projectextramile
PREVENTING ALCOHOL-RELATED HARM

RESEARCH SUMMARY
Date Compiled: April 2018

Key Takeaways from Included Research

- U.S. adults consume more than 17 billion binge drinks, or about 470 binge drinks per binge drinker annually – according to an analysis of 2015 data. Widespread use of effective community prevention strategies for excessive drinking, such as those recommended by the Community Preventive Services Task Force, could help reduce total binge drinks and related harms
- Drinking recommendations may need to be adjusted, as a major study of about 600,000 found that the optimal level was no more than 6-7 drinks per week
- The National Institutes of Alcoholism and Alcohol Abuse (NIAAA) of the NIH has not been funding research on various evidence-based alcohol policy interventions under the current director. Emails acquired by freedom of information channels have indicated that the alcohol industry may have played a role in this shift.
- The lowest income groups might be disproportionately affected by outlet density. Alcohol environments have differential effects on social groups, potentially contributing to socioeconomic inequalities in health outcomes.
- Three-tier systems of state alcohol control help prevent the sale of potentially deadly counterfeit and tainted alcohol products
- Liquor store availability in early adolescence may be a risk factor for alcohol intake in early and middle, but not late, adolescence. Improved understanding of the longer-term impacts of liquor store exposure on sensitive populations could help inform future licensing regulations.

ANNUAL TOTAL BINGE DRINKS CONSUMED BY U.S. ADULTS, 2015

April 2018

Summary

Introduction: Binge drinking (four or more drinks for women, five or more drinks for men on an occasion) accounts for more than half of the 88,000 U.S. deaths resulting from excessive drinking annually. Adult binge drinkers do so frequently and at high intensity; however, there are known disparities in binge drinking that are not well characterized by any single binge-drinking measure. A new measure of total annual binge drinks was used to assess these disparities at the state and national levels.

Methods: Behavioral Risk Factor Surveillance System 2015 data (analyzed in 2016) were used to estimate the prevalence, frequency, intensity, and total binge drinks among U.S. adults. Total annual binge drinks was calculated by multiplying annual binge-drinking episodes by binge-drinking intensity.

Results: In 2015, a total of 17.1% of U.S. adults (37.4 million) reported an annual average of 53.1 binge-drinking episodes per binge drinker, at an average intensity of 7.0 drinks per binge episode, resulting in 17.5 billion total binge drinks, or 467.0 binge drinks per binge drinker. Although binge drinking was more common among young adults (aged 18–34 years), half of the total binge drinks were consumed by adults aged ≥35 years. Total binge drinks per binge drinker were substantially higher among those with lower educational levels and household incomes than among those with higher educational levels and household incomes.

Source:

Kanny, D., Naimi, T. S., Liu, Y., Lu, H., & Brewer, R. D. (2018). Annual total binge drinks consumed by US adults, 2015. *American Journal of Preventive Medicine, 54*(4), 486-496.

Full text (subscription required): http://www.ajpmonline.org/article/S0749-3797%2817%2930753-5/fulltext

Expanded coverage: CDC: US Adults Drink 17 Billion Binge Drinks a Year

Key facts from the CDC:

- U.S. adults consume more than 17 billion binge drinks, or about 470 binge drinks per binge drinker annually.
- While binge drinking is more common among young adults aged 18-34 years, more than half of the binge drinks consumed each year are by adults aged 35 years or older.
- Adult binge drinkers binge frequently, about once a week, and at high intensity, averaging seven drinks per binge, significantly increasing the risk of harm to themselves and others.
- About 4 in 5 total binge drinks are consumed by men.
- Binge drinkers with lower household incomes (less than $25,000 a year) and lower educational levels (less than high school) consume substantially more binge drinks per year than those with higher incomes and educational levels.
- Binge drinkers consume the most in Arkansas, Mississippi, Kentucky, and Hawaii, and the lowest in DC, New Jersey, New York, and Washington State.
- Widespread use of effective community prevention strategies for excessive drinking, such as those recommended by the Community Preventive Services Task Force, could help reduce total binge drinks and related harms. These strategies include limiting the number of alcohol outlets in a geographic area, limiting days and hours of sale, and legal liability for outlets that illegally serve underage or intoxicated customers.

RISK THRESHOLDS FOR ALCOHOL CONSUMPTION: COMBINED ANALYSIS OF INDIVIDUAL-PARTICIPANT DATA FOR 599 912 CURRENT DRINKERS IN 83 PROSPECTIVE STUDIES'
April 2018

Background: Low-risk limits recommended for alcohol consumption vary substantially across different national guidelines. To define thresholds associated with lowest risk for all-cause mortality and cardiovascular disease, we studied individual-participant data from 599 912 current drinkers without previous cardiovascular disease.

Methods: We did a combined analysis of individual-participant data from three large-scale data sources in 19 high-income countries (the Emerging Risk Factors Collaboration, EPIC-CVD, and the UK Biobank). We characterised dose–response associations and calculated hazard ratios (HRs) per 100 g per week of alcohol (12·5 units per week) across 83 prospective studies, adjusting at least for study or centre, age, sex, smoking, and diabetes. To be eligible for the analysis, participants had to have information recorded about their alcohol consumption amount and status (ie, non-drinker vs current drinker), plus age, sex, history of diabetes and smoking status, at least 1 year of follow-up after baseline, and no baseline history of cardiovascular disease. The main analyses focused on current drinkers, whose baseline alcohol consumption was categorised into eight predefined groups according to the amount in grams consumed per week. We assessed alcohol consumption in relation to all-cause mortality, total cardiovascular disease, and several cardiovascular disease subtypes. We corrected HRs for estimated long-term variability in alcohol consumption using 152 640 serial alcohol assessments obtained some years apart (median interval 5·6 years [5th–95th percentile 1·04–13·5]) from 71 011 participants from 37 studies.

Findings: In the 599 912 current drinkers included in the analysis, we recorded 40 310 deaths and 39 018 incident cardiovascular disease events during 5·4 million person-years of follow-up. For all-cause mortality, we recorded a positive and curvilinear association with the level of alcohol consumption, with the minimum mortality risk around or below 100 g per week. Alcohol consumption was roughly linearly associated with a higher risk of stroke (HR per 100 g per week higher consumption 1·14, 95% CI, 1·10–1·17), coronary disease excluding myocardial infarction (1·06, 1·00–1·11), heart failure (1·09, 1·03–1·15), fatal hypertensive disease (1·24, 1·15–1·33); and fatal aortic aneurysm (1·15, 1·03–1·28). By contrast, increased alcohol consumption was log-linearly associated with a lower risk of myocardial infarction (HR 0·94, 0·91–0·97). In comparison to those who reported drinking >0–≤100 g per week, those who reported drinking >100–≤200 g per week, >200–≤350 g per week, or >350 g per week had lower life expectancy at age 40 years of approximately 6 months, 1–2 years, or 4–5 years, respectively.

Interpretation: In current drinkers of alcohol in high-income countries, the threshold for lowest risk of all-cause mortality was about 100 g/week [about 6-7 standard drinks per week]. For cardiovascular disease subtypes other than myocardial infarction, there were no clear risk thresholds below which lower alcohol consumption stopped being associated with lower disease risk. These data support limits for alcohol consumption that are lower than those recommended in most current guidelines.

Source: *The Lancet*

Full free text: https://www.sciencedirect.com/science/article/pii/S014067361830134X

Related Media Coverage:

PBS: How much alcohol is too much? A new study says it's found the number

Business Insider: Drinking just one extra glass of wine or pint of beer a week could shorten your life by 30 minutes, according to a major new study

NEW ALCOHOL-ADVERTISING RESEARCH STOPPED WITH NIH BRANCH DIRECTOR'S ARRIVAL

April 2018

Please note: This article is not a research summary, but a news report about critical dynamics within the National Institutes of Health (NIH), and thus of concern to U.S. alcohol policy research.

The branch of the National Institutes of Health that studies alcohol abuse has not funded any new research by outside scientists specifically on the effects of alcohol advertising since its current director took over in 2014, according to a STAT analysis of grants.

At least seven such studies were funded in the decade before George Koob became director of the National Institute on Alcohol Abuse and Alcoholism in 2014. No new grants have been awarded since.

An NIAAA spokesman denied that the institute's priorities have changed. Koob "has maintained the Institute's long-standing strategic areas of focus," the spokesman said, and NIAAA support of research on "epidemiology and prevention, treatment, metabolism and health effects, and neuroscience and behavior have remained at the same level that they were." He added that "behavioral and social science research to prevent and reduce alcohol misuse remains an Institute research priority."

… Starting around 2014 or 2015, "advocates were sensing that times were changing," said Diane Riibe, executive director of the U.S. Alcohol Policy Alliance, which works to translate research into policies that have been shown to reduce underage drinking. She and three researchers who conduct such "translational science" — that which can be used to inform policy — told STAT that, under Koob, the agency has stepped back from supporting policy-related studies …

… Emails shared with STAT — and first described in Monday's story — show Koob telling an industry official in July 2014, "I will NOT be funding this kind of work under my tenure." The reference was to research by a scientist at Johns Hopkins University, on the effect of advertising on underage drinking, that critics called "anti-alcohol advocacy." It had been funded by NIAAA three years before, under Koob's predecessor …

Source: *STAT news*

Full free text: https://www.statnews.com/2018/04/04/new-alcohol-advertising-research-stopped-nih/

Related Media Coverage:

The Scientist: NIH Turned Down Investigators Who Provoked Ire From Alcohol Industry
Gizmodo: The NIH's Cozy Relationship With Big Alcohol Is Bad for Science

ALCOHOL RISK ENVIRONMENTS, VULNERABILITY, AND SOCIAL INEQUALITIES IN ALCOHOL CONSUMPTION

March 2018

Abstract

Alcohol and alcohol-related harm are key public health challenges. Research has shown that individual-level factors, such as age and sex, are important predictors of alcohol consumption, but such factors provide only a partial account of the drivers of consumption. In this article, we argue that individual-level factors interact with features of the risk environment to increase the vulnerability of individuals to such environments. Features of the alcohol risk environment include the density of alcohol premises in a neighborhood. Previous research has shown that neighborhoods with a higher density of alcohol outlets have higher levels of both alcohol consumption and alcohol-related harm. There has, however, been a distinct lack of attention paid to the differential ways in which particular sociodemographic groups might be more vulnerable to such risk environments. In this article, we address the risk environment through a primary focus on the local supply and availability of alcohol products (captured using a measure of outlet density) and the relationship with the harmful use of alcohol. Using responses to the Scottish Health Survey (2008–2011), we explore vulnerability through the interaction between individual-level socioeconomic position, measured using household income, and environmental risk to assess differential social vulnerability to such environments. We report findings showing that those in the lowest income groups might be disproportionately affected by outlet density. This evidence suggests that risk environments might not affect us all equally and that there could be socially differentiated vulnerability to such environments.

Source:

Shortt, N. K., Rind, E., Pearce, J., Mitchell, R., & Curtis, S. (2018). Alcohol risk environments, vulnerability, and social inequalities in alcohol consumption. *Annals of the American Association of Geographers*, 1-18.

Free full text:
https://www.tandfonline.com/doi/full/10.1080/24694452.2018.1431105?scroll=top&needAccess=true&

MEXICO FINDS MORE FAKE TEQUILA AND WHY THE US RARELY FACES THIS ISSUE. BUT THIS COULD CHANGE!

March 2018

With Spring Break on the horizon, it seems like a good time to talk about alcohol product safety. After numerous reports last year of tourists blacking out after drinking at high-end resorts in Mexico, more stories came to light about drownings, assaults, falls, and other injuries from tourists who drank even small or moderate amounts of alcohol.

This led the US Government to issue travel warnings and recommendations that travelers drink moderately, never go out alone, and seek medical attention if they begin to feel ill.

Following these reports and some pressure from US lawmakers, Mexican health authorities raided 31 resorts, restaurants and nightclubs and seized 10,000 gallons of illegal alcohol. At the end of February, Mexican authorities announced they found another black-market tequila distillery and shut it down. Tests revealed that 235 gallons of the product contained dangerous levels of methanol, an extremely toxic substance ….

Source: Healthy Alcohol Marketplace

Free full text: http://healthyalcoholmarket.com/wordpress/

PROXIMITY TO LIQUOR STORES AND ADOLESCENT ALCOHOL INTAKE: A PROSPECTIVE STUDY

March 2018

Introduction

Cross-sectional studies have reported associations between liquor store availability and alcohol use among adolescents, but few prospective studies have confirmed this association. The aim of this study was to examine whether proximity to liquor stores at age 14 years was associated with alcohol intake at ages 14, 17, and 20 years.

Methods

Participants of the Western Australian Pregnancy Cohort (Raine) Study (n=999) self-reported alcohol intake at age 14 years (early adolescence, 2003–2005); age 17 years (middle adolescence, 2006–2008); and age 20 years (late adolescence, 2009–2011). A GIS measured proximity to the closest liquor store from participants' home and school addresses at age 14 years. Regression analyses in 2017 assessed the relationship between distance to the closest liquor store around home, school, or both (≤800 m versus >800 m) and alcohol intake.

Results

In cross-sectional analyses (age 14 years), having a liquor store within 800 m of school was associated with ever having part of an alcoholic drink (OR=2.34, p=0.003). Also, having a liquor store within 800 m of home or school was associated with ever having part of an alcoholic drink (OR=1.49, p=0.029) and ever having engaged in heavy drinking (OR=1.79, p=0.023). In prospective analyses, liquor store proximity at age 14 years was a significant predictor of alcohol intake at age 17 years (OR=2.34, p=0.032) but not at age 20 years.

Conclusions

Liquor store availability in early adolescence may be a risk factor for alcohol intake in early and middle, but not late, adolescence. Improved understanding of the longer-term impacts of liquor store exposure on sensitive populations could help inform future licensing regulations.

Source:

Trapp, G. S., Knuiman, M., Hooper, P., & Foster, S. (2018). Proximity to liquor stores and adolescent alcohol intake: A prospective study. *American Journal of Preventive Medicine.*

Full text (subscription required):
https://www.sciencedirect.com/science/article/pii/S074937971831599X