



**RESEARCH SUMMARY**  
Date Compiled: August 2021

**Key takeaways from included research:**

- Globally, an estimated 741,300, or 4.1%, of all new cases of cancer in 2020 were attributable to alcohol consumption.
- A policy review of 77 jurisdictions in six countries, including the United States, found that many jurisdictions permit the online sale and delivery of alcohol, but regulation of these sales varies widely. In most, regulations do not meet the same standard as bricks-and-mortar establishments and may be insufficient to prevent youth access to alcohol.
- Alcohol use and alcohol-associated liver disease (ALD) burden are increasing in young individuals. A new study found that young age, female gender, and Hispanic race are independently associated with ALD-related burden and acute-on-chronic liver failure (ACLF) in the United States.
- Researchers aimed to identify a set of alcohol policies with the potential to reduce alcohol-related disparities given high levels of support from marginalized groups, such as racial/ethnic minorities and lower-income groups. Of the policies examined, banning alcohol sales at corner stores is most likely to be in a “window of opportunity” for reducing alcohol-related disparities.

## **GLOBAL BURDEN OF CANCER IN 2020 ATTRIBUTABLE TO ALCOHOL CONSUMPTION: A POPULATION-BASED STUDY**

July 2021

### **Abstract**

**Background:** Alcohol use is causally linked to multiple cancers. We present global, regional, and national estimates of alcohol-attributable cancer burden in 2020 to inform alcohol policy and cancer control across different settings globally.

**Methods:** In this population-based study, population attributable fractions (PAFs) calculated using a theoretical minimum-risk exposure of lifetime abstinence and 2010 alcohol consumption estimates from the Global Information System on Alcohol and Health (assuming a 10-year latency period between alcohol consumption and cancer diagnosis), combined with corresponding relative risk estimates from systematic literature reviews as part of the WCRF Continuous Update Project, were applied to cancer incidence data from GLOBOCAN 2020 to estimate new cancer cases attributable to alcohol. We also calculated the contribution of moderate (<20 g per day), risky (20–60 g per day), and heavy (>60 g per day) drinking to the total alcohol-attributable cancer burden, as well as the contribution by 10 g per day increment (up to a maximum of 150 g). 95% uncertainty intervals (UIs) were estimated using a Monte Carlo-like approach.

**Findings:** Globally, an estimated 741 300 (95% UI 558 500–951 200), or 4·1% (3·1–5·3), of all new cases of cancer in 2020 were attributable to alcohol consumption. Males accounted for 568 700 (76·7%; 95% UI 422 500–731 100) of total alcohol-attributable cancer cases, and cancers of the oesophagus (189 700 cases [110 900–274 600]), liver (154 700 cases [43 700–281 500]), and breast (98 300 cases [68 200–130 500]) contributed the most cases. PAFs were lowest in northern Africa (0·3% [95% UI 0·1–3·3]) and western Asia (0·7% [0·5–1·2]), and highest in eastern Asia (5·7% [3·6–7·9]) and central and eastern Europe (5·6% [4·6–6·6]). The largest burden of alcohol-attributable cancers was represented by heavy drinking (346 400 [46·7%; 95% UI 227 900–489 400] cases) and risky drinking (291 800 [39·4%; 227 700–333 100] cases), whereas moderate drinking contributed 103 100 (13·9%; 82 600–207 200) cases, and drinking up to 10 g per day contributed 41 300 (35 400–145 800) cases.

**Interpretation:** Our findings highlight the need for effective policy and interventions to increase awareness of cancer risks associated with alcohol use and decrease overall alcohol consumption to prevent the burden of alcohol-attributable cancers.

**Source:** Runggay, H, Shield, K, Charvat, H, et al. (2021). Global burden of cancer in 2020 attributable to alcohol consumption: a population-based study. *The Lancet Oncology*, 22(8), 1071-1080.

## **ONLINE ALCOHOL SALES AND HOME DELIVERY: AN INTERNATIONAL POLICY REVIEW AND SYSTEMATIC LITERATURE REVIEW**

July 2021

### **Abstract**

**Background:** Online alcohol sales are experiencing rapid growth in many places, accelerated by the COVID-19 pandemic, prompting new laws and regulations. There are no comprehensive and systematic analyses of the laws or their effectiveness.

**Objective:** To summarise international policies governing online alcohol sale and delivery, including changes occurring with COVID-19, and examine available evidence of retailer compliance with such policies.

**Method:** A policy review of 77 jurisdictions in six English-speaking OECD countries: United States, Canada, United Kingdom, Ireland, Australia and New Zealand. We synthesised policies according to ten elements identified as potentially relevant for public health regulation. A systematic literature review of compliance evaluations in Medline, Medline Epub, EMBASE, CINAHL, Web of Science and Google Scholar.

**Results:** 72 of 77 jurisdictions permitted online alcohol sales and home delivery. Few jurisdictions require age verification at the time of purchase ( $n = 7$ ), but most require it at delivery ( $n = 71$ ). Since the COVID-19 pandemic began, most jurisdictions (69%) have either temporarily or permanently relaxed liquor regulations for alcohol home delivery. Three articles examined retailer compliance with age restrictions and found relatively low compliance (0%-46%).

**Conclusion:** Many jurisdictions permit the online sale and delivery of alcohol, but regulation of these sales varies widely. In most, regulations do not meet the same standard as bricks-and-mortar establishments and may be insufficient to prevent youth access.

**Source:** Colbert, S, Wilkinson, C, Thornton, L, Feng, X & Richmond, R. (2021). Online alcohol sales and home delivery: An international policy review and systematic literature review. *Health Policy*, ISSN 0168-8510, <https://doi.org/10.1016/j.healthpol.2021.07.005>

## **ALCOHOL-ASSOCIATED LIVER DISEASE IN THE UNITED STATES IS ASSOCIATED WITH SEVERE FORMS OF DISEASE AMONG YOUNG, FEMALES AND HISPANICS** July 2021

### **Abstract**

**Background:** Alcohol use and alcohol-associated liver disease (ALD) burden are increasing in young individuals.

**Aim:** To assess host factors associated with this burden.

**Methods:** National Health and Nutrition Examination Survey (NHANES), National Inpatient Sample (NIS), and United Network for Organ Sharing (UNOS) databases (2006-2016) were used to identify individuals with harmful alcohol use, ALD-related admissions, and ALD-related LT listings respectively.

**Results:** Of 15 981 subjects in NHANES database, weighted prevalence of harmful alcohol use was 17.7%, 29.3% in <35 years (G1) versus 16.9% in 35-64 years (G2) versus 5.1% in  $\geq 65$  years (G3). Alcohol use was about 11 and 4.7 folds higher in G1 and G2 versus G3, respectively. Male gender and Hispanic race associated with harmful alcohol use. Of 593 600 ALD admissions (5%, 77%, and 18% in G1-G3 respectively), acute on chronic liver failure (ACLF) occurred in 7.2%, (7.2 in G2 vs 6.7% in G1 and G3,  $P < 0.001$ ). After controlling for other variables, ACLF development among ALD hospitalizations was higher by 14% and 10% in G1 and G2 versus G3, respectively. Female gender and Hispanic race were associated with increased ACLF risk by 8% and 17% respectively. Of 20,245 ALD LT listings (3.4%, 84.4%, and 12.2% in G1-G3 respectively), ACLF occurred in 28% candidates. Risk of severe (grade 2 or 3) ACLF was higher by about 1.7 fold in G1, 1.5 fold in females and 20% in Hispanics.

**Conclusion:** Young age, female gender, and Hispanic race are independently associated with ALD-related burden and ACLF in the United States. If these findings are validated in prospective studies, strategies will be needed to reduce alcohol use in high risk individuals to reduce burden from ALD.

**Source:** Singal, AK, Arsalan, A, Dunn, W, et al. (2021). Alcohol-associated liver disease in the United States is associated with severe forms of disease among young, females and Hispanics. *Aliment Pharmacol Ther.*; 54, 451– 461. <https://doi.org/10.1111/apt.16461>

## **SUPPORT FOR ALCOHOL POLICIES IN MARGINALIZED POPULATIONS**

**July 2021**

### **Abstract**

**Aim:** Kingdon [(2014) *Agendas, Alternatives, and Public Policies*. Essex. United Kingdom: Pearson Education Limited] argues that windows of opportunity to pass policies emerge when problems, solutions and policy support co-occur. This study aims to identify a set of alcohol policies with the potential to reduce alcohol-related disparities given high levels of support from marginalized groups, such as racial/ethnic minorities and lower-income groups.

**Methods:** This study used data from five US National Alcohol Surveys, which were based on household probability samples of adults in 1995 (n = 4243), 2000 (n = 5736), 2005 (n = 1445), 2010 (n = 4164) and 2015 (n = 4041). We used multiple logistic regression to determine the odds of policy support by racial/ethnic group and income level, considering price, place and marketing policies as well as individual-level interventions.

**Results:** Overall a majority of Americans supported banning alcohol sales in corner stores (59.4%), banning alcohol advertisements on television (55.5%), and establishing universal health coverage for alcohol treatment (80.0%). Support was particularly high among Blacks, Hispanics/Latinos and lower-income persons. Multivariate models showed that compared with White people, foreign-born Hispanics/Latinos had the most robust levels of support, including raising alcohol taxes (aOR = 2.40, 95% CI: 2.00, 2.88, P < 0.0001), banning alcohol sales in corner stores (aOR = 2.85, 95% CI: 2.22, 3.65, P < 0.0001) and reducing retail sales hours (aOR = 2.91, 95% CI: 2.38, 3.55, P < 0.0001).

**Conclusion:** Of the policies examined, banning alcohol sales at corner stores is most likely to be in a “window of opportunity” for reducing alcohol-related disparities. By simultaneously reducing population-level consumption and harms from others’ drinking, place-based policies have the potential to reduce harms experienced by marginalized groups.

**Source:** Trangenstein, PJ, Mulia, N, Lui, CK, Karriker-Jaffe, KJ, Greenfield, TK & Jones-Webb, R. (2021). Support for alcohol policies in marginalized populations, *Alcohol and Alcoholism*, 56(4), 500–509, <https://doi.org/10.1093/alcalc/aqaa130>