snus use. Further, no change was found in illicit drug use among moderate and heavy alcohol users from 2004 to 2017, but current smoking and snus use decreased. When compared with low alcohol users, moderate and heavy alcohol users had a higher probability of illicit drug use, cigarette smoking, and snus use.

Adolescents have not replaced alcohol with other substances. When compared with low alcohol users, moderate and heavy alcohol users are more likely to use illicit drugs and nicotine. The low prevalence of substance use among non-drinkers may indicate that preventing alcohol use could have additional positive effects on illicit drug and nicotine use.

Source: The increased trend of non-drinking among adolescents in Sweden: Do they use other substances instead of alcohol? Peter Larm, Oscar Fjällström, Cecilia Åslund, Kent W. Nilsson, and Fabrizia Giannotta. Journal of Studies on Alcohol and Drugs. Published Online: April 20, 2025. doi.org/10.15288/jsad.24-00149

A return on investment analysis for the 2017 increase in alcohol excise taxation in Lithuania

An economic study reveals that Lithuania's substantial increase in alcohol excise taxes in 2017 led to significant public health benefits and a strong return on investment. The analysis demonstrates that the policy not only reduced alcohol consumption and related harms but also delivered measurable financial gains to society.

The study was a joint international project, co-led by Dr Jürgen Rehm of the Centre for Addiction and Mental Health (CAMH) in Canada and Dr Mindaugas Štelemėkas of the Lithuanian University of Health Sciences. They conducted a return on investment analysis of Lithuania's 2017 increase in alcohol excise taxation of 112% for beer, 111% for wine, and 23% spirits, resulting in a marked decrease in alcohol affordability.

The analyses explored the costs of the increased taxation and economic benefits derived from a societal perspective. Costs were measured according to World Health Organization standards, based on Lithuanian public data. Benefits were derived from the difference of direct (healthcare, childcare, legal) and indirect costs between 12 months pre- and post-enactment of the policy.

Overall, there were net benefits from reductions in productivity losses and increases in tax revenue. Tax revenue increased by 20%, or more than €100 million, in the first-year post enactment, and productivity losses decreased over the same time period by about €35.3 million (95% confidence interval [CI]: –51.9 to –17.1; proportionally –7%), the latter based on marked reductions in premature mortality in all alcohol-attributable causes of death. Healthcare costs decreased by about €3.8 million (95% CI: –8.4 to +0.1; proportionally –5%). Childcare and legal costs increased compared with the year before, by €5.3 million (proportionally: +7%) and €4.6 million (95% CI: +0.2 to +8.0; proportionally +5%), respectively. The final return on investment was 420 to 1, i.e., for each Euro invested, the return was €420. In the sensitivity analyses, the return on investment varied between 292 to 1 and 530 to 1, meaning that all assumptions resulted in a very positive return.

The study concludes that the increase in excise taxation for alcohol on March 1, 2017 in Lithuania created a large return on investment and reduced alcohol-attributable mortality and hospitalisations.

Source: Rehm J, Rovira P, Hassan AS, de Oliveira C, Lange S, Thompson MJ, et al. A return on investment analysis for the 2017 increase in alcohol excise taxation in Lithuania. Addiction. 2025. doi.org/10.1111/add.70083

Alcohol policy in adolescence and subsequent alcohol-attributable hospitalizations and mortality at ages 21–54 years

Little is known about how alcohol policies experienced in adolescence are associated with later health. A study assessed whether age of exposure to stricter alcohol policies is associated with later alcohol-attributable hospitalisations and mortality. The study focussed on Finland, where an alcohol advertising ban and alcohol tax increases were introduced in 1975–1977 with relatively stable alcohol policies before and after.

Finnish register data on birth cohorts 1950–1964 (1,175,878 individuals) were used to assess cohort-wise hazard ratios for the first incidence of alcohol-attributable hospitalisation and mortality, and mortality due to external and other causes at ages 21–54 years.

Men who were aged 19 to 25 at the time of the restrictive reform had similar risks for alcohol-attributable hospitalisation and mortality to the reference group of those aged 18 – legal drinking age – at the time of reform. For those underage at the time, hospitalisation and mortality rates were incrementally smaller cohort by cohort. E.g., men who were 17 at the time of the reform had lower hazard ratios of alcohol-attributable hospitalisation: 0.91 (95% CI 0.87; 0.95) as did those who were 13 [0.85 (95% CI 0.81; 0.89)]. The findings were similar for external-cause mortality, and similar yet less certain for women. In contrast, mortality from other causes declined continuously from cohort to cohort.

The researchers say their findings are consistent with the hypothesis that stricter alcohol policies in adolescence reduce harmful alcohol consumption patterns extending into adulthood and manifesting as lower alcohol-related harm to health.

Source: Luukkonen, Juha; Einiö, Elina; Tarkiainen, Lasse; et al. Alcohol policy in adolescence and subsequent alcohol-attributable hospitalizations and mortality at ages 21–54 years - A register-based cohort study. Epidemiology, April 04, 2025. doi.org/10.1097/EDE.0000000000001857

The impacts of policies controlling the spatial availability of take-away alcohol on consumption and harms

A study published in the journal, Addiction, systematically reviewed the evidence on the impacts of policies regulating the spatial availability of off-premises alcohol on consumption and harms. A narrative review examined peer-reviewed studies published from 2016 to 2024 on policy changes affecting the spatial availability of off-premises alcohol. Outcomes of interest were alcohol consumption, alcohol-related harms and mortality.

The review identified 20 observational studies, primarily natural experiments, examining four policy types: malt liquor restrictions, sales expansion to retail outlets, privatization and changes to allowable alcohol content.

Across studies, there was a suggestion that allowing alcohol sales in gas station convenience stores was associated with increased consumption and harms, whereas expanding to grocery stores was not. There was no clear evidence that restricting malt liquor reduces crime. Similarly, privatisation was not associated with crime or health outcomes, though it was accompanied by price increases. Increases in allowable alcohol content were not associated with higher consumption, but decreases were associated with fewer alcohol-related emergency visits and hospitalisations.

The authors conclude that the impact of policy changes in spatial alcohol availability depends on the policy details and retail outlet types. To mitigate public health impacts, policymakers should consider comprehensive alcohol control measures, such as regulating convenience store sales and accompanying grocery store expansions with minimum unit pricing, taxation and marketing restrictions. High-quality natural experiments with pre-post designs, control groups and confounder adjustments are needed to better understand how these policies impact both the general population and high-risk subgroups.

Source: Shakory S, Smith BT, Jansen R, Reel B, Hobin E. The impacts of policies controlling the spatial availability of take-away alcohol on consumption and harms: A systematic narrative review. Addiction. 2025. doi.org/10.1111/add.70070

The language of alcohol: Similarities and differences in how drinkers and policymakers frame alcohol consumption

A study compared semantic domains reported by drinkers and policymakers in their alcohol consumption narratives. The research question was 'How do drinkers and policymakers use semantic domains to construct alcohol consumption narratives?' The study is published in the Drug Alcohol Review.

Researchers performed a secondary analysis of open-ended survey responses (The Drinker Corpus: TDC) and three English alcohol policies (The Policy Corpus: TPC). Wmatrix software was used to identify semantic domains that appeared more frequently in these corpora compared to general usage.

Five domains appeared more frequently in both corpora than general usage: 'Cause & Effect/ Connection'; 'Disease'; 'Drinks and Alcohol'; 'Excessive drinking'; and 'Knowledge'. Domains were represented differently in the two corpora; the TPC focused on long-term health consequences, like liver disease, whereas the TDC talked about short-term consequences like hangovers. The 'Emotional actions' domain appeared in the TDC more than expected. Drinkers reported experiencing positive and negative emotions following drinking. The 'Social actions/states/processes' domain was used more frequently in the TPC than expected. Policymakers talked about changing 'behaviour' in partnership with organisations rather than working with drinkers.

This study shows that while drinker and policymaker alcohol consumption narratives draw on the same semantic domains, how these domains are used to construct these narratives differs. To improve the effectiveness of policy initiatives, the authors recommend greater dialogue between policymakers and drinkers.

Source: Moreton E, Davies E, Morris J, Cooke R. The language of alcohol: Similarities and differences in how drinkers and policymakers frame alcohol consumption. Drug Alcohol Rev. 2025 Apr 10. doi.org/10.1111/dar.14056

Associations of state-level alcohol policies and population use rates with alcohol use and binge drinking among US college students

The prevalence of binge drinking among US college students has decreased across the last two decades but remains high. A research team examined the extent to which state-level alcohol policies and drinking environments are associated with excessive and underage alcohol use among college students.

Repeated cross-sectional surveys were administered to 902,486 college students ages 18-24 years from 591 four-year institutions in 47 states biannually from 2008-2019. Time-varying, state-level Alcohol Policy Scale (APS) scores and population-level binge drinking and alcohol consumption rates were examined in relation to students' 30-day alcohol use (1+ days) and frequent use (20+ days), and 2-week binge drinking.

More restrictive state-level policy environments were associated with lower odds of students' alcohol use, frequent use, and binge drinking; for a 10-point increase in APS, odds ratios (95% CI) were .92 (.88-.95), .91 (.87-.96), and .94 (.91-.98), respectively. Associations were significant for underage students (ages 18-20 years) but significantly stronger for older students (ages 21-24). State population levels of binge drinking and alcohol consumption were only positively associated with drinking outcomes for students over 21.

Alcohol use and binge drinking were less prevalent among young adults attending college in states with more restrictive alcohol policies, and among students over 21 in states with lower state rates of binge drinking and alcohol consumption. Lifelong patterns of alcohol use can begin in college, and findings indicate that state alcohol policies are a foundation on which community- and campus-level preventive efforts can build, the authors conclude.

Source: Associations of state-level alcohol policies and population use rates with alcohol use and binge drinking among U.S. 4-year college students, 2008-2019, David C. R. Kerr, Timothy S. Naimi, Marlene C. Lira, and Harold Bae, Journal of Studies on Alcohol and Drugs. doi.org/10.15288/jsad.24-00355

Adolescent extraversion and agreeableness predict adult alcohol use: A 22-Year prospective study

The Five Factor Model (FFM or Big 5) traits of extraversion, agreeableness, conscientiousness, neuroticism and openness, have all been associated with alcohol use. However, the vast majority of these studies have used cross-sectional designs, limiting the ability to evaluate the temporal relationships between childhood personality traits in adult alcohol use patterns.

A prospective community cohort study examined the predictive value of FFM traits measured in childhood and adolescence (starting at 6-9 years of age) for alcohol use in adulthood (27-30 years of age), spanning an average of 22 years. Personality was assessed with the Hierarchical Personality Inventory for Children (HiPIC) across 5 consecutive waves utilizing multiple informants (child, mother, father, and teachers). Alcohol use was measured by the self-report Quantity-Frequency Variability Index (QFV).

The study found that during adolescence, high levels of extraversion and low levels of agreeableness are both (independently) associated with heavier drinking. These associations were robust and consistent from the first adolescent wave (age 12-15 years) to the last adolescent wave. Notably, informant-dependent measures from early childhood waves (ages 6-9) were not significant predictors, highlighting the importance of considering developmental context and informant variability. By leveraging a longitudinal design with temporally separated measures of personality and alcohol use, this study minimises concerns about reverse causality.

The results highlight the long-term relevance of adolescent personality traits in understanding adult drinking behaviour and suggest that targeted prevention strategies focusing on highly extraverted and low-agreeable adolescents may help reduce harmful drinking patterns later in life.

Source: Franken IHA, Prinzie P. Adolescent extraversion and agreeableness predict adult alcohol use: A 22-Year prospective study. Addict Behav. 2025 Jun;165:108303. doi.org/10.1016/j.addbeh.2025.108303

Adolescent extracurricular activities and perception of risk of harm from binge drinking

Underage binge drinking can lead to numerous adverse health consequences. Preventing excessive alcohol consumption by targeting perception of risk of harm is one approach with demonstrated success. A study examined the association between participation in extracurricular activities and perception of risk of harm from binge drinking among adolescents.

A cross-sectional analysis of adolescents aged 12-17 years was performed using the 2019 National Survey on Drug Use and Health dataset. Participation in any extracurricular activity as well as four types of extracurricular activities (school-based, community-based, faith-based, and other) were the main independent variables. The primary outcome was perception of risk of harm from weekly binge drinking.

Of the 11,870 adolescents included in the analysis, 4.2% reported that weekly binge drinking presented no harm. Compared to adolescents who did not participate in any extracurricular activity, adolescents who participated in one or more extracurricular activity, regardless of type, had 86% higher odds of reporting risk of harm from weekly binge drinking (aOR=1.86, 95% CI: 1.39, 2.49). This finding was similar across all levels of school-based, but different for community, faith-based and other types of activities. Compared to adolescents who did not participate in school-based activities, adolescent who participated in 1, 2, or 3+ school-based activities were more likely to report that weekly binge drinking was harmful (aOR 1.75 (95% CI: 1.29, 2.37) aOR 1.83, (95% CI:1.32, 2.53) and aOR 1.91 (95% CI:1.35, 2.75) respectively). The association between participation in community-based activities and perception of risk of harm was significant at one or two activities but not at three or more activities (aOR 1.35 (95% CI: 1.02, 1.79), aOR 1.47 (95% CI:1.06, 2.02), aOR 1.41 (95% CI: 0.98, 2.02) respectively, while the association between participation in faith-based activities and perception of risk of harm from weekly binge drinking was significant only at 3+ activities (aOR 2.07 (95% CI: 1.48, 2.88)). No significant association was found for participation in other activities.

The results suggest that participation in extracurricular activities may be a factor that contributes to increased perception of risk of harm from weekly binge drinking among adolescents, but this protective effect may vary by type and level of activity, suggesting different mechanistic pathways. Future studies are needed to further elucidate these findings to inform targeted preventive interventions and policy-level support.

Source: Szapary C, Meyer J, Fernandes C-SF, Boomer TP, Fiellin L, Aneni K (2025) Adolescent extracurricular activities and perception of risk of harm from binge drinking. PLOS Ment Health 2(4): e0000278. doi.org/10.1371/journal.pmen.0000278

Increase in past-month binge drinking among young women in the US

A recent research letter published online in the Journal of the American Medical Association reports a reversal in sex-based trends in binge drinking among young adults between 2021–2023 compared to 2017–2019. The findings show that young women are now binge drinking at higher rates than their male counterparts.

The study, led by Bryant Shuey, M.D., of the University of Pittsburgh, analysed data from 267,843 adults who participated in the National Survey on Drug Use and Health during the periods 2017–2019 and 2021–2023. Researchers examined sex-specific patterns in binge and heavy drinking across these years.

In the earlier period (2017–2019), women reported significantly lower rates of past-month binge drinking than men, both overall (22.6 vs. 29.2 per 100 people) and among those aged 18 to 25 (36.4 vs. 37.7 per 100). This trend largely persisted in the later period (2021–2023), with women continuing to drink less than men overall (21.8 vs. 25.7 per 100). However, a notable shift occurred among young adults: women aged 18 to 25 had higher binge drinking rates than men (31.6 vs. 29.9 per 100). Heavy drinking rates were consistently lower among women than men in both periods (4.5 vs. 8.3 per 100 in 2017–2019, and 5.0 vs. 7.8 per 100 in 2021–2023), with similar trends observed across all age groups.

The authors caution that, in light of increasing alcohol-related liver disease and mortality among women, healthcare providers should prioritize screening young adult women for binge and heavy drinking to help prevent long-term health consequences.

Source: Bryant Shuey et al, Sex-Based Differences in Binge and Heavy Drinking Among US Adults, JAMA (2025). doi.org/10.1001/jama.2025.2726

Social and Policy research by publication date

Adolescent extraversion and agreeableness predict adult alcohol use: A 22-Year prospective study. Available online 18/02/2025, Version of Record 22/02/2025

Exposure to zero-alcohol products prompts adolescents to think of alcohol—Reaction time experimental study. Available online 24/03/2025, Version of Record 24/03/2025

Gender differences in alcohol-cue-induced craving and heart-rate variability in hazardous drinkers. Available online 26 /03/2025, Version of Record 8/04/2025.

Alcohol policy in adolescence and subsequent alcohol-attributable hospitalizations and mortality at ages 21–54 years - A register-based cohort study. Published 04/04/2025

Adolescent extracurricular activities and perception of risk of harm from binge drinking Published: 09/04/2025

Efficacy of counter-attitudinal advocacy and personalized feedback for heavy-drinking college students. Advance online publication 09/04/2025

The impacts of policies controlling the spatial availability of take-away alcohol on consumption and harms: A systematic narrative review. Published 09/04/2025

The language of alcohol: Similarities and differences in how drinkers and policymakers frame alcohol consumption. Published 10/04/2025

Associations of state-level alcohol policies and population use rates with alcohol use and binge drinking among U.S. 4-year college students, 2008-2019. Published Online 15/04/2025

Sex-Based Differences in Binge and Heavy Drinking Among US Adults. Published online 16/04/2025.

The increased trend of non-drinking among adolescents in Sweden: Do they use other substances instead of alcohol? Published Online: 20/04/2025

Framing alcohol harm in the UN context – the importance of language. Published 24/04/2025

A return on investment analysis for the 2017 increase in alcohol excise taxation in Lithuania. Addiction. 06/05/2025

UK tackles an increase in spiking cases

The government's move to make spiking a standalone criminal offence, currently progressing through the Crime and Policing Bill at Committee Stage in the House of Commons, signals a shift in the UK's approach to tackling this crime. Prevalence remains high as according to a 2024 survey funded by Drinkaware and conducted by Anglia Ruskin University, 11.3% of adults reported being spiked at some point in their lives, with women (13%) more frequently targeted than men (9%). Around half of all incidents go unreported.

The Royal College of Emergency Medicine (RCEM) has emphasised that spiking constitutes a violent crime, yet notes that emergency departments are primarily oriented toward immediate medical care, not the collection of forensic evidence. This undermines efforts to secure successful prosecutions and contributes to a persistent evidentiary gap.

The government is pairing legislative reform with investment. So far, over 135,000 door supervisors have received mandatory anti-spiking training since Spring 2024. The Security Industry Authority aims to extend this training to all 352,000 licensed security personnel by 2028. Police-led "intensification weeks" have been introduced, increasing the frequency of arrests and preventative interventions.

A recent review by the City of London Police reveals that 91–92% of spiking incidents occurred in licensed premises. Female victims accounted for 72–76% of reported cases.

Despite growing awareness and preventative training, forensic validation remains limited: only 10% of samples tested in 2023–24 confirmed the presence of drugs commonly used in spiking, but a potentially transformative development is underway. SureScreen Diagnostics has introduced the Multi-Lined Rapid Beverage Test Cassette (MRBT), a lateral flow-based test capable of detecting GHB, ketamine, and 22 benzodiazepines (including Rohypnol) in minutes. Critically, the MRBT avoids false positives from commonly consumed mixers like tonic water or wine.

The UK's evolving approach to spiking combines legislative reform, sector-specific training, intensified enforcement, and emerging technologies. The success of this strategy will be dependent on coordinated implementation across health, policing, and licensing authorities, as well as continued investment in forensic capabilities.

UK report finds low-level drinkers have increased cancer and cardiovascular risk, study finds

Research commissioned by Alcohol Change UK and delivered by The Behavioural Insights Team examined the drinking habits of more than 4,000 UK adults and a wide range of health harms associated with different levels of alcohol consumption. The results suggest that the negative impact of alcohol on the health and wellbeing of the UK population is widespread. According to the report, even among for who drink within the limits that the Chief Medical Officers have defined as "low risk", there are links with reduced daily functioning, lower sleep quality, poorer dental health, and higher prevalence of cancer and cardiovascular disease. Those consuming more than 14 units of alcohol a week, but below the levels associated with alcohol dependency, are experiencing harm at a significant scale, including a higher risk of accidents and injuries. The report also highlights disparities in alcohol-related harms, with men, and people from lower socioeconomic groups, showing stronger links between health problems and their alcohol consumption.

The report calls on the UK government to tackle alcohol harm across the spectrum of consumption, to "turn prevention rhetoric into reality". Specifically, to meaningfully reduce alcohol-related harm, it argues that the government must adopt a comprehensive prevention strategy that addresses all levels of alcohol consumption. This requires coordinated action across departments, led by the Health Mission Delivery Board. A key step is ensuring the alcohol industry contributes more fairly to the cost of harm it causes, including reintroducing an alcohol duty escalator and ending tax breaks like the 'cider exceptionalism' loophole, which incentivises cheap, high-strength products.

Creating an environment that prevents alcohol harm involves stronger regulation. This includes mandatory, informative alcohol labelling enforced by the Chief Medical Officer, implementing Minimum Unit Pricing (MUP) in England, and reforming outdated licensing laws to address modern sales practices like online and delivery services. Additionally, stricter controls on alcohol marketing and advertising are needed to reduce consumption pressure, especially among vulnerable populations.

Improving access to treatment is essential, with a call for multi-year funding to support alcohol treatment services and address the needs of the 82% of people with alcohol dependence who are currently not in treatment. Restoring the public health grant to 2015/16 levels would support more equitable and effective services. Finally, removing the exclusion of alcohol dependence from the Equality Act would help public institutions and employers provide better support and foster recovery-friendly environments.

s3.eu-west-2.amazonaws.com/sr-acuk-craft/documents/Alcohol-harm-across-the-drinking-spectrum-2.pdf

Zero alcohol limit for new drivers moves closer to parliament vote in Cyprus

A bill proposing zero tolerance for alcohol in novice drivers is undergoing legal vetting before returning to Cyprus's parliamentary transport committee for final review. The proposal, submitted by Paphos MP Chrysanthos Savvides, would implement a complete alcohol ban for drivers with less than three years of driving experience.

A meeting of all relevant authorities will finalise the bill before it returns to the parliamentary transport committee ahead of a full parliament vote. The police, Ministry of Transport, Road Transport Department and Law Office have agreed with the proposal, though some technical legal issues remain to be resolved before it can be put to a vote in parliament.

Ministry looking to ease restrictions on young employees handling alcohol in Estonia

The Ministry of Economic Affairs plans to review the current restrictions on employing minors in Estonia. This is seen as a positive step by restaurant owners, who say that those under 18 can be highly capable workers, but current regulations place overly strict limits on hiring them. Restrictions include a ban on any contact with alcohol.

The Ministry of Economic Affairs and Communications (MKM) has now been tasked by the government with easing the rules around employing minors. One of the proposals under consideration is allowing minors to handle alcohol starting at the age of 13, which would enable them to work in cafes.

European Commission backs alcohol-free wine

In Brussels, the European Commission is taking steps to adapt the wine industry to changing consumer habits by promoting alcohol-free wine. On March 28, the Commission presented a new action plan to support the modernization of the EU wine industry. A central component of this initiative is the promotion of wines with low or zero alcohol content, aimed at enhancing the sector's competitiveness and resilience.

Key Measures include the promotion of alcohol-free wine. The Commission will support the development and marketing of alcohol-free and low-alcohol wines as part of a broader strategy to diversify product offerings and align with health-conscious consumer behaviour; standardisation of labelling - Efforts will be made to harmonize labelling requirements across EU member states, with a focus on improving transparency and consumer understanding; enhanced product information: Labels for dealcoholised wines will be required to disclose detailed information regarding ingredients and the production methods used in the dealcoholisation process.

According to the World Health Organization, alcohol consumption per capita in Europe declined by 20% between 2000 and 2019. This trend is attributed to a range of factors, including increased public awareness of health risks, stricter drink-driving legislation, and shifting preferences among younger demographics.

This action plan signals a strategic shift in EU agricultural and consumer policy, aligning traditional industries with contemporary public health goals and sustainability objectives. The Commission's endorsement of alcohol-free wine underscores its commitment to fostering innovation within the sector while supporting consumer choice.

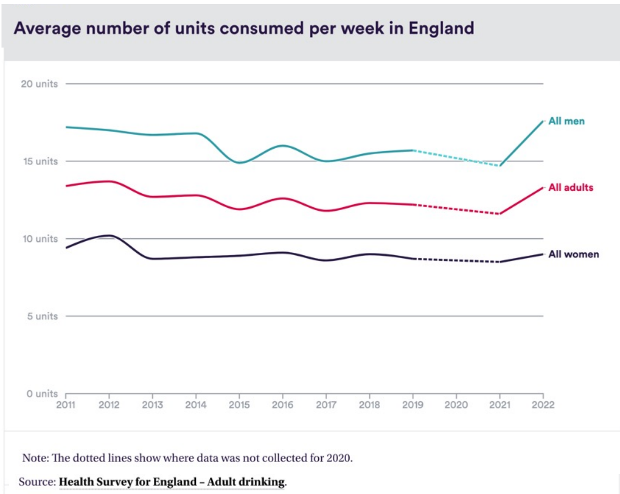
vinetur.com/en/2025040886511/european-commission-backs-alcohol-free-wine-to-modernize-industry-and-meet-changing-consumer-habits.html

Deaths from drinking are at a record high: does England need a new alcohol strategy?

A blog published on the Nuffield Trust website by Bea Taylor looks at current trends in drinking and alcohol-related harm, and explores whether the 2012 strategy needs updating to reflect the new government's focus on prevention. Taylor concludes that the changing profile of drinkers in England highlights critical challenges for alcohol treatment services and the wider health system. Despite the popularity of sobriety among younger people, alcohol-specific deaths have surged in recent years.

The last unified national alcohol strategy was published in March 2012. This strategy, which focuses much of its attention on binge drinking and "drunks turning up in A&E", no longer reflects the reality of problematic drinking in England. Since then, the profile of heavy drinkers has changed substantially. Heavy drinkers are older, more of them are male, and they face wider risks to their health from drinking and more complex barriers to treatment.

Wes Streeting, the Health and Social Care Secretary, recently outlined "three shifts" to ensure the sustainability of the NHS – the third of which was a shift towards "prevention over treatment". Taylor argues that as the government moves towards a greater emphasis on prevention, it is essential that attempts to reduce alcohol harm acknowledge the changing landscape of drinking in England. This may include, but is not limited to, ensuring health professionals can recognise harmful drinking in older people, improving public knowledge of the risks of drinking, and carefully evaluating the potential for policies like minimum unit pricing now that drinking behaviour has changed.



Note: The dotted lines show where data was not collected for 2020.
Source: Health Survey for England – Adult drinking.

nuffieldtrust.org.uk/news-item/deaths-from-drinking-are-at-a-record-high-does-england-need-a-new-alcohol-strategy

European Health Alliance on Alcohol launched

The European Health Alliance on Alcohol has been launched in response to current levels of alcohol consumption and related harm in the WHO European Region, which has the highest alcohol intake globally. The Alliance, introduced at the 2025 European Association for the Study of the Liver (EASL) Congress in Amsterdam, brings together health professionals and organisations to advocate for stronger policies and public awareness around alcohol harm.

The coalition emphasises the underestimated and wide-reaching health risks of alcohol, including liver disease, cancer, cardiovascular illnesses, and mental health problems. Experts highlight the lack of public knowledge about these risks. The Alliance aims to dispel myths, such as the belief that only heavy drinkers face health risks, and educate the public on the potential scope of alcohol's harm, especially its links to diseases like breast cancer and its effects on mental well-being.

Protecting children and adolescents is central to the Alliance's mission. The group calls for stricter regulations on alcohol marketing, which currently targets youth, and seeks to shift cultural norms to reduce underage drinking and exposure. It proposes practical measures such as tighter advertising laws, minimum unit pricing, and restrictions on alcohol availability to curb these preventable harms.

The Alliance also underlines the role of health-care professionals in addressing alcohol misuse through screening and brief interventions in clinical settings. However, it stresses that reducing alcohol-related harm requires more than medical input—it demands systemic policy changes. Citing success stories from countries like Lithuania, the Alliance supports proven strategies like increased taxation, restricted advertising, and limiting alcohol access. Its formation marks a coordinated effort to amplify medical voices in policymaking, challenge the influence of the alcohol industry, and push for a shift in responsibility from individuals to governments through strong, evidence-based interventions.

who.int/europe/news/item/08-05-2025-european-health-alliance-on-alcohol-launched-to-reduce-the-unsustainable-toll-of-alcohol-harms-in-europe

Little to no advertising specifically aimed at minors in The Netherlands

In the Netherlands, the 2024 Alcohol Marketing Monitor report was published in April. The report - drawn up by research agency Panteia - provides insight into the amount of alcohol advertising to which young people are exposed and into compliance with self-regulation and the codes surrounding the use of influencers. The monitor looked at the media (TV, youth websites, YouTube, TikTok and Instagram) and physical locations (supermarkets, sporting events, cinemas, outdoor advertising and recreational facilities). This year, supermarkets also looked at in-store advertising. The monitor shows that there is little to no advertising specifically aimed at minors. However, it shows that there is still a considerable chance that minors will see alcohol advertising in practice; in particular, advertising in outdoor areas, sponsorship of sporting events and competitions and alcohol advertising shown on TV after 9 p.m. For example, advertisements for some European Championship football matches reached more than 600,000 minors.

The 2024 Monitor shows that the number of alcohol advertisements has remained more or less the same. Only popular television programs after 9:00 PM show a small increase. Although there does not seem to be any targeted targeting of young people, certain marketing strategies could potentially appeal to young people indirectly. For example, brands use popular artists such as Snelle and Camila Cabello in advertisements. The report also mentions as a point of attention that it is not always clear whether influencers on social media are sponsored or not. In addition, minors on social media easily come into contact with advertising if they are not honest about their age on their social media account. The Monitor concludes that the current regulations seem to be complied with, but that it is unavoidable that alcohol marketing reaches minors. The researchers advise that the government should monitor the activity of influencers more and that the 25 percent criterion for content aimed at young people should be revised. They also recommend further investigation of the impact of supermarket promotions and competitions and say that the regulation of alcohol marketing around sporting events and through outdoor advertising could be tightened.

rijksoverheid.nl

Risky drinking and overall alcohol consumption in Sweden

Statistics from the Public Health Agency of Sweden show that over the past 20 years, the proportion of young people (aged 16–29) who engage in risky alcohol consumption has nearly halved. Young men account for the largest decline dropping from 42.8% to 20% compared to young women where risky drinking dropped from 30.5% to 24% for this age group. For those over the age of 45, risky drinking has increased, however.

Data from the Swedish Council for Information on Alcohol and Other Drugs (CAN) shows that young people have reduced their overall alcohol consumption by nearly 20% over the past 20 years. This decline is again largely driven by young men, while the consumption level among young women has remained relatively unchanged. The annual consumption in litres of pure alcohol for those aged 16-29 dropped from 6.1 L to 5.0 L from 2004 to 2024 (8.3 to 6.1 for young men and 6.9 to 5.5 for young women). There were also decreases in the age group 30-44 years dropping overall from 6.9 to 5.5. Nearly all of this decrease was accounted for by the drop in consumption by men. Consumption by those aged 50-64 increased slightly and for those aged 65- 84, consumption rose from 4.1 L to 5.7L with increases in both male and female drinkers. The proportion of women over 65 engaging in risky drinking has nearly tripled in 20 years.

Overall, young people still consume the most alcohol, but the gap between younger and older age groups has narrowed significantly—more so in risky drinking than in overall consumption.

"We're seeing increased awareness among young people regarding alcohol, along with changing social norms and a health trend that may be influencing behaviour. At the same time, today's older adults have a more liberal attitude towards alcohol, and we're seeing an older generation carrying their drinking habits into later life. If today's young people bring their current norms with them into older age, there's reason to be optimistic about the future," said Mojtaba Ghodsi, CEO of IQ.

"That risky drinking is decreasing as young people drink less is perhaps not surprising. But risky drinking has declined significantly more than overall consumption. Young people appear to have adopted an alcohol culture that is markedly different from the one middle-aged people followed in their youth."

"We've known for some time that today's young people drink less alcohol than previous generations. But this also shows that far fewer young people are drinking in risky ways than before. Today's young people are simply drinking more wisely".

CAN recently presented preliminary figures on overall alcohol consumption in Sweden, showing a further 2.3% decrease last year at the population level. Age-specific data has not yet been published.

nordicalcohol.org/post/risky-drinking-among-young-men-has-halved-in-20-years

Proposed California bill to extend serving hours

California lawmakers are considering a new bill, AB 342, that would allow bars and restaurants in certain areas to serve alcohol until 4 am—a two-hour extension from the current 2 am cut off. The idea is to help revive downtown districts that have struggled since the COVID-19 pandemic by bringing in more tourism and boosting the local hospitality industry.

Introduced by Assembly member Matt Haney, the bill would give cities the option to create "Hospitality Zones," where participating businesses could stay open later on weekends and state holidays. It's a flexible, opt-in approach—cities don't have to do it unless they want to".

The bill also introduces "Special Event Hospitality Zones," temporary areas that could allow extended hours for up to a month during major events like music festivals, the World Cup, or the 2028 Olympics in Los Angeles.

To create one of these zones, local governments would need to consider factors like public safety, transportation access, walkability, and how close the area is to hotels and convention centres.

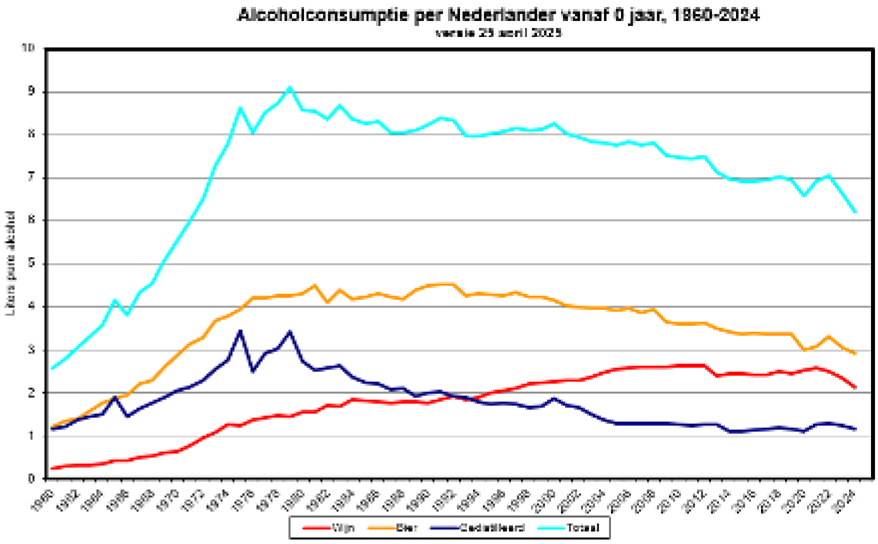
Dutch alcohol consumption continues its downward trend

An analysis by the Dutch Institute for Alcohol Policy (STAP) of figures from the Dutch Brewers, the Organisation Internationale de la Vigne et du Vin and Statistics Netherlands shows that the average alcohol consumption in the Netherlands decreased in the past year. In 2024, 6.19 Litres of pure alcohol were consumed per capita calculated as the total sales, divided by the total number in the Dutch population including all non-drinkers and children. Unregistered beverage sales are not included in all these figures.

In 2024, more than 6.5% less pure alcohol was consumed per average Dutch person than in 2023, when this was 6.62 Litres. The decrease concerns lower consumption of alcoholic beer, wine, and distilled beverages.

In the reconstruction years after the Second World War until the 1960s, the average Dutch person drank little. In the 1960s and 1970s, alcohol consumption in the Netherlands increased by more than 250%: from 2.56 litres of pure alcohol in 1960 per capita to 9.09 litres in 1979. In the two decades that followed, consumption remained largely stable (1980: 8.58 litres, 2000: 8.26 litres).

From the beginning of this century, consumption started to decline significantly. The mandatory ID check, the increase in the drinking age to 18, the increased prices, the increased attention for alcohol related harm and campaigns such as Dry January and IkPas will have contributed to the decrease.



The graph shows the development of per capita alcohol consumption since 1960 in Litres of pure alcohol. The bottom 3 lines indicate the Litres of pure alcohol that became available for consumption in the form of beer, wine, and distilled beverages. The top line shows the total amount of pure alcohol consumed per person.

France's drinking dilemma: Why young adults buck the global trend

An IAS blog by Dr Julia de Ternay states that over the past two decades, alcohol use among young adults has declined in many Western countries. However, France—long known for its wine culture and close ties to the alcohol industry—tells a different story. This was revealed in a recent study that tracked drinking trends among 18–30-year-olds in France from 2000 to 2021; and compared the profiles of current, former, and never-drinkers.

Cross-sectional survey data was taken from the 2000, 2005, 2010, 2014, 2017 and 2021 editions of the French Health Barometer, a large national survey run every few years by Santé Publique, France (the national Public Health Agency).

No clear decline in drinking among young adults in France was identified. In fact, rates of current drinkers remained remarkably stable across two decades. No significant changes in the trend of at-risk drinkers were identified during the same period. This finding also differs from other Western countries, where harmful alcohol use appears to have decreased between 1989 and 2015.

While overall trends haven't changed much, there are clear differences between those who drink and those who don't. Compared to current drinkers, former- and never-drinkers were more likely to be women, have lower incomes, be unemployed, and have less formal education. They were more likely to be physically active, to practice a religion, and to avoid other substances like tobacco and cannabis. De Ternay speculates as to why France hasn't followed the same downward trend as other countries.

ias.org.uk/2025/04/16/frances-drinking-dilemma-why-young-adults-buck-the-global-trend/

Congress reviews Biden administration's role in 2025 Dietary Guidelines amid alcohol policy debate

The development of the 2025 Dietary Guidelines for Americans has become a political flashpoint in Washington, with Congress questioning the influence of Biden-era committees on federal alcohol policy. Despite President Joe Biden no longer being in office, his administration's appointees and their reported preference for stricter alcohol guidelines remain at the centre of a growing controversy. Representative James Comer (R-Ky), chairman of the House Oversight Committee, recently demanded transparency from Secretary of Health and Human Services Robert F. Kennedy, Jr., accusing the department of circumventing proper oversight procedures.

At the centre of the debate is a disagreement between two sets of scientific recommendations on alcohol consumption. By law, the government must base its dietary guidelines on findings from the National Academies of Sciences, Engineering, and Medicine (NASEM), which assembled a panel of experts across multiple disciplines. NASEM concluded that while heavy drinking is clearly harmful, moderate alcohol use may offer some health benefits, including reduced mortality. However, under Biden's administration, the Interagency Coordinating Committee on the Prevention of Underage Drinking (ICCPUD) formed its own committee that took a more hardline stance, asserting that no level of alcohol is safe.

Critics argue that the ICCPUD panel lacked the scientific breadth and transparency of the NASEM process and accuse it of promoting a viewpoint more reflective of Biden's personal abstinence from alcohol than of balanced scientific consensus. Comer's letter to HHS claims that the agency has failed to comply with multiple congressional requests for documentation regarding the formation of the ICCPUD group and how its findings are being considered for inclusion in the 2025 guidelines. He also pointed out that previous attempts to obtain relevant information under the Biden administration were stonewalled, and he set a May 12 deadline for full disclosure.

The implications of the dispute go beyond public health messaging, as alcohol-related industries warn that tighter federal recommendations against moderate drinking could harm economic sectors such as hospitality and beverage production. As lawmakers press for accountability and greater clarity, the outcome of this battle may influence not only the content of the dietary guidelines but also the broader relationship between science, policy, and industry in shaping national health directives.

vinetur.com/en/2025050787317/congress-scrutinizes-biden-era-influence-on-2025-dietary-guidelines-amid-alcohol-policy-dispute.html

AWARE.org calls for a whole-of-society approach to alcohol responsibility in South Africa

As South Africa observed Freedom Day on April 27, AWARE.org, the Association for Alcohol Responsibility and Education, called for a whole-of-society approach to alcohol responsibility. Emphasising that true freedom comes with accountability, AWARE.org urged citizens to reflect on how they exercise their rights—particularly in their choices around alcohol consumption. The organisation challenged South Africans to consider whether their actions uphold or undermine the values of a free and thriving society.

Aware.org CEO, Mokebe Thulo, stressed that real freedom means making choices that do not endanger others. AWARE.org's message builds on its recent Easter campaign, Drunk Detour: Don't Let Alcohol Steer Your Fate, which depicted how quickly a single drink can lead to severe, unintended consequences such as legal trouble or injury. Thulo emphasised that alcohol responsibility is a collective duty, involving individuals, families, institutions, and policymakers. "We are calling on every South African, whether you're a parent, a policymaker, a business leader, or a young person, to use your freedom wisely. Because together, we can protect lives, uplift communities, and create a legacy of responsibility," she said.

Alcohol could be shipped by USPS under newly proposed bill

The United States Postal Service (USPS) would be able to ship alcoholic beverages to consumers under a bipartisan bill proposed on April 24 by US Rep. Dan Newhouse." This legislation supports small craft breweries and wineries in rural areas like central Washington and offers new opportunities for market access through the USPS," Rep. Newhouse said.

The congressman sponsored the USPS Shipping Equity Act, H.R. 3011, alongside lead original cosponsor U.S. Rep. Suhas Subramanyam to amend US Code to allow the USPS to ship directly from licensed producers and retailers to consumers over the age of 21, in accordance with state and local laws at the delivery location.

In turn, this would level the playing field and increase consumer and manufacturer choice while bringing in millions of dollars in revenue per year, according to the lawmakers. Rep. Newhouse explained, "While other carriers deliver alcohol, current law prohibits the [USPS] from doing so."

"This prohibition era restriction on the Postal Service is unnecessary and imposes on consumers and our small businesses," said Rep. Subramanyam. "I'm thrilled to partner with Congressman Newhouse on a bipartisan fix to expand opportunities available to our local breweries, vineyards, and distilleries and provide a new source of revenue for USPS."

H.R. 3011 has been referred to both the US House Oversight and Government Reform Committee and the US House Judiciary Committee.

Danish research finds that addiction often runs in families

According to the Danish Health Authority, one in ten children lives in a home affected by alcohol abuse. Research from the Centre for Alcohol and Drug Research suggests that one in seven grows up with parents who misuse alcohol or drugs. Furthermore, about 40% of children raised in such environments go on to develop addiction themselves. New figures from TUBA—a Danish organization supporting young people from families with substance abuse—reveal that addiction issues are frequently passed down through generations. TUBA emphasises the urgent need for stronger preventive efforts to help break this cycle.

Addiction, like physical traits such as eye or hair colour, can be inherited. According to TUBA's latest data, 47% of young people seeking help report that their grandparents also had alcohol problems. Kåre Skarsholm, TUBA's national director comments, "These numbers clearly show that addiction issues often span multiple generations. This strongly reinforces what we already know at TUBA: we must strengthen preventive measures to help young people break the cycle and stop addiction from being inherited."

The figures are part of a broader survey involving 1,671 respondents aged 14–35 who began treatment at TUBA in 2024. The survey results also identify that addiction often coincides with other serious family problems. Many young people report growing up with overlapping forms of neglect, abuse, and dysfunction. According to the same survey 64% experienced psychological abuse, 42% were exposed to physical violence or threats, 55% believe their father—and 46% their mother—suffered from mental illness, 26% said a parent was or may have been involved in criminal activity during their childhood. Exposure to multiple forms of neglect greatly increases the risk of later psychological, social, and health challenges. These young people are more likely than their peers to face anxiety, depression, low self-esteem, and loneliness. They're also at significantly higher risk for psychiatric hospitalisation and suicidal behaviour. Among TUBA's clients in 2024, 27% had attempted or threatened suicide.

Alongside the release of this data, TUBA is issuing new recommendations aimed at improving conditions for young people from families with substance abuse. The organization highlights the long-term impacts of growing up with addiction and calls for increased support for young people over the age of 25. Supporting young adults in overcoming inherited trauma is a vital aspect of prevention. According to TUBA, such efforts reduce the risk of continuing the addiction cycle and offer these individuals the chance to build more stable, fulfilling lives—benefiting not only themselves, but society at large.

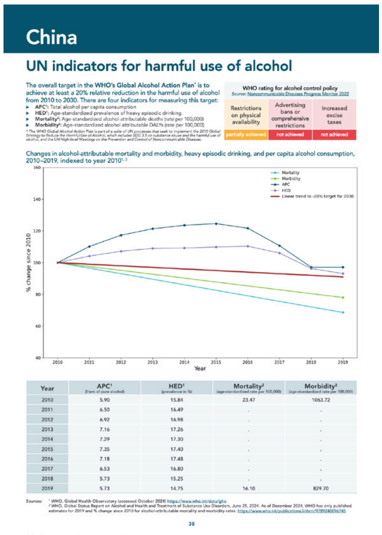
https://tuba.dk

IARD publication Alcohol and health trends by country based on WHO data

IARD launched a publication on Alcohol and health trends by country based on WHO data. The booklet is designed as a resource for UN member states, offering a detailed breakdown of alcohol and health trends by country based on the WHO's latest data. According to Julian Braithwaite, President and CEO of IARD, the booklet provides a basis for examining where there has been progress since the UN strategy came into force in 2010, and for considering which policies have worked and in which contexts. As such it will hopefully help UN member states to redouble the focus on what has been effective at the 2025 meeting.

Brathwaite commented in the report foreword "As we approach the UN High-Level Meeting on Noncommunicable Diseases (NCDs) in September 2025, it presents the most significant opportunity before 2030 to take decisive action and secure further commitments that will advance the UN's Sustainable Development Goals in public health.

Alcohol and health remain critical components of the NCD agenda, and IARD and its member companies are fully committed to playing their part in the UN's whole-of-society strategy to reduce the harmful use of alcohol. Since the 2018 High-Level Meeting, the private sector has implemented substantial measures to eliminate the marketing and sale of alcohol to minors, responding directly to the UN's call to action.



China

UN indicators for harmful use of alcohol

The overall target in the WHO's Global Alcohol Action Plan* is to achieve at least a 20% relative reduction in the harmful use of alcohol from 2010 to 2030. There are four indicators for measuring this target:

- APC[1]: Total alcohol per capita consumption
- HED[1]: Age-standardized prevalence of heavy episodic drinking
- Mortality[2]: Age-standardized alcohol attributable deaths (rate per 100,000)
- Morbidity[2]: Age-standardized alcohol attributable DALYs (rate per 100,000)

* The WHO Global Alcohol Action Plan is part of a suite of UN processes that seek to implement the 2010 Global Strategy to Reduce the Harmful Use of Alcohol, which includes SDG 3.5 on substance abuse and the harmful use of alcohol, and the UN High-level Meetings on the Prevention and Control of Noncommunicable Diseases.

WHO rating for alcohol control policy (Source: Noncommunicable Diseases Progress Monitor 2022)		
Restrictions on physical availability	Advertising bans or comprehensive restrictions	Increased excise taxes
partially achieved	not achieved	not achieved

Changes in alcohol-attributable mortality and morbidity, heavy episodic drinking, and per capita alcohol consumption, 2010–2019, indexed to year 2010[1, 2]

Year	APC[1] (liters of pure alcohol)	HED[1] (prevalence in %)	Mortality[2] (age-standardized rate per 100,000)	Morbidity[2] (age-standardized rate per 100,000)
2010	5.90	15.84	23.47	1063.72
2011	6.50	16.49	.	.
2012	6.92	16.98	.	.
2013	7.16	17.26	.	.
2014	7.29	17.30	.	.
2015	7.35	17.40	.	.
2016	7.18	17.48	.	.
2017	6.53	16.80	.	.
2018	5.73	15.25	.	.
2019	5.73	14.75	16.10	829.70

Sources: [1] WHO, Global Health Observatory (accessed October 2024) https://www.who.int/data/gho
[2] WHO, Global Status Report on Alcohol and Health and Treatment of Substance Use Disorders, June 25, 2024. As of December 2024, WHO has only published estimates for 2019 and % change since 2010 for alcohol-attributable mortality and morbidity rates. https://www.who.int/publications/i/item/9789240096745

38

Encouragingly, the UN's strategy is yielding results. According to the WHO, global alcohol-attributable mortality rates decreased by 20% from 2010 to 2019, a testament to the effectiveness of coordinated efforts. However, significant national disparities persist, as illustrated in the accompanying data in this booklet, which has been derived from the WHO's Global Status Report on Alcohol and Health (June 2024).

IARD and the private sector stand ready to support the outcomes of the 2025 High-Level Meeting and to embrace new commitments that will further the UN's goal of reducing harmful drinking by 2030.

iard.org/getattachment/69ec18ec-7ed6-4d4b-86e1-358657c7c52b/iard_trendsreport-2025hlm-alcoholandhealthwhodata2024.pdf

MADD and Nationwide Launch "Prom Promise" Campaign in the US

Mothers Against Drunk Driving® (MADD), with support from Nationwide, has launched the 2025 Prom Promise campaign to prevent underage drinking and drug use during prom season. The campaign centres around the Prom Promise Contract, an agreement signed by parents and teens to commit to a safe, substance-free prom night. Accompanied by MADD's Power of Parents handbook, the initiative aims to foster open communication and shared responsibility between families to ensure teens understand the risks of impaired choices.

MADD emphasises that prom is a significant milestone for teens and that promoting safety during this period is crucial. With Nationwide's backing, the campaign provides tools and resources that encourage parents and guardians to have meaningful, potentially lifesaving conversations with their children.

The campaign is references statistics showing that underage drinking leads to approximately 4,300 deaths annually in the US, according to the CDC. In addition, youth who begin drinking early are seven times more likely to be involved in alcohol-related crashes. The National Highway Traffic Safety Administration reports that car crashes remain a leading cause of teen deaths, with nearly a third of young drivers in fatal incidents in 2022 found to have consumed alcohol.

Changes to the Sale & Supply of Alcohol in New Zealand

In New Zealand, The Hon. Kieran McAnulty's Sale & Supply of Alcohol Amendment Bill (Sales on Anzac Day morning, Good Friday, Easter Sunday and Christmas Day) has passed its first reading, and the committee is accepting submissions until 22 May 2025.

New Zealand Alcohol Beverages Council (NZABC) executive director Virginia Nicholls said, "Allowing restaurants, bars and supermarkets to sell or serve alcohol like any other day during ANZAC Day morning, Good Friday, Easter Sunday and Christmas Day is a win for common sense." NZABC said it would also support the Bill going a step further and allowing all other retailers who presently sell beer, wine and spirits to open on these days.

Mike Butterick's Members' bill in New Zealand makes two changes to the Sale and Supply of Alcohol Act to allows restaurants to hold an on-licence and off-licence under the same roof and liberalises the requirement to serve low-alcohol products to allow the sale of no alcohol beer, wine, and spirits as well.

Butterick commented, "The Act currently prohibits 'shops within shops', which means restaurants that are also speciality food stores have great difficulty in selling alcohol through an off-licence under the same roof and at the same time….This has become a particular point of frustration with local restaurants and vineyards, who want to offer an enhanced dining experience for their customers but find there are too many regulatory hoops to jump through. This Bill fixes that."

Additionally, the Bill will modernise the law in respect to the growth of the ultra-low and non-alcohol market. Currently, the Act requires on-license and club-license premises to stock low-alcohol products but does not extend this requirement to allow no alcohol beer, wine, and spirits. The Bill will make it an 'and/or' by extending the provision to beer, wine, or spirits that contain less than 1.15% of ethanol. Butterwick added, "The Sale and Supply of Alcohol Act is supposed to reduce alcohol-related harm, but sections of the Act are outdated and are stopping innovative restaurants from offering broader dining and retail experiences to improve the strength of their business".

48th Annual RSA Scientific Meeting/ ISBRA Congress

June 21-25, 2025

New Orleans, Louisiana

The primary goal of the Annual Scientific Meeting is to provide a forum for alcohol researchers – from all disciplines – to present their latest findings and to learn about new research developments in an environment that will provide interaction at both the professional and personal level. The 48th Annual RSA Scientific Meeting/ISBRA Congress is now open!

rsa.societyconference.com/v2/

Alcohol Program in the Centers for Disease Control and Prevention in the US to close

A small office that produced data on alcohol-related deaths and harms, and worked on policies to reduce them, has been closed by the Trump administration. Those involved with the work say it was the only group in the federal government focused on preventing excessive drinking and the problems associated with it, including chronic diseases. At least 11 states directly relied on the Alcohol Program in the Centers for Disease Control and Prevention for funding, data assistance and other guidance. The three-person, 24-year-old program was cut by the large reduction-in-force that began April 1 at Health and Human Services. Most recently, the alcohol program was allocated $6 million for its work. Much was spent in grants to nearly a dozen state health departments so they could hire alcohol epidemiologists, conduct studies on excessive alcohol use, and try to reduce associated harms. Now, without the staff to tend to those five-year agreements, states are not sure if they will receive their final round of funding in the coming fall.

The real reasons Generation Z is drinking less alcohol

In the US, data suggests that Generation Z is drinking less alcohol than previous generations did at the same age. Most industry experts believe that this trend is driven by young people's concerns about health and concern about their physical appearance due to their heavy use of social media. The authors of a report by RodoResearch, question these assumptions.

Senior analyst, Bourcard Nesin, argues that the main reasons Gen Z-led households spend less on alcohol than other generations is due to lower incomes, less stable employment, and that they are only just beginning to form independent households. Many are also still under the legal drinking age. While they don't yet make as much money as older generations, they spend an equal share of what they do earn on alcohol. In previous decades however, young people used to spend a much higher share of their income on alcohol. A decade ago, households led by an individual under 30 spent 1.1% of their income on alcohol. Today it is closer to 0.74%. Meanwhile, spending on alcohol has largely remained unchanged for households led by people over 30.

While economic factors explain much of Gen Z's drinking behaviour, Nesin also explores how the digital world has reshaped youth social life – and, by extension, drinking culture. Smartphone use, social media, and constant parental surveillance have led to a steep drop in underage drinking. In 1991, over 64% of US high school seniors had been drunk at least once. By 2024, it was just 33%. Two-thirds of that decline occurred after 2012 – the year smartphones became commonplace. Young people today spend more time online and less time socialising face to face. That means fewer parties and fewer drinking occasions. At the same time, the ever-present risk of being photographed while drunk – and having that photo go viral – has made alcohol less appealing. The consequences for teens caught drinking, especially student athletes, can be immediate and serious.

Yet, crucially, Nesin argues that these changes are more about adolescence than a permanent generational mindset. "The surveillance risk disappears as Gen Z grows up," he notes. That's why the industry can expect a rebound – albeit a partial one – in alcohol consumption as this cohort matures. Across the past 40 years, younger adults have increasingly delayed their drinking – but by their mid-30s, most catch up to prior general norms. Nesin's analysis suggests Gen Z will do the same, albeit at slightly lower levels.

media.rabobank.com/m/18086d3a9adee411/original/The-real-reasons-Generation-Z-is-drinking-less-alcohol.pdf

Drink More Water campaign in Bangkok

Pernod Ricard is bringing back its Drink More Water campaign to Bangkok for Songkran 2025, continuing its mission to promote responsible drinking and encourage hydration during celebrations. Running from April 12–15, the campaign features playful hydration stations inspired by local culture, offering free water and popsicles to help festivalgoers stay refreshed and pace their alcohol consumption during Thailand's iconic water festival.

This year's campaign introduces a local twist by incorporating popular street treats and setting up hydration stations at key hotspots. Visitors can participate by following the campaign's Instagram account, sharing a photo taken at the stations, and presenting proof to redeem complimentary refreshments. The installations also serve as engaging photo spots, with on-site brand ambassadors promoting mindful drinking habits.

Part of Pernod Ricard's global Sustainability & Responsibility strategy, the Drink More Water initiative has reached over 600 million people online and 23 million in person across 61 markets since 2021. The company continues to lead in responsible consumption efforts through initiatives like digital labelling on half a billion bottles and by fostering its philosophy of "conviviality without excess," particularly during high-consumption occasions like Songkran.

AIM – Alcohol in Moderation was founded in 1991 as an independent not for profit organisation whose role is to communicate "The Responsible Drinking Message" and to summarise and log relevant research, legislation, policy and campaigns regarding alcohol, health, social and policy issues.

AIM Mission Statement

- To work internationally to disseminate accurate social, scientific and medical research concerning responsible and moderate drinking
- To strive to ensure that alcohol is consumed responsibly and in moderation
- To encourage informed and balanced debate on alcohol, health and social issues
- To communicate and publicise relevant medical and scientific research in a clear and concise format, contributed to by AIM's Council of 20 Professors and Specialists
- To publish information via www.alcoholinmoderation.com on moderate drinking and health, social and policy issues – comprehensively indexed and fully searchable without charge
- To educate consumers on responsible drinking and related health issues via drinkingandyou.com and publications, based on national government guidelines enabling consumers to make informed choices regarding drinking
- To inform and educate those working in the beverage alcohol industry regarding the responsible production, marketing, sale and promotion of alcohol
- To distribute AIM Digest Online without charge to policy makers, legislators and researchers involved in alcohol issues
- To direct enquiries towards full, peer reviewed or referenced sources of information and statistics where possible
- To work with organisations, companies and associations to create programmes, materials or policies that communicate responsible alcohol consumption messages or work to reduce alcohol related harm.

AIM Social, Scientific and Medical Council