



## RESEARCH SUMMARY

Date Compiled: December 2018

### Key Takeaways from Included Research

- The US Preventive Services Task Force (USPSTF) now recommends screening for unhealthy alcohol use in primary care settings in adults 18 years or older, including pregnant women, and providing persons engaged in risky or hazardous drinking with brief behavioral counseling interventions to reduce unhealthy alcohol use.
- A study gauging young adult Facebook engagement and drinking behaviors found that pro-drinking comments may increase the desire to drink and ad engagement, both of which may be predictive of future drinking behavior. This suggests that regulations are needed to limit the ability of social media users to engage with alcohol ads.
- A study comparing alcohol outlet density, heavy drinking, and on-premise alcohol-related complaints found that both off-premise outlet density and heavy drinking rates were independent predictors of on-premise complaints.
- A study of over 400,000 women in the U.K. found that, in middle-aged women, cirrhosis incidence increases with total alcohol intake, even at moderate levels of consumption. For a given weekly intake of alcohol, this excess incidence of cirrhosis is higher if consumption is usually without meals, or with daily drinking.
- A longitudinal study of Australian children found that the breastfeeding children of women who binge drink – or even consume alcohol regularly – during lactation may be at risk for later impaired cognition and behavior.
- Distilled spirits have a higher concentration of alcohol than other beverages, and thus present greater public health risk than other forms of alcohol. This suggests that differential restrictions may be appropriate for this type of alcohol.

### **SCREENING AND BEHAVIORAL COUNSELING INTERVENTIONS TO REDUCE UNHEALTHY ALCOHOL USE IN ADOLESCENTS AND ADULTS: US PREVENTIVE SERVICES TASK FORCE RECOMMENDATION STATEMENT**

November 2018

#### **Abstract**

**Importance:** Excessive alcohol use is one of the most common causes of premature mortality in the United States. From 2006 to 2010, an estimated 88,000 alcohol-attributable deaths occurred annually in the United States, caused by both acute conditions (e.g., injuries from motor vehicle collisions) and chronic conditions (e.g., alcoholic liver disease). Alcohol use during pregnancy is also one of the major preventable causes of birth defects and developmental disabilities.

**Objective:** To update the US Preventive Services Task Force (USPSTF) 2013 recommendation on screening for unhealthy alcohol use in primary care settings.

**Evidence Review:** The USPSTF commissioned a review of the evidence on the effectiveness of screening to reduce unhealthy alcohol use (defined as a spectrum of behaviors, from risky drinking to alcohol use disorder, that result in increased risk for health consequences) morbidity, mortality, or risky behaviors and to improve health, social, or legal outcomes; the accuracy of various screening approaches; the effectiveness of counseling interventions to reduce unhealthy alcohol use, morbidity, mortality, or risky behaviors and to improve health, social, or legal outcomes; and the harms of screening and behavioral counseling interventions.

**Findings:** The net benefit of screening and brief behavioral counseling interventions for unhealthy alcohol use in adults, including pregnant women, is moderate. The evidence is insufficient to assess the balance of benefits and harms of screening and brief behavioral counseling interventions for unhealthy alcohol use in adolescents.

**Conclusions and Recommendation:** The USPSTF recommends screening for unhealthy alcohol use in primary care settings in adults 18 years or older, including pregnant women, and providing persons engaged in risky or hazardous drinking with brief behavioral counseling interventions to reduce unhealthy alcohol use. (B recommendation) The USPSTF concludes that the current evidence is insufficient to assess the balance of benefits and harms of screening and brief behavioral counseling interventions for alcohol use in primary care settings in adolescents aged 12 to 17 years. (I statement)

**Source:**

O'Connor, E. A., Perdue, L. A., Senger, C. A., Rushkin, M., Patnode, C. D., Bean, S. I., et al. (2018). Screening and behavioral counseling interventions to reduce unhealthy alcohol use in adolescents and adults: Updated evidence report and systematic review for the US Preventive Services Task Force. *JAMA*, 320(18), 1910-1928.

**Free full text:** <https://jamanetwork.com/journals/jama/fullarticle/2714537>

**Accompanying editorials:**

[Screening for Unhealthy Alcohol Use](#)

[Screening and Brief Behavioral Counseling Interventions to Reduce Unhealthy Alcohol Use in Adults 18 Years and Older, Including Pregnant Women](#)

[Unhealthy Alcohol Use in Primary Care—The Elephant in the Examination Room](#)

**Related media coverage:**

CNN: [All adults should be screened for unhealthy alcohol use, new guidelines say](#)

U.S. News & World Report: [Task Force: Screen Adults for Booze Use](#)

## **ALCOHOL ADVERTISING ON FACEBOOK AND THE DESIRE TO DRINK AMONG YOUNG ADULTS**

November 2018

### **Abstract**

**Objective:** Social networking sites (SNSs) may influence the behavior of SNS users by exposing them to information about the number of other users who engaged with a SNS post (i.e., user engagement) and any comments left in response to a post (i.e., user-generated comments [UGC]). The current study hypothesized that beer advertisements with higher user engagement levels and pro-drinking UGCs would be positively associated with the desire to drink and ad engagement. The effect of ad content in relation to regulatory compliance was also investigated.

**Method:** A 2 (regulatory compliant vs. noncompliant) × 2 (low vs. high user engagement) × 2 (pro- vs. anti-alcohol UGC) mixed factorial experiment was used. A total of 120 young adults viewed two compliant and two noncompliant ads. Participants were randomized into four groups: ads with high or low user engagement values, which were paired with either pro- or anti-drinking UGCs. Dependent variables included desire to drink and engaging (i.e., Liking or Sharing) with the ad.

**Results:** When associated with high user engagement values, the desire to drink was 3.5 times greater in the pro-drinking UGC group compared with the anti-drinking UGC group (odds ratio = 3.48, 95% CI [1.60, 7.55]). Ad engagement was 2.3 times greater among those exposed to pro-drinking UGCs (odds ratio = 2.30, 95% CI [1.09, 4.85]).

**Conclusions:** Pro-drinking comments may increase the desire to drink and ad engagement, both of which may be predictive of future drinking behavior. Regulations are needed to limit the ability of SNS users to engage with alcohol ads.

### **Source:**

Noel, J. K., & Babor, T. F. (2018). Alcohol advertising on Facebook and the desire to drink among young adults. *Journal of Studies on Alcohol and Drugs*, 79(5), 751-760.

**Free full text:** <https://www.jsad.com/doi/10.15288/jsad.2018.79.751>

### **Related media coverage:**

Medical Xpress: [Alcohol ads with pro-drinking comments on Facebook boost desire to drink](#)

## **ALCOHOL OUTLET DENSITY AND AREA-LEVEL HEAVY DRINKING ARE INDEPENDENT RISK FACTORS FOR HIGHER ALCOHOL-RELATED COMPLAINTS**

December 2018

### **Abstract**

Alcohol outlet density has well-documented associations with social and health indicators such as crime and injury. However, significantly less is known about the relationships among alcohol-related complaints. Bayesian hierarchical Poisson regression with spatial autocorrelation was used to model the association between on- and off-premises alcohol outlet density and area-level prevalence of current drinkers and heavy drinking, and graffiti density—an indicator of physical disorder—in association with calls from civilians reporting illegal use, alcohol sales, and other alcohol-related activities (hereafter alcohol-related complaints). Complaints were separated into two groups based on

whether they occurred at (a) clubs/bars/restaurants or (b) elsewhere. Alcohol-related complaints and graffiti were collected from NYC Open Data. Alcohol density data are from ESRI Business Analyst and information on the prevalence of drinking from the New York City Community Health Survey. The unit of analysis consisted of ZIP codes in New York City (n = 167), and the design was a cross-sectional analysis of aggregated data between 2009 and 2015. In multivariable models, a one-unit increase in off-premises alcohol outlet density was associated with a 47% higher risk of alcohol-related complaints at clubs, bars, and restaurants [rate ratio (RR = 1.46, 95% CI = 1.21, 1.77)]. Area-level prevalence of heavy drinking was associated with a 59% higher risk of alcohol-related complaints at the club, bars, and restaurants (RR = 1.59, 95% CI = 1.34, 1.86) and a 40% higher risk of complaints elsewhere (RR = 1.40, 95% CI = 1.20, 1.63). In New York City, area-level heavy drinking prevalence is a strong independent mechanism that links alcohol outlet density to alcohol-related complaints. Area-level heavy drinking should be investigated as a predictor of other public health problems such as drug overdose mortality.

#### **Source:**

Ransome, Y., Luan, H., Shi, X., Duncan, D. T., & Subramanian, S. V. (2018). Alcohol outlet density and area-level heavy drinking are independent risk factors for higher alcohol-related complaints. *Journal of Urban Health*, 1-13.

### **ALCOHOL DRINKING PATTERNS AND LIVER CIRRHOSIS RISK: ANALYSIS OF THE PROSPECTIVE UK MILLION WOMEN STUDY**

November 2018

#### **Summary**

**Background:** Alcohol is a known cause of cirrhosis, but it is unclear if the associated risk varies by whether alcohol is drunk with meals, or by the frequency or type of alcohol consumed. Here we aim to investigate the associations between alcohol consumption with meals, daily frequency of consumption, and liver cirrhosis.

**Methods:** The Million Women Study is a prospective study that includes one in every four UK women born between 1935 and 1950, recruited between 1996 and 2001. In 2001 (IQR 2000–03), the participants reported their alcohol intake, whether consumption was usually with meals, and number of days per week it was consumed. Cox regression analysis yielded adjusted relative risks (RRs) for incident cirrhosis, identified by follow-up through electronic linkage to routinely collected national hospital admission, and death databases.

**Findings:** During a mean of 15 years (SD 3) of follow-up of 401 806 women with a mean age of 60 years (SD 5), without previous cirrhosis or hepatitis, and who reported drinking at least one alcoholic drink per week, 1560 had a hospital admission with cirrhosis (n=1518) or died from the disease (n=42). Cirrhosis incidence increased with amount of alcohol consumed ( $\geq 15$  drinks [mean 220 g of alcohol] vs one to two drinks [mean 30 g of alcohol] per week; RR 3.43, 95% CI 2.87–4.10;  $p < 0.0001$ ). About half of the participants (203 564 of 401 806) reported usually drinking with meals and, after adjusting for amount consumed, cirrhosis incidence was lower for usually drinking with meals than not (RR 0.69, 0.62–0.77;  $p < 0.0001$ ; wine-only drinkers RR 0.69, 0.56–0.85; all other drinkers RR 0.72, 0.63–0.82). Among 175 618 women who consumed seven or more drinks per week, cirrhosis incidence was greater for daily consumption than non-daily consumption (adjusted RR 1.61, 1.40–1.85;  $p < 0.0001$ ). Daily consumption, together with not drinking with meals, was associated with more than a doubling of cirrhosis incidence (adjusted RR 2.47, 1.96–3.11;  $p < 0.0001$ ).

**Interpretation:** In middle-aged women, cirrhosis incidence increases with total alcohol intake, even at moderate levels of consumption. For a given weekly intake of alcohol, this excess incidence of cirrhosis is higher if consumption is usually without meals, or with daily drinking.

**Funding:** UK Medical Research Council and Cancer Research UK.

**Source:**

Simpson, R. F., Hermon, C., Liu, B., Green, J., Reeves, G. K., Beral, V., & Million Women Study Collaborators. (2018). Alcohol drinking patterns and liver cirrhosis risk: Analysis of the prospective UK Million Women Study. *The Lancet Public Health*.

**Free full text:** [https://www.thelancet.com/journals/lanpub/article/PIIS2468-2667\(18\)30230-5/fulltext](https://www.thelancet.com/journals/lanpub/article/PIIS2468-2667(18)30230-5/fulltext)

**DRINKING OR SMOKING WHILE BREASTFEEDING AND LATER COGNITION IN CHILDREN**

December 2018

**Background and Objectives:** Although prenatal alcohol and nicotine exposure are associated with reduced cognition in children, associations between consumption of alcohol during lactation and cognition have not been examined. We aimed to examine whether drinking or smoking while breastfeeding lowers children's cognitive scores. We hypothesized that increased drinking or smoking would be associated with dose-dependent cognitive reductions.

**Methods:** Data were sourced from Growing Up in Australia: The Longitudinal Study of Australian Children. Participants were 5107 Australian infants recruited in 2004 and assessed every 2 years. Multivariable linear regression analyses assessed relationships between drinking and smoking habits of breastfeeding mothers and children's Matrix Reasoning, Peabody Picture Vocabulary Test–Third Edition and Who Am I? scores at later waves.

**Results:** Increased or riskier wave 1 maternal alcohol consumption was associated with reductions in Matrix Reasoning scores at age 6 to 7 years in children who had been breastfed ( $B = -0.11$ ;  $SE = 0.03$ ; 95% confidence interval:  $-0.18$  to  $-0.04$ ;  $P = .01$ ). This relationship was not evident in infants who had never breastfed ( $B = -0.02$ ;  $SE = 0.10$ ; 95% confidence interval =  $-0.20$  to  $0.17$ ;  $P = .87$ ). Smoking during lactation was not associated with any outcome variable.

**Conclusions:** Exposing infants to alcohol through breastmilk may cause dose-dependent reductions in their cognitive abilities. This reduction was observed at age 6 to 7 years but was not sustained at age 10 to 11 years. Although the relationship is small, it may be clinically significant when mothers consume alcohol regularly or binge drink. Further analyses will assess relationships between alcohol consumption or tobacco smoking during lactation and academic, developmental, physical, and behavioral outcomes in children.

**Source:**

Gibson, L., & Porter, M. (2018). Drinking or smoking while breastfeeding and later cognition in children. *Pediatrics*, *142*(2), e20174266.

**Free full text:** <http://pediatrics.aappublications.org/content/pediatrics/142/2/e20174266.full.pdf>

## **THE RATIONALE FOR TIGHTER CONTROL OF LIQUOR VERSUS WINE AND BEER**

December 2018

Historically, alcoholic beverages have been regulated and sold differently from other products. And spirits have been regulated differently than beer and wine—for good reason. William Kerr, PhD, Senior Scientist at the Alcohol Research Group, a program of the Public Health Institute, put it this way: “Spirits having a higher concentration of alcohol than other beverages, present greater public health risk than other forms of alcohol.” As a researcher in the field for many years, he has a great deal of data to back this up.

In addition to the higher alcohol by volume causing more intoxication per ounce consumed, spirits have been linked to increased risk for illness and disease compared to other types of alcohol. Higher risk for certain cancers has been linked to spirits. Studies in Spain and Puerto Rico found that oral cancers occurred more often in drinkers of spirits ...

**Source:** Healthy Alcohol Marketplace

**Free full text:** <http://healthyalcoholmarket.com/wordpress/>