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information about AIM's subscription levels and payment details.

**Henk Hendriks - Co-director**E: [henk@alcoholinmoderation.com](mailto:henk@alcoholinmoderation.com)**Creina Stockley - Co-director**E: [creina@alcoholinmoderation.com](mailto:creina@alcoholinmoderation.com)**Alison Rees - Editor**E: [alison@alcoholinmoderation.com](mailto:alison@alcoholinmoderation.com)**Zoe Westwood – Finance and subscriptions**E: [zoe@alcoholinmoderation.com](mailto:zoe@alcoholinmoderation.com)

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## Alcohol consumption and colorectal carcinogenesis: an exploration of the gut microbial pathway as a potential mediator

Alcohol consumption is one of the major risk factors of colorectal cancer (CRC), yet the mechanisms underlying this relationship, particularly the role of gut microbes, are not fully understood. A study published in the European Journal of Nutrition explored the associations of alcohol intake with the gut microbiome and colorectal lesions among CRC screening participants. Of particular interest was the potential role of gut microbes in mediating the association between alcohol intake and colorectal lesions.

Screening participants with a positive faecal immunochemical test at ages 55–77 were eligible for the CRCbiome study. Alcohol intake was assessed using a validated, semi-quantitative food frequency questionnaire and linked with based gut microbial profiles to study associations with screen-detected colorectal lesions. The potential role of alcohol-associated gut microbes in mediating the association between alcohol intake and colorectal lesions was examined.

Of 1,468 participants with dietary data, 414 were diagnosed with advanced lesions. People who drank more alcohol were more likely to have these early warning signs, and the risk increased the more alcohol they consumed.

The researchers also discovered that people who drank alcohol had different types of bacteria in their gut compared to those who didn't drink. These changes in gut bacteria seemed to explain a small part of the increased cancer risk—about 12%. This means alcohol may not only harm the body directly, but also indirectly by changing the balance of bacteria in the gut. Overall, the study suggests that gut bacteria play a role in how alcohol increases the risk of bowel cancer, although they are only one part of the bigger picture.

Source: AS Kværner, E Birkeland, E Avershina, et al. Alcohol consumption and colorectal carcinogenesis: an exploration of the gut microbial pathway as a potential mediator. *Eur J Nutr* 2026, 65, 120. <https://doi.org/10.1007/s00394-026-03960-6>

## Association between alcohol consumption and breast cancer incidence and prognosis: A systematic review and meta-analysis

Arecco, L., Cacilhas, P.M., Bobato Lara Gismondi, C., Bruzzone, M., Gentile, G., Gerosa, R., Blondeaux, E., Agostinetto, E., Dauccia, C., Lobo-Martins, S., Grochot, R., Saini, K., Azim Jr., H.A., Debiasi, M., De Caluwé, A., Buisseret, L., Del Mastro, L., Lambertini, M., de Azambuja, E.

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### Abstract

**Background:** While alcohol consumption appears to influence the incidence of breast cancer (BC), its association with prognosis after a BC diagnosis remains less established. This meta-analysis aimed to explore the association between alcohol consumption on both BC incidence and outcomes.

**Methods:** A systematic literature search was conducted up to May 1st, 2025 (CRD42025593784). Retrospective and prospective studies reporting BC incidence, recurrences, and survival outcomes in women with history of alcohol consumption were included. Analyses according to alcohol intake levels (light, intermediate, heavy consumption) were performed. Main outcomes were BC incidence, BC recurrences, BC-specific survival (BCSS), and overall survival (OS). Pooled relative risk (RR) and hazard ratio (HR) with 95% confidence interval (CI) were calculated.

**Results:** Out of 5208 screened records, 37 studies including 2,565,920 women were included. Among 17 studies reporting on BC incidence, any alcohol consumption was associated with an increased BC incidence (RR 1.17, 95%CI 1.09–1.26;  $p < 0.001$ ). BC incidence increased proportionally with higher levels of alcohol consumption: light RR 1.13 (95%CI 1.05–1.23;  $p = 0.002$ ), intermediate RR 1.28 (95%CI 1.18–1.39;  $p < 0.001$ ), and heavy consumption RR 1.52 (95%CI 1.38–1.67;  $p < 0.001$ ). Among 20 studies assessing BC outcomes, no associations were found between alcohol consumption and BC recurrences (RR 1.02, 95%CI 0.93–1.11) nor BCSS (HR 0.93, 95%CI 0.87–1.00), while light and intermediate alcohol consumption were associated with slightly improved OS: HR 0.85 (95%CI 0.78–0.92;  $p < 0.001$ ) and HR 0.84 (95%CI 0.75–0.94;  $p = 0.002$ ), respectively.

**Conclusions:** Among over 2.5 million women, alcohol consumption was associated with a dose-dependent increased risk of BC, while alcohol consumption did not appear to worsen prognosis in patients with prior BC diagnosis.

### ISFAR Summary

Arecco et al. (2026) provide a comprehensive synthesis of the relationship between alcohol consumption and breast cancer incidence and prognosis, drawing on data from over 2.5 million women across 37 studies. Although a statistically significant association is reported, the magnitude of the observed effect is weak from an epidemiological standpoint. A large degree of heterogeneity is also reported, indicating that this association is highly susceptible to residual bias and uncontrolled confounding, thus limiting causal inference.

Arecco et al. (2026) report a relatively high increase in risk with alcohol consumption, namely 13–28%, whereas other meta-analyses report lower increases. These differences will most likely be determined by the studies included in the analysis, with assessments of alcohol consumption varying across them, recall bias leading to underreporting, and other biases, such as a lack of information on drinking patterns, as well as the role of other socioeconomic and lifestyle factors. Differences may also be determined by excluding some studies that did not find an association between alcohol consumption and breast cancer risk.

The study's clinical significance lies in its finding that alcohol appears to have a limited effect on breast cancer prognosis. In addition, no significant association was observed with recurrence or breast cancer-specific survival, whereas a significant beneficial association was observed with overall survival. While the study strengthens the existing evidence for alcohol reduction in cancer prevention, this new evidence on survivorship and prognosis should be interpreted cautiously.

### Background

Breast cancer (BC) is the most common type of cancer in women, and the first purported positive association between alcohol consumption and breast cancer was reported in 1977 (Williams and Horm 1977). Although treatment has advanced and is now relatively successful, BC remains the second leading cause of cancer death in women after lung cancer (American Cancer Society, 2026). Therefore, regularly updating and reviewing the latest literature is important.

BC has many risk factors; several of these are not modifiable. Non-modifiable risk factors include getting older, specific genetic mutations, early menstrual periods, late or no pregnancy, starting menopause after the age of 55, having dense breasts, personal and family history of breast cancer, and previous radiotherapy (Debela et al., 2025). Modifiable risk factors include lack of physical activity, being overweight or obese after menopause, using hormone therapy, taking oral contraceptives, and alcohol consumption (Jung et al. 2016, Francies et al. 2020). Since BC is a common type of cancer and the risk may be influenced to some extent by lifestyle factors such as alcohol consumption, considerable attention is given to the relationship between BC and alcohol consumption.

Consuming alcohol has been dose-dependently associated with an increased risk of BC. The impact of alcohol consumption on BC risk varies between studies; some report an increase of approximately 4% per daily glass of alcohol (Seitz et al., 2012) whereas others have reported an increase of approximately 10% per daily glass of alcohol (U.S. Surgeon General., 2025). These estimated risk increases are relative risks. So, one should understand that, because one in eight women will develop BC, women have an overall risk of 12.5%. Drinking one glass of alcohol daily will increase that risk from 12.5% to  $[12.5 + (4\% \times 12.5)]$  or  $12.5 + (10\% \times 12.5)$ , which is 13 or 13.75%.

Previous ISFAR critiques (ISFAR #285, #270, #265 and #241, for example) also addressed systematic reviews and meta-analyses of BC incidence. Arecco et al. (2026) address not only the relationship between alcohol consumption and BC incidence but also BC recurrence and overall survival, which have been less addressed in studies. The authors selected papers published after 2000, yielding two sets of studies: one focusing on BC incidence and another on BC recurrence and overall survival. The incidence analysis included 2,450,932 women, and among these, 53,465 women with a history of alcohol consumption were subsequently diagnosed with BC. The conclusions drawn were essentially similar to those reported before: alcohol consumption, even moderate drinking, increases the incidence of BC, and alcohol consumption does not affect BC recurrence and is actually linked to a slightly improved overall survival.

## Critique

While meta-analysis by Arecco et al. (2026) confirms and reinforces previous results, it is striking how the relative risks vary across meta-analyses. As indicated above, the relative risk ranges from approximately 4% to 10% per daily glass of alcohol. Arecco et al. (2026) report a 13% increase for the light alcohol consumption group compared with non-consumption, which is defined as the group drinking up to one glass of (10 g) alcohol per day. The intermediate group, defined as  $> 10$  g alcohol and  $< 20$  g of alcohol per day, has an increased risk of 28%, which is relatively high compared to some other previous meta-analyses and systematic reviews. Such differences will most likely be determined by the studies included in the analysis, with assessments of alcohol consumption varying across them, recall bias leading to underreporting, and other biases, such as the lack of information on drinking patterns, as well as the strong correlation between alcohol consumption and socioeconomic and lifestyle factors that may independently influence cancer risk and survival.

Arecco et al. (2026) also reported the incidence of BC by tumour subtype (i.e., hormone receptor status). Alcohol consumption appeared to be associated with a higher risk of hormone-receptor-positive BC, while no significant association was found between alcohol consumption and the incidence of hormone-negative BC. Since a large proportion of BC cases involve hormone receptor-positive tumours (70-80% of all BC cases), this first key finding supports the idea that hormonal pathways, especially those related to oestrogen, are central to the biological connection between alcohol and breast cancer, and could explain why the effect of alcohol varies across different breast cancer subtypes (Al-Sader et al., 2009). It is well documented that there is a positive association between the risk of development of breast cancer and the concentration of steroid hormones for both pre- and post-menopausal women; the steroid hormones include androgens, such as testosterone, and estrogens, such as estradiol, estrone and estriol (Kaaks et al. 2005a,b). One source of endogenous estrogens is the aromatisation of androgens to estrogens, and alcohol has been observed to increase this aromatisation; the conversion occurs primarily in the ovary for pre-menopausal women and

peripherally for post-menopausal women. The authors thus suggest that, although a causal relationship cannot be definitively established, reducing alcohol consumption remains an important modifiable risk factor for BC prevention.

A second aim of Arecco et al. (2026) was to examine the effect of alcohol consumption on BC recurrence, breast cancer-specific survival and overall survival. Interestingly, neither parameter is negatively affected by alcohol consumption. However, as the authors highlight, alcohol consumption is often measured prior to diagnosis rather than afterwards, and there is limited monitoring of changes in drinking behaviour after treatment, which is a major limitation of existing studies.

A potential biological explanation for this lack of association between BC recurrence and alcohol consumption is that the processes that trigger cancer (carcinogenesis) are not always the same as those that promote tumour growth or recurrence (Murray, 2015). The initiation of the tumour is linked to alcohol, with acetaldehyde, the primary metabolite of alcohol, directly damaging DNA and impeding repair mechanisms, leading to mutations that can result in the development of the first cancer. The promotion of the existing tumour, however, may be less closely linked to alcohol, as once a tumour is established, its recurrence depends more on the tumour's inherent aggressiveness, systemic inflammation, or hormonal factors, which may not be significantly influenced by low levels of alcohol. Furthermore, although alcohol is known to raise oestrogen levels, which can promote oestrogen receptor-positive (ER+) cancers (Al-Sader et al., 2009), many patients receive anti-oestrogen treatments such as tamoxifen or aromatase inhibitors after diagnosis. These adjuvant therapies effectively block the estrogen-increasing effects of alcohol, neutralising the pathway that would otherwise promote recurrence.

It has also been suggested that while low levels of the enzyme aldehyde dehydrogenase in breast tissue, which detoxifies acetaldehyde, increase the breast's vulnerability to initiation by alcohol, in an already treated patient, the amount of acetaldehyde produced by moderate drinking might not reach a sufficiently high concentration to promote new growth in any dormant cancer cells. Additionally, after radiation and chemotherapy,

any remaining dormant cells might have a different metabolic profile, rendering them less vulnerable to the specific DNA damage caused by acetaldehyde (Brooks and Zakhari 2015)

Another possible explanation is changes in drinking habits after a first BC incident. This is, however, not likely since recurrence was studied in women who drank alcohol after their first incidence of breast cancer. Alternatively, methodological aspects or unknown confounders, such as cancer screening (Mu and Mukamal, 2016), may still be relevant for the alcohol–breast cancer association but are currently missing from the overall picture.

The third key finding of 'slightly' improved overall survival in women who had already been diagnosed with light and intermediate alcohol consumption may, as the authors suggest, be due to beneficial effects on other conditions, such as cardiovascular disease events or residual confounding. Interestingly, the hazard ratios reported for this finding were 0.85 and 0.84 for light and intermediate alcohol consumption, respectively, corresponding to reductions of 14% or 15% in overall survival. Conversely, a 13% and 28% increased risk for an initial BC incidence was seen as a key reason to advocate limiting alcohol consumption to reduce cancer risk.

It is interesting to see how positive and negative relative risks are interpreted differently. The relationship between alcohol consumption and BC risk is very complex and should be recognised as present but not as a proven fact to justify restrictive measures for alcohol consumption.

In conclusion, this systematic review and meta-analysis by Arecco et al. (2026) provides a comprehensive and methodologically rigorous synthesis of the relationship between alcohol consumption and breast cancer incidence and prognosis, drawing on over 2.5 million women across 37 studies. The findings confirm alcohol consumption as a modifiable risk factor, particularly for estrogen receptor-positive breast cancer, with risk increasing in a dose-dependent manner. However, the study's clinical significance lies in its finding that alcohol appears to have a limited influence on breast cancer prognosis, as no significant association was observed with recurrence or breast cancer-specific survival, even among heavy drinkers. Importantly, this absence of association should not be interpreted as

evidence of safety, as limitations in self-reported exposure measurement, inadequate assessment of post-diagnosis drinking behaviours, and residual confounding may obscure a true relationship. Accordingly, while the study strengthens the evidence for alcohol reduction in cancer prevention, its implications for survivorship and prognosis remain uncertain and should be interpreted with caution.

### Specific Comments

Forum Member Skovenborg states that “alcohol is classified as a group 1 carcinogen “alongside tobacco and asbestos”. As of March 2026, there are over 135 agents, mixtures, and exposure circumstances listed in Group 1, including, for example, tamoxifen (an anti-oestrogen drug), diesel exhaust, wood dust, processed meat, and Chinese-style salted fish. Full-text articles reporting no association between alcohol and breast cancer were excluded according to the flow diagram. If you are studying the possible association between alcohol consumption and breast cancer how is it OK to exclude studies with a “no association” result? And how would the relative risk calculations look if these studies were included? Is this decision introducing an information bias?

Light alcohol intake ( $\leq 10$  g/day) is a fictional figure, calculated by dividing most data on weekly alcohol intake by 7. There is a risk difference between drinking 70 grams of alcohol over the weekend and taking 10 g a day with a meal.

Significant heterogeneity was observed across the included studies. Given this serious problem, why should the results not be interpreted with “extreme caution”? A recent Norwegian review of risk factors for breast cancer reached the following conclusion: “It is surprising that alcohol consumption was not in the “top list” of risk or causes of breast cancer, since alcohol consumption is listed as a risk factor, and deaths from breast cancer are linked to alcohol use (Løyland et al. 2024). Three systematic reviews of alcohol use and breast cancer are included in this evidence synthesis, two with meta-analyses, and it is interesting to note that the findings are inconsistent. The conclusions varied from “there is an association” between alcohol consumption and breast cancer risk, to “the association remains insufficient”, to “high intake of wine contributes” to

breast cancer risk, but “protection is exerted with low doses of wine”. Although one of these meta-analyses concluded with an association with an effect size of 1.28, the result did not qualify for our “top list” because of high heterogeneity ( $I^2 = 73.5\%$ ). In addition, in the systematic review without a meta-analysis, researchers found a positive association in one study, while another study showed a nonsignificant inverse association. The authors of this systematic review reported low methodological quality and a small number of included studies.”

**Forum member Ellison** “Agrees with the initial comments of other Forum members, as stated in the Critique, that this is a very well-done analysis and publication that supports the potential adverse effects of alcohol consumption on the occurrence and recurrence of breast cancer. This and earlier studies suggest that the increase in breast cancer risk among light drinkers is modest, but risk rises among women who drink heavily. Further, little effect of alcohol intake is observed on breast cancer recurrence or death from breast cancer. However, among women with breast cancer, a beneficial effect of alcohol consumption on total mortality is notable, with about a 15% decrease in risk for light and moderate drinkers. We assume that the protective effects of moderate drinking on cardiovascular risk underlie these findings.

The initial results reported in this paper concern the relationship between total alcohol intake and breast cancer risk. Given that the association between alcohol and disease is non-linear, these data are less informative than those demonstrating risk at varying levels of consumption.

To what extent can these data provide advice for an individual woman? Since the effects of alcohol consumption are markedly affected by cultural and lifestyle factors (including education, income, dietary factors, smoking habits, obesity, and especially the pattern of drinking), the results of these analyses are limited in providing the data needed to develop drinking advice for an individual woman. For this, data are needed on the effects among women in similar socio-economic and cultural settings and with similar patterns of drinking. One possible avenue to explore this might be to evaluate a woman’s frequency of mammography. This seems to be affected by lifestyle factors, with more frequent

mammography among those with higher socio-economic status, and thus presumably a higher chance of identifying early cancers. As such, women who tend to drink more might be found to have a higher alcohol-related cancer risk."

**Forum member Romano** considers that "The relationship between alcohol consumption and breast cancer, as presented in this meta-analysis, must be interpreted with caution because of important methodological limitations that compromise the causal validity of the findings. Although a statistically significant association is reported, the magnitude of the observed effect (RR 1.17) is weak from an epidemiological standpoint and falls within a range highly susceptible to residual bias and uncontrolled confounding, thereby limiting causal inference.

A central concern is residual confounding. Alcohol consumption is closely associated with socioeconomic, behavioural, and biological variables, including socioeconomic status, diet, body mass index, physical activity, reproductive history, and hormonal therapy use. These factors are inconsistently controlled for across studies, and the 'healthy moderate drinker' effect introduces systematic bias, as moderate drinkers often have better overall health profiles and greater access to healthcare.

The extreme heterogeneity across studies ( $I^2 = 92\%$ ) further undermines interpretability. The pooled estimate combines heterogeneous populations, study designs, and exposure definitions, limiting both internal coherence and external validity. Measurement of alcohol exposure is another major limitation. Most studies rely on self-reported intake, with inconsistencies in timing, quantification, and categorisation. Harmonising into standardised exposure groups introduces misclassification bias, which may attenuate or distort associations.

Although biological mechanisms support a potential carcinogenic role for alcohol, including acetaldehyde-mediated DNA damage, oxidative stress, and hormonal modulation, the modest magnitude of the observed associations raises concerns about bias.

The finding of improved overall survival among moderate drinkers is particularly problematic. This observation lacks biological plausibility and is likely explained by systematic biases, such as

the 'healthy drinker bias' and 'sick quitter bias', in which non-drinkers may include individuals with pre-existing illness.

From a sampling perspective, aggregating heterogeneous study designs across diverse populations and time periods limits comparability and generalisability. Selection bias is also likely, as several cohorts involve specific subpopulations.

Finally, the definition of the reference group is a critical limitation. Including both lifelong abstainers and former drinkers introduces bias that may distort estimates of incidence and survival. Overall, although the study suggests an association between alcohol consumption and breast cancer risk, methodological limitations preclude strong causal conclusions. Prognostic findings should be interpreted with caution, as they are likely influenced by bias rather than by true biological effects."

**Forum member Harding** considers that "the rationale for this paper is set out in the Introduction. The first paragraph identifies alcohol consumption as a modifiable risk factor that may influence breast cancer incidence, citing references 4 and 5. Reference 4 (Harborg) concerns obesity and does not mention alcohol at all. Reference 5 (Islami) lists alcohol consumption as one of 18 modifiable risk factors attributed to all cancer cases in the USA, but makes no claims about causation.

2. The second paragraph of the Introduction simply states that alcohol intake is a well-established modifiable risk factor for cancer and cites Reference 6 (Rumgay). The authors of this paperwork for the International Agency for Research on Cancer and state that alcohol consumption was causally related to breast cancer in IARC Monographs published in 2010 and 2012.

3. The 2010 Monograph was No. 96, devoted to Alcohol Consumption and Ethyl Carbamate. Paragraph (f) in the Preamble (p. 19) concerns the Criteria for Causality. It states that the Working Group makes a judgment on the strength of evidence that the agent in question is carcinogenic in humans. It further states that, in making this judgement, the Working Group considers the Bradford Hill criteria, but there is no account of how the criteria are applied in particular cases, i.e. the process is not transparent. On page 13, it states that the IARC Working Groups strive to achieve a 'consensus evaluation'. Consensus

reflects broad agreement among Working Group Members, but not necessarily unanimity. The conclusion that malignant tumours of the female breast are causally related to the consumption of alcoholic beverages (6.1, p. 1278) is a result of this process, but the rationale for the conclusion is not explained and is not known. There are no criteria mentioned that need to be met before the evidence is 'sufficient' to conclude that alcohol causes breast cancer. In paragraph 6(e) on page 33, it states that the reasoning the Working Group used to reach its evaluation is presented and discussed, but where is it?

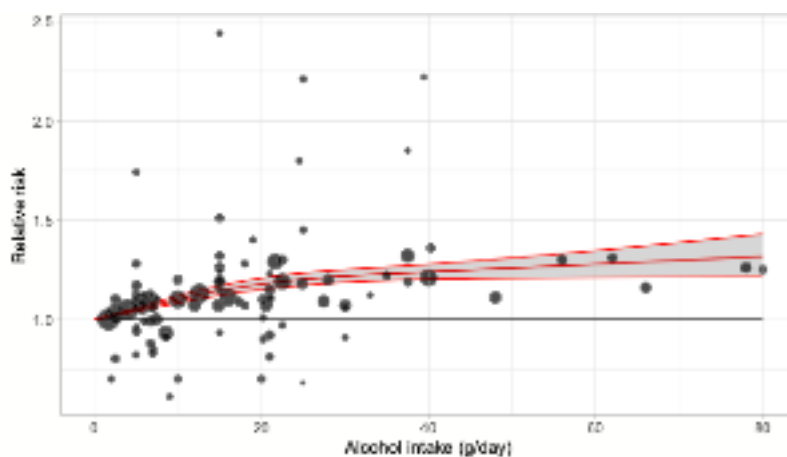
4. The 2012 Monograph was No.100E, on Personal Habits and Indoor Combustions. It simply cited the conclusions of the 2010 Monograph but also included more recent studies. Several studies showed negative associations, but the conclusion was again that alcohol consumption is causally associated with cancer of the female breast.

5. The Introduction goes on to assert that 'Recent evaluations have reaffirmed the link between alcohol and breast cancer incidence<sup>2</sup> estimating that women who consume two alcoholic drinks per day have a 10-20% higher risk of developing breast cancer compared to non-drinkers'. The reference cited is the 2025 US Surgeon General's Advisory on Alcohol and Cancer Risk, which cites two papers in support of this position (Sarich et al and Jung et al). Both papers find positive associations between alcohol consumption and breast cancer, yet again gloss over the crucial difference between association and causation.

6. The US Surgeon's General Advisory does acknowledge, on page 7, that 'Determining whether there is a causal relationship between a risk factor and a health outcome such as cancer is done through comprehensive assessments of scientific evidence and the application of well-established scientific criteria such as the Bradford-Hill criteria', but then makes absolutely no attempt to do so.

7. So, let's apply some of them now. The first is Strength of the association. The increase in breast cancer rates reported in these papers is about 10%

per additional drink per day. Reading Bradford-Hill's original paper, it is clear that he would regard that as a very small effect. Another is Plausibility. Certainly, there are mechanisms by which alcohol consumption could lead to cancer, but where is the evidence that any of them actually causes breast cancer, especially when the cause of breast cancer is unknown? A third is Consistency. Has it been repeatedly observed by different people, in different places, circumstances and times? There is no shortage of studies on alcohol consumption and breast cancer. A graph taken from Sohi et al illustrates the general picture:



Scatter plot of studies that investigated the relationship between alcohol consumption and breast cancer incidence.

8. Further, some studies have found no association between alcohol consumption and breast cancer risk. For example, Ingold et al. (2019) reported that alcohol increased the risk of head and neck cancers but not breast cancer. A study involving about half a million Britons found no evidence of a causal association between alcohol consumption and breast cancer (Bressaoud et al. 2008). Low and regular consumption of wine reduces the risk of breast cancer (Mourouti et al. 2014). Moderate alcohol consumption, and especially wine consumption, seems to be associated with breast cancer prevention.

9. In 2026, it is no longer sufficient to depend on IARC assessments from 2010 and 2012 based on unknown rationales. It is unacceptable to gloss over results that do not support a position by arguing that the majority of studies show the opposite. A basic principle of the scientific method is that if a study does not support a hypothesis, there must be something wrong with the study or the hypothesis. So, which is it?

10. So, for these reasons, I do not support the premise on which this paper is written."

**ISFAR member Kaplan** remarks that "this meta-analysis is particularly important because there appears to be broad consensus that alcohol consumption—including light intake—is associated with incident breast cancer and, in some analyses, poorer outcomes. These conclusions have also influenced policy-relevant statements from the WHO, the American Association for Cancer Research, and the U.S. Surgeon General. In addition, concern about breast cancer risk may strongly influence health behaviours among women. With that context, here are a few comments:

### 1. Overall findings

Some of the core results are not unexpected. The analysis reports an association between alcohol consumption and breast cancer incidence in the overall population, and this association appears consistent across light, moderate, and heavy exposure categories. At the same time, there appears to be a protective association for overall survival, which deserves careful interpretation and discussion.

### 2. Study exclusions in the PRISMA diagram

All of the critiques were thoughtful, but I was particularly struck by Forum Member Skovenborg's comments. One point that would benefit from clarification is the exclusion of 22 studies at the third step of the PRISMA diagram (Figure 1). Were these studies excluded because they analysed alcohol exposure and found no statistically significant association with breast cancer (as suggested by Forum Member Skovenborg), or were they excluded because the authors did not report alcohol-related outcomes, perhaps because they were focusing on other associations? Clarifying this distinction would help readers better understand the selection process. If Forum Member Skovenborg's interpretation is correct (at least the way I read it), there was a serious problem with the inclusion criteria.

### 3. Number needed to harm

I had hoped to use the reported data to calculate the number needed to harm. Unfortunately, I was unable to locate sufficient information in the manuscript to perform that calculation. Providing absolute risks or additional summary estimates would have been very helpful."

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

Henk Hendriks, PhD, Independent consultant and partner of the Nutrition Consultants Cooperative, 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

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

Raquel Romano, PhD, Independent consultant and Professor of Applied Technology at the University of Aconcagua, Argentina

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

Robert M. Kaplan, PhD, Distinguished Professor and faculty member, Stanford School of Medicine Clinical Excellence Research Center, California, USA

## Reevaluating the alcohol–cancer link: Long-term cancer mortality outcomes in the REGARDS Study

Cancer prevention strategies often focus on behaviour change such as increased screening, smoking cessation, and healthy diets. Recently, enthusiasm for addressing alcohol as a significant cancer risk factor has gained attention. Using a large, population-based cohort, researchers sought to determine independent associations between alcohol consumption and cancer mortality.

The study used data from the REGARDS cohort study, which enrolled 30,239 adults 45+ years between 2003 and 2007 and follows them today. At enrolment, participants self-reported alcohol consumption as none, light ( $\leq 3$  drinks/week), moderate (4–7 drinks/week for women, 4–14 drinks/week for men), and heavy ( $\geq 8$  drinks/week for women and  $\geq 15$  drinks/week for men). The associations between alcohol consumption and cancer mortality were estimated.

Among 26,694 participants, mean age was 64.4 (SD 9.4) years, 44% were male, 42% were Non-Hispanic Black, 63% reported no alcohol, 22% light, 11%

moderate, and 4% heavy alcohol consumption. Over a median 13.3-year follow-up, there were 2,306 cancer deaths. After full adjustment for covariates, compared to abstainers, heavy drinkers had an increased risk of cancer death (1.21; 95% CI 1.01–1.45), and light drinkers had a decreased risk of cancer mortality (0.87; 95% CI 0.78–0.98), and there was no association between moderate drinking and cancer mortality.

These findings contribute to the growing evidence that heavy alcohol use is consistently linked with higher cancer mortality. The researchers encourage cancer prevention strategies to step away from isolating single health behaviours and consider holistic perspectives of an individual's lifestyle including physical activity, smoking, diet, and alcohol consumption.

Source: LC Pinheiro, G Jumonville, J Ringel, et al. Reevaluating the Alcohol–Cancer Link: Long-Term Cancer Mortality Outcomes in the REGARDS Study. *J Gen Intern Med* 2026 May 4. <https://doi.org/10.1007/s11606-026-10479-3>

## Zero tolerance for 0%? How should clinicians and other practitioners respond to the use of alcohol-free and low-alcohol products in higher risk groups

Alcohol-free and low-alcohol drinks (no/lo drinks) are now widely available and popular with consumers in high-income countries; however, it is unclear whether clinicians and others working to prevent or treat severe alcohol-related health problems should take a zero-tolerance approach to these alcohol-like products or encourage patients to try them. We argue that no/lo drinks may have an important role to play for people who drink at high-risk levels and those with alcohol use disorders (AUD) or alcohol-related liver disease (ARLD), particularly where debate and guidance related to treatment of these problems considers goals other than abstinence. The limited available evidence suggests no/lo drinks may be useful in supporting attempts to reduce alcohol consumption or maintain abstinence among high-risk drinkers who do not have severe AUD or ARLD; however, they may also entail significant risks of relapse in those recovering from AUD.

Further experimental and longitudinal studies are therefore needed, testing whether use of no/lo drinks can lead to, or support, reductions in alcohol consumption. In particular, there is a need for high-quality experimental studies to test whether exposure to and sustained use of no/lo drinks affects treatment and recovery outcomes. Evidence is also needed on which subgroups of AUD and ARLD patients would benefit or be at risk from use of either alcohol-free or low-alcohol drinks. Finally, guidance should recognise that many patients already use these products and that a zero-tolerance approach may alienate patients or erode trust in clinicians.

Source: J Holmes, CK Oldroyd, C Drummond, M Field, I Kersbergen, Allison MED. Zero tolerance for 0%? How should clinicians and other practitioners respond to the use of alcohol-free and low-alcohol products in higher risk groups. *Addiction*. 2026 May;121(5):1036-1041. <https://doi.org/10.1111/add.70244>.

## Alcohol consumption and molecular subtypes of colorectal cancer: pooled observational and Mendelian randomization analyses

Alcohol consumption is associated with colorectal cancer (CRC) risk, yet its association with distinct molecular subtypes remains unclear. Clarifying this could reveal insights into alcohol's carcinogenic mechanisms.

An international team of researchers examined the association between alcohol consumption and the risk of CRC subtypes defined by individual tumour markers (and marker combinations), namely microsatellite instability (MSI) status, CpG island methylator phenotype (CIMP) status, BRAF, and KRAS mutations.

Pooled observational and genome-wide association data were used. Multivariable logistic regression models and Mendelian randomization (MR) analyses were conducted to assess the association between alcohol consumption, modelled in MR as genetically predicted average drinks per week per 1 SD increase ( $\approx 2.9$  drinks/wk), and risk of CRC subtypes defined by individual tumour markers (and marker combinations). Case-only analyses tested for differences between molecular subtypes. Bonferroni correction was applied for multiple tests.

Among drinkers, each additional 14 g/d of alcohol was associated with a 10% higher CRC risk [odds ratio (OR) = 1.10; 95% confidence interval (CI): 1.07,

1.13], but this association was primarily driven by heavy alcohol consumption ( $>28$  g/d). Including non-drinkers revealed a J-shaped association. The associations with higher alcohol consumption were stronger in males compared with females. No significant heterogeneity was observed across the different subtypes. All associations were similar across smoking status, folate intake, tumour anatomical site, study design, early/late-onset CRC, and across individual studies. MR analyses supported that higher genetically predicted alcohol consumption was associated with a 25% higher risk of bowel cancer, but similarly to the observational analysis, without evidence of heterogeneity across molecular subtypes.

Heavy alcohol consumption may initiate colorectal carcinogenesis through mechanisms that operate across all examined molecular pathways for CRC. Although the largest available data were used, power is lower for subtype heterogeneity analyses, and modest interaction effects cannot be excluded.

Source: CV Chalitsios, WC Chan, G Markozannes, EK Aglago, SI Berndt, DD Buchanan, PT Campbell, Y Cao, N Dimou, et al. Alcohol consumption and molecular subtypes of colorectal cancer: pooled observational and Mendelian randomization analyses. *Am J Clin Nutr.* 2026 Apr 22;101308. <https://doi.org/10.1016/j.ajcnut.2026.101308>

## Alcohol consumption and the incidence of hyperuricemia in Japanese men and women

A study examined the association between alcohol consumption and hyperuricemia in Japanese men and women.

In a population-based retrospective cohort study (ISSA-CKD study), a total of 5153 participants without hyperuricemia were followed up from baseline (first health check-up of each participant) to the last visit during the study period (2008–2019). Alcohol consumption was classified into non-drinkers, occasional, and daily drinkers (average alcohol intake  $<22$  g/day, 22–43 g/day, 44–65 g/day, or  $\geq 66$  g/day). The outcome was incident hyperuricemia (uric acid  $>416$   $\mu\text{mol/L}$  [7.0 mg/dL]).

During average follow-up of 5.5 years, 496 men and 128 women developed new-onset hyperuricemia. Increases in the incidence (per 1,000 person-years) of hyperuricemia were associated with the

frequency/amount of alcohol consumed among men (non-drinkers: 33.7, occasional: 43.9, daily  $<22$  g/day: 41.7, daily 22–43 g/day: 60.6, daily 44–65 g/day: 68.0, and daily  $\geq 66$  g/day: 92.7). Similar results were observed in women (non-drinkers: 6.1, occasional: 10.3, daily  $<22$  g/day: 8.8, daily  $\geq 22$  g/day: 13.4). After multivariable adjustment, hazard ratios increased with higher alcohol consumption in both men and women.

In conclusion, alcohol consumption was associated with an increased risk of hyperuricemia in each sex. Even low or occasional intake elevated the risk, indicating no safe level of alcohol consumption.

Source: T Ueno, K Kawano, C Nohara, et al. Alcohol consumption and the incidence of hyperuricemia in Japanese men and women. 2026 April 16. *Sci Rep* <https://doi.org/10.1038/s41598-026-46480-3>

## Alcohol-attributable cancer risk and burden estimates for Australia's updated alcohol consumption guidelines

The Australian alcohol health guidelines were revised in 2020 to recommend a maximum of 10 drinks/week. A research team calculated estimates of cancer caused by alcohol use in Australia for the updated recommended limits.

Hazard ratios (HR) for cancer incidence in relation to self-reported alcohol consumption (drinks/week) were estimated among 225,805 participants aged  $\geq 45$  years (2005-2009) in the New South Wales (NSW) 45 and Up Study, an Australian prospective cohort study (baseline  $n = 267,357$ ). Cumulative absolute risk of cancer to age 85 years was estimated. Population attributable fractions were calculated using Australian national alcohol consumption and cancer incidence data, compared to a theoretical minimum risk exposure of no alcohol consumption. Cancer cases and deaths were ascertained through record linkage to the NSW Cancer Registry and NSW Registry of Births Deaths & Marriages to 2019. Participants diagnosed with cancer pre-baseline were excluded.

Over a median 11.4 years, 34,860 cancer cases were recorded. When modelled as a continuous variable, alcohol-related cancer risk increased by 19% for every ten drinks/week increase in consumption (HR: 1.19; 95% confidence interval: 1.15-1.23). By age 85 years, those who consumed  $>10$  drinks/week had an estimated 4.9% higher cumulative absolute risk of an alcohol-related cancer compared to those consuming 0 to  $<1$  drink/week. An estimated 7,804 cancer cases (4.6% of all cancer cases) were attributable to alcohol use in 2024.

The proportion of alcohol-attributable cancers in Australia is substantial and somewhat higher than previously estimated, the researchers conclude.

**Source:** P Sarich, K Canfell, S Egger, E Banks, G Joshy, L Wellard-Cole, C Hughes, N Houssami, P Grogan, MF Weber. Alcohol-attributable cancer risk and burden estimates for Australia's updated alcohol consumption guidelines, *Br J Cancer*. 2026 Apr 10. <https://doi.org/10.1038/s41416-026-03403-3>

## The influence of habitual consumption of alcohol on the incidence of obstructive sleep apnea

Around 1 billion adults worldwide aged 30–69 have obstructive sleep apnea (OSA), with 425 million experiencing moderate to severe forms. It is linked to serious health problems—such as heart disease, metabolic issues, brain impairment, and higher death risk—and also creates safety risks like accidents due to daytime sleepiness. The objective of a nationwide population-based cohort study in Korea was to determine the association between habitual alcohol consumption and the incidence of newly diagnosed obstructive sleep apnea (OSA).

A total of 3,988,993 individuals (mean age, 54.5 years; male, 50.1%; mean body mass index [BMI], 24.0 kg/m<sup>2</sup>) were included, of whom 1,688,094 (42.3%) had habitual alcohol consumption. During a mean follow-up period of 9.7 years, 33,563 new cases of OSA were documented. Individuals with habitual alcohol consumption had an incidence rate of 108.9 per 100,000 person-years, whereas those without habitual alcohol consumption had a rate of 69.6 per 100,000 person-years. Following

adjustment for covariates including age, sex, BMI, income, smoking status, physical activity, and the Charlson comorbidity index, the hazard ratio for incident OSA was 1.026 (95% confidence interval, 1.001–1.051). The association between habitual alcohol consumption and incident OSA was more prominent among males and those with underlying chronic kidney disease or a history of cancer.

This large-scale Korean population-based cohort study revealed that habitual alcohol consumption is associated with an increased incidence of OSA. This research underlines the importance of managing alcohol consumption as part of clinical interventions for preventing or managing obstructive sleep apnea. The study helps identify high-risk subgroups for targeted screening and interventions in clinical settings.

**Source:** Park, J., Bae, E., Sim, Y.J. et al. The influence of habitual consumption of alcohol on the incidence of obstructive sleep apnea: a national population-based cohort study. *Sleep Breath*. 2026 30, 127. <https://doi.org/10.1007/s11325-026-03684-1>

## The alcohol harm paradox and oral health: Evidence from the 2019 Brazilian national health survey

Researchers in Brazil investigated how the association between alcohol consumption and two oral health outcomes—tooth loss, measured as non-functional dentition (NFD), and poor self-rated oral health (SROH) varies according to socioeconomic position (SEP).

Data were drawn from the 2019 Brazilian National Health Survey. SEP was operationalised using educational attainment, and average alcohol consumption was categorised in 20 g/day increments. Sex-stratified models were used to assess whether the association between alcohol consumption and oral health outcomes varied in magnitude and direction across SEP levels.

The sample comprised 21,330 men and 13,650 women. Among men, those with low educational attainment consuming >0 to ≤20 g/day (PR: 1.80; 95% CI: 1.13, 2.89) and >40 g/day (PR: 1.90; 95% CI: 1.10, 3.26) had a higher prevalence of NFD and poor SROH, respectively, compared with their

highly educated counterparts reporting the same levels of consumption. Among women, those with low educational attainment consuming >0 to ≤20 g/day (PR: 1.59; 95% CI: 1.18, 2.13) had a higher prevalence of poor SROH than their highly educated counterparts.

In conclusion, the association between alcohol consumption and oral health outcomes differs across SEP, both in magnitude and direction. Even low-to-moderate alcohol intake was associated with a higher prevalence of NFD and poor SROH, with stronger associations observed among individuals with lower educational attainment. These findings should be interpreted in light of the inherent limitations of the cross-sectional design.

Source: LM Oliveira, TR Pelissari, RP Antoniazzi, LRM Sartori, FF Demarco, FB Zanatta. The alcohol harm paradox and oral health: Evidence from the 2019 Brazilian national health survey. *Community Dent Health*. 2026 Apr 24;265539X261447650. <https://doi.org/10.1177/0265539X261447650>

## Alcohol cue-induced heart rate variability and drinking behaviour: The role of impulsivity

Research has demonstrated that exposure to alcohol-related cues (e.g., sight or smell of a preferred beverage) elicits heightened self-reported craving and psychophysiological responses, including changes in heart rate (HR) and heart rate variability (HRV), particularly among individuals high in trait impulsivity. While cue-induced psychophysiological reactivity is well documented, its predictive value for drinking behaviour, particularly in individuals with elevated impulsivity, has received more limited empirical attention.

A study examined whether trait impulsivity predicts cardiovascular reactivity to alcohol cues and whether these physiological responses mediate the relationship between impulsivity and drinking behaviour. The researchers hypothesized that individuals higher in trait impulsivity would exhibit greater HR and HRV reactivity to alcohol cues, and that these responses would, in turn, predict greater alcohol consumption.

Seventy-three young adult drinkers from a major urban university completed self-report measures of trait impulsivity (UPPS-P) and past 90-day drinking behaviour. Participants were then exposed to counterbalanced presentations of a glass of alcohol and a glass of water while HR and HRV were continuously recorded. HRV was analysed. Mediation analyses partially supported the researchers' hypotheses: impulsivity was directly associated with greater alcohol use, but indirectly associated via HRV responses to alcohol cues to lower alcohol use. No significant effects were observed for HR.

These findings identify HRV as a potential biomarker linking impulsivity to alcohol consumption and raise the possibility that cue-induced autonomic reactivity may play a role in modulating drinking behaviour.

Source: N Taniajura, C Rincon, S Kennedy, J Erlich, Alcohol cue-induced heart rate variability and drinking behavior: The role of impulsivity. *Addict Behav Rep*. 2026 Mar 10;23:100687. <https://doi.org/10.1016/j.abrep.2026.100687>

## Association of alcohol consumption with oral high-risk human papillomavirus infection

Human papillomavirus (HPV)-related oropharyngeal cancer arises from persistent high-risk HPV (HR-HPV) oral infection. Smoking is a risk factor for oral HPV, but alcohol's role is unclear. Researchers investigated the association between alcohol consumption and oral HPV infection.

The cross-sectional analysis used baseline data from the HIM Study. Oral HPV was detected from oral gargle specimens. Associations between alcohol consumption and oral HPV were assessed using adjusted logistic regression models, exploring effect modification by smoking.

Among 3,121 males (median age 33 years), 39% were from Brazil, 32% from Mexico and 28% from the United States; 76% reported alcohol use in the past month (median 8 drinks). Oral HPV was detected in 20% of participants reporting alcohol use, including 6.1% with HR-HPV and 14% low-risk HPV (LR-HPV). HR-HPV detection increased with alcohol intake, peaking at 7.6% among those consuming  $\geq 16$  drinks/month ( $p = 0.005$ ). Consuming  $\geq 16$  drinks/month was independently

associated with HR-HPV after adjustment (adjusted odd ratio [aOR] 1.60, 95% confidence interval [CI] 1.07, 2.40), whereas consuming 3-15 drinks was not (aOR 1.15, 95% CI: 0.76, 1.76). Exploratory stratified analyses showed aOR 2.57 (95% CI: 1.37, 4.96) in males who had never smoked and 1.12 (95% CI: 0.67, 1.88) in those who currently or formerly smoked, with no evidence of effect modification.

Higher monthly alcohol consumption was modestly associated with oral HR-HPV in this cross-sectional analysis; longitudinal studies are needed to assess extension to oral HPV persistence, a recognized precursor of cancer.

Source: A Beltrame, LL Villa, E Lazcano-Ponce, R Carvalho da Silva, L Galan de Paula, W Fan, B Sirak, CW Dukes, J Rathwell, K Isaacs-Soriano, MJ Schell, AR Giuliano. Association of alcohol consumption with oral high-risk human papillomavirus infection: a cross-sectional study within the multinational HPV infection in men (HIM) cohort. *Lancet Reg Health Am.* 2026 Apr 2;58:101464. <https://doi.org/10.1016/j.lana.2026.101464>

## Alcohol consumption trajectories from early adulthood to adulthood and cancer risk in adulthood

Long-term alcohol consumption patterns may influence cancer risk, yet evidence on life-course consumption trajectories remains inconsistent. A study summarised existing literature, identified common alcohol trajectories, and assessed their associations with overall and site-specific cancer risk.

PubMed, EMBASE, and Scopus (2000 March 2025) were searched for observational studies reporting alcohol intake at  $\geq 2$  time points and adult cancer outcomes. Six trajectories were identified: lifetime abstinence, stable light, moderate increasing, moderate decreasing, decreasing-heavy, and stable high. Nine studies ( $n=3,860,679$ ) met inclusion criteria.

Compared with lifetime abstinence, stable-light drinking was associated with a small increase in overall (aHR=1.03;95%CI:1.00-1.05) and alcohol-related cancer risk aHR=1.07;95%CI:1.02-1.12). Higher risks were observed for moderate

increasing, decreasing heavy, and stable-high trajectories, with gastrointestinal cancers showing the strongest associations (aHR=1.58;95%CI:1.40-1.77). Breast cancer risk increased among women with moderate increasing or stable high intake. No consistent associations were found for genitourinary cancers.

Sustained or increasing alcohol intake from early adulthood substantially elevated cancer risk, while even stable light drinking carried modest risk. Individuals reducing heavy drinking later in life remained at increased risk, suggesting early life alcohol-related damage may not be fully reversible.

Source: S Behboudi-Gandevani, IJ Brustad, T Haugan, V Rangul, EC Arntzen, M Sivertsen, S Cook, R Bidhendi-Yarandi. Alcohol Consumption Trajectories from early adulthood to adulthood and Cancer Risk in Adulthood: A Systematic Review and Meta-Analysis. *Cancer Epidemiol Biomarkers Prev.* 2026 Apr 13. <https://doi.org/10.1158/1055-9965.EPI-25-1846>

## The global epidemiology of alcohol-associated liver disease

Authors of a review published in the journal *Hepatology Communications*, say that alcohol-associated harm remains a major, largely preventable driver of global morbidity, mortality, and societal costs, and alcohol-associated liver disease (ALD) is a major consequence of long-term exposure.

According to the World Health Organization, average consumption was 5.0 L of pure alcohol per person aged  $\geq 15$  years in 2022, with 21% unrecorded consumption and substantial regional variation. Per-capita intake declined from 5.7 L in 2010 to 5.0 L in 2022, yet current models forecast an increase to 5.7 L by 2030. In 2023, an estimated 3.15 million people were living with alcohol-associated cirrhosis, and 419,429 new cases occurred; while crude burden has risen, age-standardized prevalence was 34.6 per 100,000, reflecting demographic shifts. Age-standardized mortality due to ALD cirrhosis was highest in

the European Region (5.8 per 100,000) and the Americas (5.0 per 100,000), and projections suggest crude ALD mortality will increase by 76% from 2021 to 2050 (354,200–624,150).

Because alcohol exposure is frequently underreported, ascertainment using validated questionnaires and biomarkers is critical for surveillance and research. Scalable models linking alcohol-use detection with staged fibrosis assessment and triage pathways can narrow diagnostic gaps and support health system planning. Coupling these pathways with the implementation of high-impact “best-buy” alcohol control policies is essential to reduce the global ALD burden.

Source: P Danpanichkul, F Idalsoaga, F Murray, JP Arab, LA Díaz. The global epidemiology of alcohol-associated liver disease. *Hepatology Communications* 10(5):e0947, May 2026. <https://doi.org/10.1097/hc9.0000000000000947> - free online

## Low to moderate alcohol consumption across two decades and subclinical atherosclerosis at age 60

Alcohol consumption at low to moderate levels has long been debated in relation to cardiovascular risk, with inconsistent findings. Multi-decade cohort data with repeated exposure assessments are rare, especially in a northern Scandinavian population. A study investigated associations between alcohol consumption at age 40, 50, and 60 and markers of subclinical atherosclerosis [carotid plaque and intima-media thickness (IMT)] at age 60 in a healthy below-risk-threshold alcohol-consuming cohort in Northern Sweden.

The study included 1,014 participants in the Visualisation of Asymptomatic Atherosclerotic Disease for Optimum Cardiovascular Prevention (VIPVIZA) trial, aged 60 who had alcohol data from the Västerbotten Intervention Programme (VIP) at 40, 50, and 60, with below-risk-threshold alcohol consumption ( $>0$  to  $\leq 100$  g/week). Alcohol intake data were collected via a food frequency questionnaire in VIP. Carotid plaque and IMT were assessed at age 60 at VIPVIZA baseline.

Mean weekly alcohol consumption for the study period was 26 g ( $\pm 21.4$  g), higher in men ( $37.5 \pm 23.8$  g) than in women ( $19.2 \pm 16.3$  g) and increasing over time in both sexes. At age 60,

49.6% had carotid plaque, and mean IMT was 0.77 mm ( $\pm 0.15$ ). No indication of associations was found between midlife alcohol consumption and carotid plaque in the total cohort [odds ratio (OR): 1.00, 95% confidence interval (CI): 0.99–1.01], men (OR: 1.00, 95% CI: 0.99–1.01), or women (OR: 0.99, 95% CI: 0.99–1.00) per gram increase of weekly alcohol intake. No associations were observed across consumption groups ( $>25$  to  $\leq 50$ ,  $>50$  to  $\leq 75$ ,  $>75$  to  $\leq 100$  vs.  $>0$  to  $\leq 25$  g/week).

No association was found between self-reported midlife alcohol consumption and subclinical atherosclerosis at age 60 in the VIPVIZA baseline cohort. Results were consistent across sexes and intake levels, contributing to the evidence base used to guide primary prevention and public health recommendations.

Source: A Dahlin Almevall, P Wennberg, E Nyman, J Hultdin, M Ramstedt, A Sjölander and M Wennberg Low to moderate alcohol consumption across two decades and subclinical atherosclerosis at age 60: findings from the Northern Sweden Västerbotten Intervention Programme—visualisation of atherosclerosis (VIPVIZA) study. *Front. Cardiovasc. Med.* 2026;12:1710165. <https://doi.org/10.3389/fcvm.2025.1710165>

## Alcoholic and non-alcoholic acute pancreatitis mortality in the United States, 2006–2023: A nationwide trend analysis

Researchers analysed national mortality from Acute pancreatitis (AP) in United States (US) adults from 2006–2023 using the Centers for Disease Control and Prevention Wide-ranging Online Data for Epidemiologic Research (CDC WONDER) Underlying Cause of Death database to compare alcoholic AP (AAP) and non-alcoholic AP (non-AAP) across demographic and geographic groups. During this period, there were 52,904 AP deaths, including 6,759 AAP deaths and 46,145 non-AAP deaths. Overall, AP age-adjusted mortality rate (AAMR) declined from 1.54 to 1.19 per 100,000, and non-AAP AAMR declined from 1.38 to 0.99 per 100,000. In contrast, AAP AAMR increased from 0.13 to 0.23 per 100,000, and AAP deaths rose by more than 60 percent. Crude mortality fell in adults aged 75 years and older but increased in

adults aged 25 to 44 years, especially for AAP. AAP deaths increased in both males and females and in both metropolitan and nonmetropolitan areas.

These findings show that while non-AAP mortality continues to decline, AAP mortality is increasing and represents a growing, largely preventable source of premature death that warrants targeted prevention, improved access to alcohol use treatment, and community-level policies addressing harmful drinking behaviours, with particular concern for younger adults entering their peak working years.

Source: D Yang, F Zhang, L Bai, et al. Alcoholic and non-alcoholic acute pancreatitis mortality in the United States, 2006–2023: A nationwide trend analysis. *Sci Rep* 2026; 16, 6427. <https://doi.org/10.1038/s41598-026-37268-6>

## The interaction of age and total lifetime drinks is associated with regional cortical perfusion and thickness in healthy adults with low-level alcohol consumption

Low-level alcohol consumption at or below current guidelines ( $\leq 1$  standard drink equivalent/day for females,  $\leq 2$  standard drink equivalents/day for males) has been proposed to carry minimal systemic health risks. The neurobiological correlates of low-level drinking in healthy adults are not well characterised. To date, no study has concurrently assessed the associations of low-level alcohol consumption, modelled as a continuous rather than categorical variable, with regional brain perfusion (blood flow) and morphometrics in healthy, non-smoking adults.

A study examined the associations between alcohol consumption and magnetic resonance measures of regional brain perfusion and cortical volumes and thickness in healthy non-smoking adults (22–70 years of age) with no history of alcohol use disorder. All participants consumed  $\leq 60$  standard drink equivalents/month over the year preceding the study. Average number of drinks per month over lifetime was  $21 \pm 11$ . Researchers hypothesized that a greater multiplicative product of age and total lifetime

drinks consumed predicts lower regional brain perfusion, volumes, and thickness. Greater age by total lifetime drinks were related to lower perfusion in numerous bilateral regions, primarily in the frontal, parietal, and occipital lobes, as well as lower bilateral average cortical perfusion. Greater age by total lifetime drinks were related to thinner cortex, primarily in the bilateral frontal and parietal lobes, as well as lower bilateral average cortical thickness.

Findings indicate alcohol consumption considered “low risk” may have consequences for the integrity of cortical tissue, particularly with advancing age. These results may have implications for current harm reduction strategies and alcohol consumption public health guidelines.

Source: TC Durazzo, BDP Joseff, MW McNERNEY, K Humphreys, DJ Meyerhoff, The interaction of age and total lifetime drinks is associated with regional cortical perfusion and thickness in healthy adults with low-level alcohol consumption, *Alcohol*, 2026, 133; 38–47, ISSN 0741-8329, <https://doi.org/10.1016/j.alcohol.2026.03.006>.

## Impact of alcohol on gut microbial metabolism and the gut-liver-brain axis

The gut microbiome includes a large and diverse microbial community that plays a central role in host health, supported by an extensive genomic repertoire that is distinct from and complementary to mammalian enzymatic pathways. Alcohol consumption disrupts this ecosystem, inducing microbial dysbiosis and altering functional interactions between the host and its gut bacteria that can lead to systemic effects.

In a review published in the journal, *Alcohol*, researchers examine how alcohol affects gut bacteria, and how these changes impair essential bacterial functions, including short-chain fatty acid production, mucin metabolism, biofilm

formation, and bile acid metabolism, that support intestinal, liver, and brain health. They also describe how certain gut bacteria tolerate or produce ethanol, and how these traits contribute to the systemic harms associated with alcohol-induced dysbiosis. Finally, therapeutic strategies are highlighted that are aimed at targeting ethanol-tolerant or ethanol-producing bacteria as potential avenues for preventing or mitigating intestinal inflammation, liver injury, and other metabolic disorders.

Source: L Freund, B Ramirez Leal, CL Hsu, *Impact of alcohol on gut microbial metabolism and the gut-liver-brain axis*, *Alcohol*, Volume 134, 2026, Pages 44-53, <https://doi.org/10.1016/j.alcohol.2026.04.009>.

### Medical research by publication date

Zero tolerance for 0%? How should clinicians and other practitioners respond to the use of alcohol-free and low-alcohol products in higher risk groups, *First* published 09 November 2025

Low to moderate alcohol consumption across two decades and subclinical atherosclerosis at age 60: findings from the Northern Sweden. Published 7 January 2026

Alcoholic and non-alcoholic acute pancreatitis mortality in the United States, 2006–2023: A nationwide trend analysis. Published 28 January 2026, version of record 16 February 2026

Association between alcohol consumption and breast cancer incidence and prognosis: A systematic review and meta-analysis. Published online February 4, 2026

Alcohol cue-induced heart rate variability and drinking behavior: The role of impulsivity

Available online 10 March 2026, Version of Record 13 March 2026.

The interaction of age and total lifetime drinks is associated with regional cortical perfusion and thickness in healthy adults with low-level alcohol consumption. Available online 30 March 2026, Version of Record 2 April 2026.

Association of alcohol consumption with oral high-risk human papillomavirus infection: a cross-sectional study within the multinational HPV infection in men (HIM) cohort. Published April 2, 2026

Alcohol-attributable cancer risk and burden estimates for Australia's updated alcohol consumption guidelines. Published 10 April 2026

Alcohol consumption trajectories from early adulthood to adulthood and cancer risk in adulthood: A Systematic Review and Meta-Analysis

Published 13 April

Alcohol consumption and the incidence of hyperuricemia in Japanese men and women

Published: 16 April 2026

The influence of habitual consumption of alcohol on the incidence of obstructive sleep apnea: a national population-based cohort study. Published: 18 April 2026

Alcohol consumption and colorectal carcinogenesis: an exploration of the gut microbial pathway as a potential mediator. Published: 21 April 2026

Alcohol consumption and molecular subtypes of colorectal cancer: pooled observational and Mendelian randomization analyses. Available online 22 April 2026

The alcohol harm paradox and oral health: Evidence from the 2019 Brazilian national health survey. First published online April 24, 2026

The global epidemiology of alcohol-associated liver disease Published 1 May 2026

Reevaluating the Alcohol–Cancer Link: Long-Term Cancer Mortality Outcomes in the REGARDS Study. Published 4 May 2026.

Impact of alcohol on gut microbial metabolism and the gut-liver-brain axis. Available online 5 May 2026, Version of Record 7 May 2026.

## Imposter syndrome and college students' drinking behaviours: The roles of negative affect and coping motivated alcohol use

College students are known to frequently engage in alcohol consumption, and are at risk for developing dangerous drinking patterns such as binge drinking. Since imposter syndrome occurs at high rates among undergraduate students, it is reasonable to assume that college students may experience its negative effects, such as anxiety and depression. Given the relation of anxiety and depression to worse drinking outcomes, imposter syndrome may also be related to greater drinking and related problems.

In the first known study to test whether imposter syndrome is related to drinking behaviours, 376 undergraduates (87% female) with current (past 3-month) alcohol use were recruited and completed an online survey.

Imposter syndrome was statistically significantly related to anxiety, depression, coping-motivated

drinking, peak estimated blood alcohol content (eBAC), drinking frequency, and alcohol-related problems. Imposter syndrome, via the serial effects of depression and coping motives, was significantly indirectly related to eBAC, drinking frequency, and alcohol-related problems. Similarly, via the serial effects of anxiety and coping motives, imposter syndrome was significantly indirectly related to eBAC, drinking frequency, and alcohol-related problems.

The results of this study can inform treatment and prevention efforts by suggesting that imposter syndrome may be an important, yet thus far neglected, target for interventions.

Source: A Knox, LA Vargo, JD Buckner. Imposter syndrome and college students' drinking behaviors: The roles of negative affect and coping motivated alcohol use, *Am J Addict.* 2026 May;35(3):404-411. <https://doi.org/10.1111/ajad.70092>

## The role of identity in positive alcohol use attitudes, risky drinking, and alcohol-related problems among racially/ethnically diverse adolescents

Positive attitudes toward alcohol use, risky drinking, and the likelihood of experiencing alcohol-related problems tend to increase during adolescence. Although prior studies suggest that identity coherence protects against, and identity confusion increases, vulnerability to negative health-related outcomes, less is known about how identity coherence and confusion uniquely predict trajectories of positive alcohol-use attitudes, risky drinking, as well as the onset of alcohol-related problems across adolescence-particularly among racially/ethnically diverse youth. In a study published in the *Journal of Adolescent Health*, researchers examined the trajectories of positive alcohol-use attitudes, risky drinking, and the onset timing of alcohol-related problems and the unique predictive effects of identity coherence and identity confusion on these outcomes.

The study used six waves (2014-2017) of data from a school-based study on alcohol use involving 812 adolescents (mean age at baseline was 13.60). The sample was primarily Hispanic (39.5%) and non-Hispanic Black (34.0%), along with non-Hispanic White (8.8%), multiracial (7.8%), and other racial/ethnic groups (9.9%).

Positive alcohol-use attitudes and risky drinking increased across adolescence, and the likelihood of alcohol-related problem onset peaked at age 16 years. Identity coherence negatively predicted all outcomes, including trajectories of positive alcohol-use attitudes and risky drinking, as well as the onset of alcohol-related problems. In contrast, higher identity confusion positively predicted only the positive alcohol-use attitudes trajectory.

Findings suggest that identity-focused interventions in racially/ethnically diverse settings should emphasise strengthening identity coherence to mitigate maladaptive alcohol-related cognitions, behaviours, and problems during adolescence.

Source: SW Lee, TK Lee, A Meca, JG Tubman, P Montero-Zamora, JB Unger, CL Cobb, LG Watkins, A Alpysbekova, DH Vo, A Lopez-Soto, E Bochkina, M Duque, S Sahbaz, B Ertanir, C Scaramutti-Gladfelter, M Cisco, SJ Schwartz. The Role of Identity in Positive Alcohol Use Attitudes, Risky Drinking, and Alcohol-Related Problems Among Racially/Ethnically Diverse Adolescents, *J Adolesc Health.* 2026 May;78(5):764-773. <https://doi.org/10.1016/j.jadohealth.2025.12.263>

## Associations of minimum legal drinking age law with later-life alcohol use and alcohol-attributable mortality from disease and injury

A research team in China examined the associations of minimum legal drinking age (MLDA) laws with later-life alcohol use and alcohol-attributable mortality.

An ecological study was performed using the free-access data from the United States. Five outcome measures were considered: (1) drinking rate, (2) alcohol consumption per capita, and alcohol-attributable mortality for (3) all diseases and injuries, (4) non-injury diseases, and (5) injuries. The researchers compared differences in 5 outcome measures during 1990-2021 across 3 types of states, classified based on different MLDA beer laws in 1970-1988. Multivariable regression examined MLDA laws' associations with 5 outcome variables, adjusting for covariates. Sensitivity analyses used MLDA classifications for wine and spirits.

Based on MLDA beer laws of 1970-1988, the 50 states and the District of Columbia were classified as Type 1 (increasing MLDA), Type 2 (fluctuating MLDA), and Type 3 (steady MLDA of 21). For all

years combined, Type 1 and Type 2 states had lower and higher drinking rates (51.05% and 55.20% vs. 53.23%) and alcohol consumption per capita (463.25 and 511.57 vs. 483.92 standard drinks). Compared to Type 2 and Type 3 states, Type 1 states had the highest alcohol-attributable injury mortality for Americans aged 30 years and older (4.30 vs. 3.93 and 3.87 per 100,000). After adjusting for the included covariates, 3 types of states demonstrated differing trends in drinking rate and alcohol-attributable injury mortality but highly similar trends in the other 3 outcome measures. Sensitivity analyses generated similar findings.

MLDA was associated with later-life alcohol use and alcohol-attributable mortality.

Source: J Li, P Ning, W Wang, DC Schwebel, L Li, Z Rao, P Cheng, D Tian, G Hu. Associations of minimum legal drinking age law with later-life alcohol use and alcohol-attributable mortality from disease and injury: An ecological study. *Chin J Traumatol*. 2026 Apr 12;S1008-1275(26)00078-7. <https://doi.org/10.1016/j.cjtee.2026.01.007>.

## Risky drinking in midlife men: Insights From Australia's National Drug Strategy Household Survey

Australian midlife men are more likely to drink exceeding Australia's Alcohol guidelines for adults compared to midlife women. Despite this, there is a paucity of research investigating the factors associated with risky drinking for midlife men to inform preventive health efforts. A study investigated these factors and how they differ between younger and older midlife men.

Secondary data analysis was conducted using the 2019 and 2022/23 waves of the National Drug Strategy Household Survey. Data for 6471 midlife men (aged 30-59 years) were analysed, comprising younger (aged 30-44 years, n=3311) and older (45-59 years, n=3,160) midlife age groups. Associations between behavioural, psychological and demographic factors and risky drinking, and interactions with midlife age groups were analysed.

Overall, 42.9% of midlife men reported risky drinking. Past year tobacco (OR=1.70, CI=1.35-2.14) and illicit/non-medicinal drug use (OR=3.54, CI=2.92-4.31), residing in Rural/Remote/Regional locations (OR=1.76, CI=1.48-2.11), higher

psychological distress scores (OR=1.37, CI=1.05-1.79), working managerial (OR=1.48, CI=1.14-1.91) or tech/trade (OR=1.48, CI=1.17-1.87) occupations, and higher household earnings (OR=1.70, CI=1.41-2.06) were all significantly associated with risky drinking. Greater psychological distress scores were significantly associated with risky drinking among younger (OR=0.49, CI=0.32-0.75), but not older midlife men, while being married/de facto relationship was significantly associated with risky drinking among older (OR=1.55, CI=1.01-2.39), but not younger midlife men.

This study highlights a range of modifiable and non-modifiable factors that may inform the development of future preventive health policy and practise strategies for this high prevalence group.

Source: S Zaccagnini, A Bartram, M Livingston, J A Smith, N Bovopoulos, and J Bowden. Risky Drinking in Midlife Men: Insights From Australia's National Drug Strategy Household Survey, *Drug and Alcohol Review* 45, no. 4 (2026): e70149, <https://doi.org/10.1111/dar.70149>.

## Consumers' stated responses to wine drinking guidelines and health warning labels

A group of researchers in the US explored how wine consumers report adjusting their drinking habits in response to standard drinking guidelines or cancer risk warnings.

Using online survey data from 2,078 US respondents, their analysis examined how stated responses to adjust wine consumption are associated with alcohol drinking guidelines, health warning labels, perceptions, and sociodemographic characteristics. Results indicate older consumers, frequent wine drinkers, higher-income households, and higher wine expenditures are less likely to report intentions to change their consumption. In contrast, the respondents living in a household with children under 21, respondents familiar with guidelines, and higher-educated individuals are more likely to report reduction in their intentions to adjust wine consumption. Social media influence emerges

as a significant covariate, with those reporting stronger influence being more likely to state that they would reduce wine consumption. In addition, support for warning labels is positively associated with stated intentions to reduce wine consumption, highlighting a connection between endorsement and self-reported intended action under hypothetical exposure.

Overall, these findings suggest that one-size-fits-all communication strategies are unlikely to be effective. Tailored approaches that leverage digital platforms, adjust message framing to counter possible "warning fatigue," and incorporate family-oriented appeals may be more effective in shaping stated intentions across consumer groups.

Source: L Nguyen, D Solís, and RM Nayga. Consumers' Stated Responses to Wine Guidelines and Health Warning Labels. 2026. Agribusiness0: e70098. <https://doi.org/10.1002/agr.70098>.

## Sociodemographic and alcohol-related correlates of perceived helpfulness of alcohol cancer warning labels and anticipated reductions in alcohol consumption among US adults

A study published in the the journal Preventive Medicine, examined sociodemographic and alcohol-related characteristics associated with perceived helpfulness of alcohol cancer warning labels and anticipated reductions in alcohol consumption.

From April–May 2025, 1,141 US adults aged  $\geq 21$  years completed a survey about alcohol cancer warning labels, alcohol use, and sociodemographic characteristics. The associations between sociodemographic and alcohol-related characteristics and both perceived helpfulness and anticipated reductions in alcohol consumption were examined.

Overall, 82.1% of participants perceived alcohol cancer warning labels as helpful and 39.4% anticipated reducing alcohol use. Several sociodemographic and alcohol-related characteristics were associated with perceived helpfulness of alcohol cancer warning labels and anticipated reductions in consumption. Notably, higher odds of perceiving labels as helpful were

observed among Non-Hispanic Black (adjusted odds ratio [AOR] =2.63, 95% confidence interval [CI]: 1.40, 4.93) and Hispanic/Latino/a (AOR = 2.59, 95% CI: 1.30, 5.15) participants and cisgender women (AOR = 1.46, 95% CI: 1.04, 2.05). Prior alcohol quit attempts were associated with anticipated reductions in drinking (AOR = 1.91, 95% CI: 1.44, 2.53).

Alcohol cancer warning labels were widely perceived as helpful and many participants anticipated reducing their alcohol consumption. Associations with sociodemographic and alcohol-related characteristics suggest perceptions vary across population groups. Cancer warning labels may represent a promising population-level strategy for reducing alcohol use.

Source: J Bleasdale, MA Ray, DA Westmoreland. Sociodemographic and alcohol-related correlates of perceived helpfulness of alcohol cancer warning labels and anticipated reductions in alcohol consumption among U.S. adults, Preventive Medicine, Volume 208, 2026, 108583, ISSN 0091-7435, <https://doi.org/10.1016/j.ypmed.2026.108583>

## Alcohol availability around schools and adolescent consumption: A case study in Madrid, Spain

Evidence on the relationship between alcohol environment and adolescents' alcohol consumption remains inconsistent. A cross-sectional study explored the association between alcohol availability around schools and adolescent alcohol consumption in Madrid, a European city with high availability.

Researchers quantified alcohol availability as the number of alcohol outlets within 500m street network buffers around 49 schools located in areas with different Socioeconomic Position (SEP). Questionnaires were distributed to students aged 14-18 attending these schools, including sociodemographic and alcohol consumption measures (ever drunk, past 30 and 7 days and binge drinking in the past 30 days). Data were collected during 2021-2022.

The mean number of alcohol outlets around schools was 79. 67% of students reported ever drinking, with higher prevalences among females, older students, and those receiving more pocket

money, with low-risk perception, or reporting higher parental alcohol consumption. Students from high SEP areas reported more drinking than those from low SEP areas. Consumption was not associated with alcohol availability around schools. This aligns with emerging evidence suggesting that in highly saturated urban environments, the relationship between outlet density and consumption may follow a threshold-effect, where additional outlets no longer increase use. Adolescent consumption was high overall, and the observed overprovision of outlets may contribute to the normalisation of drinking. Future research should inform preventive strategies and public health policies that tackle the complex dynamics of alcohol consumption.

Source: I Martin-Turrero, D Prieto-Merino, R Valiente, A Espelt, X Sureda, Alcohol availability around schools and adolescent consumption: A case study in Madrid, Spain, *Health & Place*, Volume 99, 2026, 103669, ISSN 1353-8292, <https://doi.org/10.1016/j.healthplace.2026.103669>

## Attitudes toward underage drinking: The role of own drinking patterns and parenthood

A study examined Finnish adults' attitudes toward underage drinking and their associations with parenthood and personal alcohol use.

Data came from the 2023 Finnish Drinking Habit Survey, a general-population sample of 4,587 adults aged 20–79 years, collected through telephone interviews. Attitudes were assessed using three statements on adolescent alcohol use. Personal alcohol use was measured with the Alcohol Use Disorders Identification Test (AUDIT), and parenthood was categorised by the age of respondents' children. Sociodemographic information was obtained from the Population Register. Associations between parenthood, AUDIT scores, and attitudes were analysed, adjusted for age, gender, and education.

Allowing adolescents to decide about their own alcohol use was almost universally rejected. Attitudes were otherwise divided: approximately half opposed offering alcohol in family settings or enforcing strict prohibitions. Parents, particularly those with children aged 13–17 years, expressed

more restrictive attitudes than non-parents (OR = 2.32). Respondents with moderately high AUDIT scores were less restrictive than those with low scores (OR = 0.52), whereas those with the highest scores did not differ from the low-score group. Among respondents without children, however, high AUDIT scores were associated with more restrictive attitudes (OR = 1.89). Women were more restrictive than men (OR = 1.27), while higher education was associated with less restrictive attitudes (OR = 0.67).

Parenthood and personal alcohol use were strongly associated with attitudes toward adolescent drinking. Prevention efforts should address adults' attitudes and behaviours, particularly among parents, to reduce adolescent alcohol use and related harms.

Source: K Raitasalo & P Mäkelä, Attitudes toward under-age drinking: the role of own drinking patterns and parenthood. *Addiction Research & Theory*, 1–9. <https://doi.org/10.1080/16066359.2026.2653600>

## Understanding purchasing patterns of alcoholic, alcohol-free and low-alcohol drinks

Alcohol-free and low-alcohol (no/lo) drinks ( $\leq 1.2\%$  ABV) are increasingly popular in high-income countries. Their potential to reduce alcohol-related harm depends on who buys them, in what quantity and their incorporation into overall drinking patterns. A study published in the journal, *Addiction*, compared purchases containing only no/lo drinks, only alcoholic drinks or both, over time between 2018 and 2023; identified subgroups with distinct purchasing patterns in 2023; and described sociodemographic differences between these subgroups.

Purchasing data was taken from nationally representative samples of households in Great Britain, (30,401 in 2018 and 28,254 in 2023). 4,975 households purchasing no/lo drinks in 2023 were included in the latent profile analysis.

Data included off-trade (i.e. shop) purchasing occasions categorised into no/lo-only, alcohol-only or no/lo alongside alcohol. Household characteristics were purchasing frequency, standard servings of no/lo drinks per adult, alcohol risk levels based on weekly units of alcohol purchased per adult (non-drinker: 0 units; low-risk:  $\leq 14$  units; increasing risk:  $>14 - \leq 35$  units; high-risk:  $>35$  units; 1 unit = 8 g alcohol), age, social class, region and ethnicity.

From 2018 to 2023, the proportion of purchasing occasions that were alcohol-only fell from 97 to

95%, while no/lo-only purchases rose from 1.4% to 2.7% and no/lo alongside alcohol purchases rose from 1.2% to 1.9%. In 2023, no/lo-only purchases were smaller (median = 6.9 no/lo servings) than no/lo alongside alcohol purchases (median = 6.5 plus 24.5 alcohol units) and alcohol-only purchases (median = 24.6 units). For no/lo-only purchases, the study identified three classes: no/lo triers (53%) averaged 2.1 no/lo servings per adult annually with 95% purchasing no or low-risk levels of alcohol; occasional purchasers (34%) averaged 7.5 servings with 20% purchasing alcohol at increasing or high-risk levels; dual purchasers (13%) averaged 37.8 servings with 39% purchasing alcohol at increasing or high-risk levels. Dual purchasers and occasional purchasers were more likely to be older [60% and 54% aged  $\leq 55$  years, respectively] and white [both 97%] compared with no/lo triers (49% aged  $\leq 55$  years, 94% white).

In Great Britain, most households that purchase no/lo drinks appear to do so infrequently and purchase alcohol at low-risk levels; however, a smaller group of older, higher-risk households purchase no/lo drinks more frequently.

Source: O Rousham, AK Stevely, J Holmes. Understanding purchasing patterns of alcoholic, alcohol-free and low-alcohol drinks: A latent profile analysis. *Addiction*. 2026 Apr 23. <https://doi.org/10.1111/add.70445>

## Lower risk drinking guidelines and the 'no safe level' message: Finding a balance in risk communication

In an editorial published in the journal *Addiction*, Robyn Burton, James Nicholls state that in recent years, the message that there is 'no safe level' of alcohol consumption has become increasingly prominent in academic research, health guidance and advocacy materials. At the same time, many countries continue to promote 'low risk' drinking guidelines, which describe levels of consumption associated with relatively low risk. Both messages are well established, but surprisingly little has been written about how they interrelate. The 'no safe level' statement refers to the absence of a biologically risk-free threshold for certain health outcomes, particularly cancer. However,

depending on how it is interpreted, it may be understood as implying that abstinence is the behavioural ideal. By contrast, drinking guidelines seek to reduce risk without implying that all drinking is problematic. In alcohol health communications, the relationship between these two messages can be ambiguous—particularly if 'no safe level' is understood as prescriptive rather than advisory.

Source: R Burton, and J Nicholls., Lower risk drinking guidelines and the 'no safe level' message: Finding a balance in risk communication. *Addiction* 2026. <https://doi.org/10.1111/add.70431>

## Full alcohol marketing ban and adolescent drinking patterns: a repeated cross-sectional analysis comparing Lithuania with other EU countries

Alcohol consumption is a leading cause of premature mortality in Europe, with adolescents particularly vulnerable to marketing influences. While alcohol marketing bans are considered a WHO 'best buy', evidence of their effectiveness remains limited. Lithuania's 2018 full national ban on alcohol marketing offers a unique opportunity to assess its impact on adolescent drinking. A study evaluated whether adolescents in Lithuania reported greater declines in alcohol use compared with peers in European Union countries without a full ban.

Data came from the European School Survey Project on Alcohol and Other Drugs for 15-16 year-olds in Lithuania and five comparator countries (Estonia, France, Italy, Latvia and Poland) across four waves (2007, 2011, 2015 and 2019; n=84 189). The primary outcome was self-reported frequency of intoxication in the past 12 months.

Compared with statutory control for some alcoholic beverages, a full marketing ban was associated with a 35% reduction in frequency of intoxication (incidence rate ratios (IRR) 0.65 (95% CI 0.56 to 0.77)). Sensitivity analyses confirmed this association. Without the ban, predicted intoxication frequency in 2019 would have been nearly twice as high (1.28 vs 0.73 occasions). Additional analyses showed significant reductions in the odds of any intoxication (OR 0.68 (95% CI 0.60 to 0.78)). Protective associations were also observed for alcohol use (IRR 0.88 (95% CI 0.79 to 0.99)) and binge drinking (IRR 0.82 (95% CI 0.72 to 0.92)).

The implementation of full alcohol marketing bans was associated with reduced risky drinking

behaviours among adolescents in Lithuania. The researchers say that their findings support full bans as a central component of alcohol control, especially in the digital age, where partial restrictions are easily circumvented.

Source: D Correia, J Manthey, A Månsson, P Allebeck, L Kraus, J Rehm. Full alcohol marketing ban and adolescent drinking patterns: a repeated cross-sectional analysis comparing Lithuania with other EU countries. *BMJ Public Health*. 2026 Apr 10;4(2):e004245 <https://doi.org/10.1136/bmjph-2025-004245>

This research has been critiqued by Christopher Snowden, Head of lifestyle economics at the Institute of Economic Affairs. Snowden questions both the strength of the evidence and the conclusions drawn from it. He argues that the conclusion is misleading because teenage drinking in Lithuania had already been declining steadily for years before the ban was introduced, making it difficult to attribute the change directly to the policy. Snowden also questions the reliability of the data, noting that it is based on self-reported surveys of 15–16-year-olds, where most respondents rarely get drunk, meaning small numerical shifts can appear as large percentage changes. He further points out that the study relies on international comparisons that cannot establish clear causation, and he situates the findings within a broader body of research that generally shows limited impact from advertising bans. Overall, the article presents a sceptical view, arguing that while teenage drinking did fall, there is insufficient evidence to conclude that the advertising ban was the primary cause.

<https://substack.com/home/post/p-195975686>



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## A systematic review of the association between alcohol-related deaths and area-level socioeconomic deprivation and other geographic characteristics in high-income countries

There are substantial inequalities in alcohol-related mortality related to individual-level education, income, and employment status, but less is known about the association between alcohol-related mortality and the geographic characteristics of an area. Researchers conducted a systematic review to explore whether area-level features, including area-level measures of socioeconomic status, are associated with alcohol-attributable mortality.

Medical research databases were searched, and results were supplemented with searches of grey literature, for primary quantitative studies conducted in high-income countries. Eligible studies examined associations between alcohol-attributable mortality and one or more geographic characteristic. 73 eligible studies were identified covering mortality from a range of alcohol-attributable conditions, including chronic alcohol-specific conditions (e.g. alcohol-related liver disease) and alcohol-related incidents (e.g. road traffic collisions, suicides). Study quality was found to be good in most cases.

Urban–rural location was the most common exposure and alcohol-specific mortality was the most common outcome measured in the included studies. Of the 34 studies examining area-level socioeconomic deprivation, all studies found a positive association between deprived areas and alcohol-attributable mortality. Of the 49 studies that examined urban–rural location, 26 (53.1%) found a positive association between rural location and alcohol-attributable mortality. Fourteen studies (28.6%) found urban location significant. Rural locations were particularly associated with alcohol-related road traffic collisions and suicides.

Greater area-level deprivation and rurality are associated with higher rates of alcohol-related mortality.

Source: A Doyle, AK Stevely, L Murphy, et al. A systematic review of the association between alcohol-related deaths and area-level socioeconomic deprivation and other geographic characteristics in high-income countries. *BMC Public Health* (2026). <https://doi.org/10.1186/s12889-026-27445-7>

### Social and Policy research by publication date

Imposter syndrome and college students' drinking behaviors: The roles of negative affect and coping motivated alcohol use. First published: 19 October 2025

The role of identity in positive alcohol use attitudes, risky drinking, and alcohol-related problems among racially/ethnically diverse adolescents  
Published online February 24, 2026

Associations of minimum legal drinking age law with later-life alcohol use and alcohol-attributable mortality from disease and injury: An ecological study. Available online 12 April 2026.

Risky drinking in midlife men: Insights From Australia's National Drug Strategy Household Survey  
First published: 13 April 2026

Consumers' stated responses to wine drinking guidelines and health warning labels  
First published: 15 April 2026

Alcohol availability around schools and adolescent consumption: A case study in Madrid, Spain.  
Available online 22 April 2026, Version of Record 22 April 2026.

Sociodemographic and alcohol-related correlates of perceived helpfulness of alcohol cancer warning labels and anticipated reductions in alcohol consumption among US adults. Available online 18 April 2026, Version of Record 23 April 2026.

Attitudes toward under-age drinking: the role of own drinking patterns and parenthood  
Published online: 21 Apr 2026

Understanding purchasing patterns of alcoholic, alcohol-free and low-alcohol drinks: A latent profile analysis. First published: 23 April 2026

A systematic review of the association between alcohol-related deaths and area-level socioeconomic deprivation and other geographic characteristics in high-income countries. Published: 29 April 2026

Lower risk drinking guidelines and the 'no safe level' message: Finding a balance in risk communication.  
First published: 30 April 2026

Full alcohol marketing ban and adolescent drinking patterns: a repeated cross-sectional analysis comparing Lithuania with other EU countries.  
Published: 30 April 2026

## Young people's consumption of alcohol-free and low alcohol drinks in family settings

Research funded by Alcohol Change UK explored how alcohol free and low-alcohol (below 1.2% ABV) drinks are perceived, used, and shaped within family and social contexts in Great Britain by examining adults' attitudes toward adolescent consumption alongside adolescents' and young people's patterns, motivations, and experiences of consuming no/low drinks in order to clarify the role families play in influencing these behaviours.

The study used new and existing survey data from 5,890 adults and 3,652 young people aged 16-25. Researchers also explored the topic with families through a series of interviews with primary carers and young people – both on a one-to-one basis and together.

### Key findings

1. Views on no/low acceptability are mixed - more than a third of adults surveyed in Great Britain view use of no/low drinks among 13-17-year-olds as broadly acceptable - at 46% for zero-alcohol drinks and 31% for low alcohol drinks up to 1.2% ABV - and even more acceptable in family settings at 64% and 56% respectively.
2. No/low drinks are seen as 'for adults' - young people and parents/carers largely view no/low products as for adults choosing not to drink and less relevant to adolescents. Even in family settings, where no/low drinks were seen as more acceptable, their use is uncommon.
3. Teens opt for alcohol or soft drinks over no/low drinks - among young people, no/low drinks are seen as a poor substitute, as a primary

purpose of drinking alcohol is at least mild intoxication. Even in family settings, most adolescents would prefer to drink either a standard alcoholic drink, or a traditional soft drink – suggesting limited appeal of no/low alternatives.

4. No evidence of a 'gateway' effect - while concerns have been raised that no/low drinks may lead to a 'gateway' effect, whereby drinking no/low drinks reduced the age at which young people first consumed alcohol or impacted how much alcohol they drank, this study found no evidence of this in the context of Great Britain.
5. Parental roles reflect alcohol's normalisation – in many family settings, alcohol is already an established cultural default. While adolescent no/low use was seen as broadly acceptable, most primary carers interviewed thought it was acceptable for young people to drink some alcohol within the family home, with some believing it is their responsibility to introduce their adolescent children to alcohol. This is despite strong evidence that an alcohol-free childhood is the safest option.

Researchers say the findings highlight a need to review and update existing information and advice for parents and carers about alcohol to include no/low drinks, while continuing to monitor trends and impacts of no/low drinks on adolescents and young people.

<https://alcoholchange.org.uk/publication/young-peoples-consumption-of-alcohol-free-and-low-alcohol-drinks-in-family-settings>

## Additional restrictions on alcohol in Balearics as part of all-inclusive deals

As of May 2026, Spain has intensified its restrictions on alcohol consumption in specific "party tourism" areas, notably in the Balearic Islands (Majorca and Ibiza), to curb rowdy behaviour. Key rules include a 6-drink daily limit at specific all-inclusive resorts, a 9:30 PM to 8 AM alcohol sale ban in shops, and strict fines up to €3,000 for drinking in the street.

Activities promoting heavy drinking, such as pub crawls and happy hours, are also prohibited,

advertising for party boats is restricted, and new licenses for such excursions will not be issued. There will also be new, no-drinking zones implemented in the resorts.

These measures are part of a broader effort to promote more responsible tourism and reduce the negative impacts associated with alcohol-fuelled tourism in these popular destinations.

<https://thetravelvillage.co.uk/our-blog/spain-s-six-drink-rule-explained>

## UK public backs lower drink-drive limit ahead of Government review

The latest data published by the Department for Transport in the UK estimate there were 260 fatalities in drink-drive collisions in 2023, with a total of 6,310 people injured in incidents involving drivers over the legal limit.

A survey of 2,000 UK adults indicates strong public support for stricter drink-driving laws in England and Wales. The survey, conducted by breathalyser firm AlcoSense, comes ahead of the Government's Road Safety Strategy consultation deadline. The findings suggest that 87% of respondents believe tougher penalties are needed to deter people from driving under the influence, reflecting growing concern about current enforcement and safety measures.

There is also widespread backing for lowering the legal alcohol limit, which currently stands at 80mg per 100ml of blood. Around 78% of those surveyed support reducing the limit, with half favouring a significant reduction to 20mg or zero, while a further 28% support aligning with

Scotland's lower 50mg limit. Only a small minority (12%) believe the current limit should remain unchanged.

In addition to stricter limits, respondents expressed strong support for enhanced enforcement powers. Around three-quarters agreed that police should be able to suspend a driver's licence at the roadside if they fail or refuse a breath test. The findings suggest that many people view enforcement and legal thresholds as complementary measures, with 58% stating that a combination of lower limits and stronger enforcement would be the most effective approach. The study also highlights that stricter laws may have limited impact on social habits, with many respondents indicating their behaviour, such as visiting pubs or restaurants, would remain unchanged.

<https://roadsafetygb.org.uk/news/public-backs-lower-drink-drive-limit-ahead-of-government-review/>

## Rapid alcohol delivery and public health considerations

Alcohol Change UK has launched the "End the delivery trap" campaign, calling for new regulations on rapid alcohol delivery services. The campaign proposes measures such as introducing delays between ordering and delivery, restricting delivery hours, and enabling individuals or families to block access to alcohol delivery apps.

Rapid delivery platforms like Uber Eats and Deliveroo, along with supermarket services such as Tesco Whoosh, have transformed how alcohol is purchased in the UK. These services allow alcohol to be delivered quickly, often within an hour, but their app-based model differs from traditional retail environments governed by the Licensing Act 2003. This shift has raised questions about

how effectively existing safeguards—such as age and intoxication checks—operate in a delivery context.

The convenience of rapid delivery may influence consumption patterns by making it easier to order additional alcohol during drinking occasions and reducing barriers that might otherwise limit intake. Survey data suggests widespread use, with 22% of people ordering alcohol this way weekly and higher usage among those at greater risk of harm. In response, the campaign highlights the need to adapt regulation to evolving purchasing behaviours and strengthen protections within these systems.

<https://alcoholchange.org.uk/get-involved/campaigns/end-the-delivery-trap>

## Minnesota passes Liquor bill that includes 'Grandparents' Happy Hour'

Lawmakers in Minnesota have passed an omnibus liquor bill in the state House that includes a provision informally known as "Grandparents' Happy Hour." This measure would allow nursing homes, assisted living facilities, and similar institutions to serve alcohol to residents and their guests during organised events, provided certain conditions are met, such as notifying the state.

The bill, which passed the House with strong support, now returns to the Senate for further consideration. In addition to the care facility provision, it includes a range of updates to local liquor laws and would allow some University of Minnesota campuses to serve alcohol at certain events.

<https://www.house.mn.gov/sessiondaily/Story/19075>

## Czechia considers a ban on nighttime alcohol sales to curb consumption

In Czechia, Health Minister Adam Vojtěch has said that the government is preparing a series of measures aimed at reducing alcohol consumption, including possible nighttime sales restrictions at convenience stores and gas stations. The proposals, which are still under discussion, are part of a broader effort to address what officials describe as one of the highest per-capita alcohol consumption rates in the world. The measures could be presented for coalition-level debate by the summer.

The primary focus is protecting children and reducing harm linked to excessive drinking. The initiative follows concerns from public health officials that more than one million people in

Czechia engage in risky drinking behaviour, with broader impacts on healthcare costs and public budgets.

Vojtěch has signalled support for limiting late-night sales as one possible tool, adding that restrictions on nighttime sales could help protect children and young people in particular. Other ideas being discussed include higher alcohol taxes, tighter limits on advertising, and changes to where alcohol can be sold. Some policymakers have also suggested introducing school lessons focused on addiction prevention and substance awareness.

<https://www.expats.cz/czech-news/article/czechia-considers-ban-on-nighttime-alcohol-sales-to-curb-consumption>

## Greece rolls out digital registry to monitor alcohol, tobacco sales in real time

Greece has introduced a new digital system to monitor the sale of alcohol, tobacco, and vaping products in real time, representing a shift toward more centralised and data-driven regulation. The initiative is built around two platforms, [alto.gov.gr](http://alto.gov.gr) and [events.gov.gr](http://events.gov.gr), which record and track commercial activity that was previously only partially visible, aiming to strengthen oversight and enforcement.

The rollout has already reached significant scale, with over 88,600 points of sale registered, including bars, kiosks, and retail outlets. More than 79,000 businesses are participating, reflecting a transition from a fragmented marketplace to a unified digital registry. Under the system, all businesses selling these regulated products must register, provide relevant details, and demonstrate compliance with legal requirements.

Once approved, businesses receive certification in the form of a QR code, which authorities can scan during inspections to verify compliance instantly. Registration is mandatory, and failure to comply results in a prohibition on selling alcohol, tobacco, or vaping products, with potential penalties including suspension of operations.

The system is part of a broader policy effort to reduce underage access and improve enforcement efficiency. By including vaping products alongside alcohol and tobacco, the framework reflects changing consumption trends. Authorities expect the system to enhance inspection targeting, increase market transparency, and replace fragmented oversight with continuous, standardised digital monitoring.

<https://www.ekathimerini.com/economy/1302661/greece-rolls-out-digital-registry-to-monitor-alcohol-tobacco-sales-in-real-time/>

## World Cup fans to be served alcohol from 6am thanks to temporary drinking laws

A new law has been signed off to allow bars to serve alcohol early for the upcoming Football World Cup, with Kansas City, Missouri set to play host to four countries as their base - with the Chiefs' Arrowhead Stadium to hold games throughout the tournament.

Bars in Kansas City will be permitted to serve alcohol from 6am and be open for up to 23 hours after a new law was passed ahead of the

competition. Kansas City is expecting thousands of soccer fans in attendance, with the law set to be in place from June 11 all the way through to July 19, after the end of the games. Lawmakers in the state of Missouri have also passed legislation which will allow alcohol to be served for up to 23 hours a day.

<https://www.telegraph.co.uk/football/2026/05/04/england-world-cup-base-23-hour-drinking-laws-kansas>

## Icelandic court rules online alcohol sales illegal

An Icelandic court has ruled that online alcohol sales by private companies are illegal under the country's state monopoly system, marking a significant legal development. The decision was issued by the Reykjanes District Court on April 8, 2026, and addresses longstanding uncertainty around the legality of domestic online alcohol retail.

The case involved Vilhjálmur Forberg Ólafsson, representing the online retailer Smárikið, which was found guilty of unlawful retail sales following a test purchase. The court rejected the argument that the business operated as a cross-border seller, determining instead that the alcohol was sourced and stored within Iceland. As a result, the activity was classified as domestic retail, which is restricted under Iceland's state alcohol monopoly system operated by ÁTVR (Vínbúðin).

The ruling reinforces the legal framework that limits alcohol retail sales to the state-controlled system. By confirming that locally fulfilled online sales fall within the scope of domestic retail, the decision effectively closes a gap that had allowed some private operators to continue trading in a legal grey area.

As a consequence of the ruling, Ólafsson was fined 100,000 ISK, with an alternative custodial sentence, and ordered to pay legal costs. The outcome has been welcomed by some public health advocates, who view it as a clarification and enforcement of existing alcohol control laws in Iceland.

<https://www.nordicalcohol.org/post/icelandic-court-rules-online-alcohol-sales-illegal>

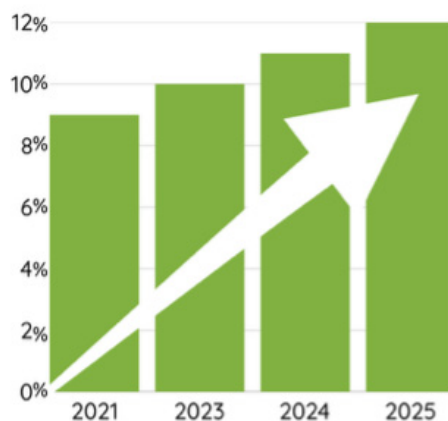
## Policy briefing on Alcohol and road safety in Ireland

A new report from Alcohol Action Ireland argues that alcohol is a major contributor to road deaths in Ireland and calls for stronger action to tackle drink driving. The report highlights that 2025 was the deadliest year on Irish roads since 2014, with alcohol involved in around one-third of driver deaths. It also found that one in eight drivers admitted to drink driving in the previous year - equivalent to roughly 380,000 people - while Ireland has one of the lowest levels of roadside breath testing in the EU.

The report says current enforcement measures are not strong enough and recommends major reforms. Suggested measures include increasing random breath testing so that every licensed driver could expect to be tested at least once per year, introducing alcohol ignition interlock systems for offenders, impounding vehicles of drivers who fail breath tests, and extending the legal time window for collecting blood samples after collisions from three to twelve hours. The report also calls for improved treatment services for people with alcohol problems and better support systems when children are present in drink-driving incidents.

More broadly, the report argues that Ireland's overall drinking culture contributes to road safety problems. It points to international evidence showing that reducing alcohol availability, marketing, and consumption at a population level can reduce alcohol-related crashes. The authors conclude that reducing drink driving will require coordinated action across government departments, including health, transport, justice, and finance, alongside stronger enforcement and public health policies.

<https://alcoholireland.ie/wp-content/uploads/2026/04/Alcohol-and-road-safety-9.pdf>



Source: <https://www.rsa.ie/docs/default-source/road-safety/r4.1-research-reports/safe-road-use/driver-attitudes-and-behaviour-survey-2025.pdf>



RSA data from 2025 shows that 12% of Irish motorists admit to driving after consuming alcohol in the previous 12 months - up from 9% in 2021

## Alcohol warning labels in China

Shanghai's health authorities are implementing a pilot programme requiring alcohol warning labels across both online and offline sales channels. The initiative, led by the Shanghai Municipal Health Commission, aims to increase public awareness of drinking-related risks and standardise how alcohol is presented to consumers.

First announced in December 2025, the programme has since expanded to include guidance for a wide range of sellers, including retailers, restaurants, entertainment venues and e-commerce platforms. The rules apply to all alcoholic beverages with an alcohol content above 0.5% by volume and are aligned with broader public health strategies such as the Healthy Shanghai Action Plan and the Shanghai National Nutrition Plan.

The guidance sets out specific requirements for how warning labels should be displayed. Labels

must be clearly visible and placed in positions where customers are likely to see them before making a purchase. In physical retail settings, this includes placing signage at eye level, with detailed positioning rules such as minimum height requirements when mounted on walls. In practice, the policy requires at least one warning sign to be displayed in key areas, including cashier points, order counters, alcohol shelves, refrigerators, vending machines and promotional spaces.

"The guidelines for these alcohol warning labels are in line with the Shanghai National Nutrition Plan and Healthy Shanghai Action Plan, both running from 2019-2030," the commission said via formal documentation.

<https://www.foodnavigator-asia.com/Article/2026/05/06/policy-picks-alcohol-warning-labels-vietnam-food-safety-and-more-updates/>

## Little public support in Nova Scotia for alcohol expansion into corner stores

Nova Scotia has decided not to proceed with plans to expand alcohol sales into corner stores following public consultations that showed limited support for increased retail access. A 2025 survey and consultation process found that most respondents already consider alcohol widely available, with 83% describing it as "more than accessible" and over half opposing further expansion.

The research, commissioned by the provincial government and involving over 1,500 residents as well as industry and community groups, indicated stronger interest in maintaining the current system while exploring more targeted changes. Finance Minister John Lohr confirmed that the government will not move forward with retail expansion at this time.

Industry stakeholders, including local brewers and winemakers, expressed concerns that allowing

alcohol sales in convenience stores would favour large national brands and disadvantage smaller local producers. They argued that increased competition for shelf space and higher distribution costs could harm local businesses without significantly increasing overall sales.

While broad retail expansion received little support, there was some openness to alternative changes, such as cross-selling between producers and increasing the presence of local products in existing outlets. The report suggests that any future reforms would need to be gradual, carefully regulated, and aligned with public health and economic priorities.

<https://www.cbc.ca/news/canada/nova-scotia/corner-store-expansion-survey-results-wine-beer-9.7151707>

## European Parliament committee renews call for alcohol health warnings without delay

The debate on alcohol labelling has re-emerged as a key issue in EU health policy following a draft report published by the European Parliament's European Parliament Committee on Public Health. The report calls on the European Commission to introduce mandatory ingredient lists and health warnings on alcoholic beverages "without further delay," highlighting frustration over limited progress.

These calls relate to commitments made under Europe's Beating Cancer Plan, launched in 2021. The plan originally set deadlines for introducing ingredient labelling by 2022 and health warnings by 2023, but these have not yet resulted in concrete legislative proposals. The committee's draft report, published in March 2026, signals renewed political pressure to act, with further amendments under discussion before the process moves toward a plenary stage later in the year.

The report situates alcohol labelling within the broader context of Europe's cancer burden. It notes that in 2022, 2.7 million people in Europe were diagnosed with cancer and 1.3 million died from the disease. Around 40% of cases are considered preventable, with alcohol identified as a significant risk factor. The report also highlights that approximately three in ten alcohol-attributable deaths are linked to cancer.

Overall, the committee's position frames alcohol labelling as a public health measure rather than a technical regulatory issue. While the proposal does not introduce new policy commitments, it reinforces existing ones and increases pressure on the European Commission to move forward with legislation, as the parliamentary process continues in the coming months.

<https://www.alcoholandcancer.eu/post/european-parliament-committee-renews-call-for-alcohol-health-warnings-without-delay>

## New York City Health Department launches campaign to highlighting risk of alcohol-related cancers

In May, the New York City Health Department launched a new citywide education campaign to raise awareness of the alcohol-related cancers. Alcohol is a carcinogen and is associated with an increased risk of at least seven types of cancer. The campaign highlights that drinking less can lower the risk of cancer.

Running throughout May on subways and social media, in bars and public spaces, over the radio, and in community and ethnic publications, the ad campaign directs New Yorkers to learn about alcohol-related health risks and where they can seek support if they are concerned about their drinking.

"New Yorkers deserve to know the truth about the risk of cancer when drinking alcohol. To some our data may be a buzzkill, but it's actually their buzz that can kill," said NYC Health Commissioner Dr Alister Martin. "The good news is that drinking less lowers the risk of cancer, and knowing the facts means you're in control. We're putting this message on the subway, in your neighbourhood,

online, and over the airways because knowledge is power. We're committed to supporting New Yorkers' healthier choices every step of the way."

The city's campaign for increasing New Yorkers' life expectancy, includes a key aim of reducing deaths from screenable cancers (breast, colorectal, lung, prostate, and cervical) by 20% by 2030. To achieve this goal, the City and its partners are making robust efforts to address key risk factors for cancer, link New Yorkers to effective screenings, and support access to high-quality medical care. The campaign ads provide links to support for New Yorkers who are concerned about their alcohol consumption.

<https://www.nyc.gov/site/doh/health/health-topics/alcohol-and-drug-use-alcohol-and-health.page>



## SpiritsEurope report on labelling progress

In 2019, spiritsEUROPE committed to improving how information is shown on spirits labels across Europe, especially focusing on energy (calorie) content. They set targets for how many products should include this information, aiming for 25% by 2020, 50% by 2021, and 66% by 2022. The plan also included using digital tools, such as e-labels, to make information easier to access in different languages and avoid trade barriers.

In April, spiritsEUROPE published the 5th report on rollout progress reviewing progress made in 2025 and shows that companies have gone well beyond the original targets. On average, 91% of spirits sold by participating companies in the EU included energy information on the label, with

some companies reaching full (100%) compliance. The data comes from company reports and national trade associations, supported by additional market checks.

Overall, the findings show continued improvement in providing consumer information, with more companies participating and more consumers becoming familiar with both on-bottle labels and digital information tools. The organisation plans to keep tracking progress each year and has outlined further steps for 2026 to improve how data is collected and reported.

<https://spirits.eu/upload/files/publications/CP.MI-021-2026-%20spiritsEUROPE%20MoU%20report%202026%20-%2016%20April%202026.pdf>

## Russian Lawmakers seek to introduce graphic warnings on alcohol labels

Russian lawmakers have proposed new legislation to strengthen health warnings on alcoholic beverages, which could require significant packaging changes if adopted. The draft bill No. 1143864-8, submitted to the State Duma, would amend existing laws governing alcohol production and sales by introducing stricter labelling requirements.

Under the proposal, alcohol products would need to display prominent warnings about the risks of consumption, including contraindications for certain groups. These warnings would be required to appear in capital letters, use the largest possible font, and occupy at least 10% of the label, whether on the front, back, or overall packaging. In addition to text, the bill proposes the inclusion of pictograms illustrating health harms linked to

alcohol use, such as damaged organs or disease, similar to graphic warning systems already used on tobacco packaging in many countries, aiming to make health risks more visible and easily understood.

Supporters of the measure argue that alcohol consumption is linked to a range of societal and health issues, including mortality, illness, crime, injuries, traffic accidents, and domestic violence. They also highlight its impact on pregnancy outcomes and demographic trends, positioning the proposal as part of broader efforts to address public health and population challenges.

<https://www.vinetur.com/en/2026042499638/russian-lawmakers-seek-graphic-warnings-on-alcohol-labels.html>

## Ontarians can drink alcohol in more areas in provincial parks this summer

Starting this summer, Ontario is relaxing alcohol restrictions in provincial parks, allowing visitors aged 19+ to responsibly consume alcohol in most areas, including beaches, picnic spots, and day-use areas, rather than only at individual campsites. This update modernises park rules for the 2026 season. Todd McCarthy, minister of environment, conservation and parks, made the announcement at Bronte Creek Provincial Park in Oakville, Ontario, noting that some areas will remain alcohol-free, such as certain historical sites or specific, high-risk safety areas. Public intoxication, underage drinking, and impaired boating/driving are still

illegal. This change builds on the government's broader efforts to modernise alcohol rules and support local tourism, including expanded "bring your own" permits for outdoor public events that give communities more flexibility to host festivals and cultural gatherings that support local economies. It is part of the government's broader plan to protect Ontario by boosting the tourism sector, promoting Ontario as a global travel destination and helping create jobs across the province.

<https://news.ontario.ca/en/release/1007298/ontario-relaxing-alcohol-restrictions-in-provincial-parks>

## MPs in Kenya push for real-time ethanol tracking system to curb illicit alcohol

Members of Parliament in Kenya are proposing reforms to strengthen control over industrial ethanol as part of efforts to curb illicit alcohol production. The initiative is being led by the Public Petitions Committee of Kenya, which has called for a review of existing alcohol regulations and stricter oversight of ethanol supply chains. Illicit alcohol trade costs Kenya more than KSh 120 billion in lost tax revenue every year.

Alcoholic Beverages Association of Kenya (ABAK), ABAK revealed that illicit alcohol accounts for approximately 6 per cent of the Kenyan market, giving illegal operators a major advantage over compliant manufacturers by undercutting prices while evading quality standards and excise regulations. The proposals were discussed during a committee session responding to a public petition submitted by MP Gladys Boss, which seeks tighter controls on ethanol distribution, production, and use. Overall, the measures are intended to improve traceability, strengthen enforcement, and reduce the role of industrial ethanol in the illicit alcohol trade.

A central proposal is the introduction of a real-time digital tracking system that would monitor ethanol consignments from importation or manufacture through to licensed end users. The aim is to prevent diversion of industrial ethanol into illegal brewing. The committee has also recommended amendments to the Alcoholic Drinks Control Act to introduce tougher penalties, including custodial sentences for unauthorised possession of ethanol.

Lawmakers have emphasised the need for coordinated enforcement, urging closer collaboration between the Ministry of Interior and National Administration and the National Authority

for the Campaign Against Alcohol and Drug Abuse (NACADA). They also called for engagement with parliamentary leadership to accelerate legislative changes and strengthen regulatory frameworks.

Nairobi County has also launched the induction of a new Alcoholic Drinks Control and Licensing Board as part of efforts to strengthen oversight of the liquor sector. The initiative is intended to improve coordination and enforcement while addressing persistent challenges such as illegal outlets, underage drinking, and unregulated nightlife activity in residential areas.

The board includes representatives from key agencies such as the National Police Service and the National Authority for the Campaign Against Alcohol and Drug Abuse (NACADA), alongside public health and regional officials. Authorities say this multi-agency structure is designed to enhance compliance and ensure a more coordinated regulatory approach.

Officials have called on alcohol producers, distributors, and vendors to register through the Liquor Pay system and comply with licensing requirements. They have also indicated that stricter enforcement will follow, including action against unlicensed operators, while maintaining a commitment to support compliant businesses through collaboration between county and national authorities.

<https://peopledaily.digital/news/inside-kenyas-illicit-alcohol-trade-ksh120b-in-annual-losses-as-mps-push-crackdown>

<https://citizen.digital/article/nairobi-county-inducts-new-liquor-licensing-board-in-crackdown-on-illegal-alcohol-trade-n382103>

## US appeals court declares 158-year-old home distilling ban unconstitutional

A ruling in the US by the Fifth Circuit Court of Appeals has declared a nearly 158-year-old federal ban on home distilling unconstitutional. The court found that the law, originally introduced in 1868 during the Re-construction era to prevent tax evasion, was not a valid or necessary way for Congress to exercise its taxation powers. The case was brought by the Hobby Distillers Association and several members, who argued for the right to distil alcohol at home for personal use.

The ban had imposed significant penalties, including fines of up to \$10,000 and prison sentences of up to five years. The court's decision represents a notable legal shift, potentially opening the way for individuals to legally produce spirits at home, although the broader regulatory implications may depend on further legal or legislative developments.

<https://www.theguardian.com/law/2026/apr/11/appeals-court-ruling-home-distilling-ban-unconstitutional>

## WHO holds second alcohol industry dialogue examining labelling, marketing and sales practices

In April, the World Health Organization convened a second dialogue with representatives from the alcohol industry as part of its work under the Global Alcohol Action Plan 2022-2030. The meeting focused on how industry practices relate to public health goals, with discussions centred on product reformulation and consumer information, marketing practices, and alcohol sales and availability. The WHO emphasised that governments remain responsible for setting and enforcing alcohol policy.

The dialogue forms part of broader efforts to reduce alcohol-related harm, which the WHO identifies as a major contributor to premature mortality and disease worldwide. The agency highlighted that alcohol's impacts extend beyond health systems to economic development and progress toward global targets such as the Sustainable Development Goals. It reiterated that effective policy responses should be evidence-based and led by governments.

Topics discussed included labelling practices for no- and low-alcohol products, as well as wider issues such as digital marketing, influencer promotion, and cross-border advertising. The WHO also examined sales and availability, including e-commerce, delivery systems, age verification, and licensing frameworks - areas that are becoming increasingly complex as alcohol sales expand online.

The meeting followed an earlier dialogue in 2023 and was described as a structured exchange rather than a partnership. The WHO stressed that engagement with industry participants does not affect its independence in developing policy guidance. The discussions come amid wider global debates on alcohol regulation, with governments considering changes to labelling, marketing restrictions, and online sales controls.

<https://www.vinetur.com/en/2026041598958/who-holds-second-alcohol-industry-dialogue.html>

## Concerns that new bill in New Zealand will increase harm and reduce public voice

Proposed amendments to alcohol laws in Aotearoa New Zealand have raised concerns among public health experts about increased availability and reduced community influence over local decisions. The changes are outlined in the Sale and Supply of Alcohol (Improving Alcohol Regulation) Amendment Bill, which has been analysed in a briefing by researchers from the University of Otago. The authors argue that the Bill may weaken existing protections and shift the balance toward greater commercial access.

According to the briefing, the proposed reforms would expand access to alcohol in everyday settings. Measures include allowing some restaurants to sell takeaway alcohol, permitting clubs to serve the general public, enabling hairdressers and barbers to provide alcohol without a licence, and extending trading hours during major televised events. The Bill also does not mandate consistent ID or intoxication checks for most alcohol deliveries, raising questions about oversight.

The analysis highlights that alcohol remains a leading contributor to health and social harm in

New Zealand, with impacts spanning physical, psychological, and economic domains. It also notes that Māori communities experience disproportionately higher rates of alcohol-related harm, including mortality. Public health evidence cited in the briefing suggests that increased availability is associated with increased harm, while stronger controls are linked to better outcomes.

In addition to availability, the Bill proposes changes to licensing processes that could limit community participation. Objections to licence applications would be restricted to those living or working nearby, potentially excluding other affected groups and organisations. Critics argue this could make it more difficult for communities to influence local alcohol environments, while industry support for the reforms has prompted further debate about the balance between economic and public health considerations.

Consultation on the Bill is underway, with submissions open until Thursday 14 May 2026.

<https://www.phcc.org.nz/briefing/unpicking-alcohol-protections-new-bill-set-increase-harm-and-reduce-public-voice>

**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](http://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](http://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**

**Professor R. Curtis Ellison MD - Chairman,**  
Professor of Medicine, Emeritus, Section of Preventive Medicine & Epidemiology, Boston University School of Medicine, Boston, MA, US

**Henk Hendriks PhD - Co-director**  
Independent consultant, Netherlands

**Creina S. Stockley PhD MBA - Co-director**  
Independent consultant and Adjunct Senior Lecturer in the School of Agriculture, Food and Wine at the University of Adelaide, Australia

**Professor Adrian Furnham,** Professor in Psychology and occupational psychology, University College London, UK

**Giovanni de Gaetano, MD, PhD,** President, IRCCS Istituto Neurologico Mediterraneo NEUROMED, Pozzilli, Italy

**Tedd Goldfinger FACC, FCCP,** President, Desert Heart Foundation, Tucson, University of Arizona, US

**Ellen Mack MD,** Oncologist

**Professor JM Orgogozo,** Professor of brain science, Institut de Cerveau, University of Bordeaux, France

**Dr Erik Skovenborg,** Scandinavian Medical Alcohol Board

**Arne Svilaas MD, PhD,** Chief Consultant, Lipid Clinic, Oslo University Hospital, Oslo, Norway.

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

**Dag Thelle MD, PhD,** Senior Professor of Cardiovascular Epidemiology and Prevention, University of Gothenburg, Sweden; Senior Professor of Quantitative Medicine at the University of Oslo, Norway

**David Vauzour PhD,** Senior Research Associate, Department of Nutrition, Norwich Medical School, University of East Anglia, Norwich, UK