



RESEARCH SUMMARY
Date Compiled: July 2023

Key takeaways from included research:

- Researchers examined the prospective association of alcohol consumption with all-cause and cause-specific mortality among the US population. They determined that heavy or binge drinking had higher risks of all-cause, cancer, and accident (unintentional injury) mortality.
- In recent years, there has been more of a push to have health warning labels on alcoholic beverages. Researchers in Mexico conducted an experimental study to test potential impacts of visible health warning labels and how they impact individuals' thinking about health risks, product attractiveness, visual avoidance, and intention to change alcohol use among students aged 18-30 years. They found that these warnings could lead individuals to think more about the risks, reduce attractiveness, and decrease the intention to purchase and consume alcoholic products.
- A study was conducted to test associations of alcohol craving utilizing alcohol-related images with and without peers in the human laboratory while in the natural environment the ecological momentary assessment (EMA) was used. Researchers found that peers are a social context with was associated with increased craving for alcohol.
- A new study looked at changes in monthly alcohol-induced mortality among US adults by age, sex, and race/ethnicity. Researchers found that during the peak months of the COVID-19 pandemic, the risking trends in alcohol-induced mortality substantially differed by race and ethnicity. They concluded that behavioral and policy interventions as well as future investigations should be considered to reduce alcohol-induced mortality specifically among individuals who identified as Black or American Indian/Alaska Native.
- Researchers examined the impacts of distance learning-related parental stress during the COVID-19 pandemic and their alcohol consumption. Findings showed that stressed parents reported consuming more alcohol and binge drinking more often than those parents who did not have increased levels of stress resulting from distance learning.

ALCOHOL CONSUMPTION AND ALL-CAUSE AND CAUSE-SPECIFIC MORTALITY AMONG US ADULTS: PROSPECTIVE COHORT STUDY

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Background: Previous studies have shown inconsistent findings regarding the association of light to moderate alcohol consumption with cause-specific mortality. Therefore, this study sought to examine the prospective association of alcohol consumption with all-cause and cause-specific mortality in the US population.

Methods: This was a population-based cohort study of adults aged 18 years or older in the National Health Interview Survey (1997 to 2014) with linkage to the National Death Index records through December 31, 2019. Self-reported alcohol consumption was categorized into seven groups (lifetime abstainers; former infrequent or regular drinkers; and current infrequent, light, moderate, or heavy drinkers). The main outcome was all-cause and cause-specific mortality.

Results: During an average follow-up of 12.65 years, among the 918,529 participants (mean age 46.1 years; 48.0% male), 141,512 adults died from all causes, 43,979 from cardiovascular disease (CVD), 33,222 from cancer, 8246 from chronic lower respiratory tract diseases, 5572 from accidents (unintentional injuries), 4776 from Alzheimer's disease, 4845 from diabetes mellitus, 2815 from influenza and pneumonia, and 2692 from nephritis, nephrotic syndrome, or nephrosis. Compared with lifetime abstainers, current infrequent, light, or moderate drinkers were at a lower risk of mortality from all causes [infrequent—hazard ratio: 0.87; 95% confidence interval: 0.84 to 0.90; light: 0.77; 0.75 to 0.79; moderate 0.82; 0.80 to 0.85], CVD, chronic lower respiratory tract diseases, Alzheimer's disease, and influenza and pneumonia. Also, light or moderate drinkers were associated with lower risk of mortality from diabetes mellitus and nephritis, nephrotic syndrome, or nephrosis. In contrast, heavy drinkers had a significantly higher risk of mortality from all causes, cancer, and accidents (unintentional injuries). Furthermore, binge drinking ≥ 1 day/week was associated with a higher risk of mortality from all causes (1.15; 1.09 to 1.22), cancer (1.22; 1.10 to 1.35), and accidents (unintentional injuries) (1.39; 1.11 to 1.74).

Conclusions: Infrequent, light, and moderate alcohol consumption were inversely associated with mortality from all causes, CVD, chronic lower respiratory tract diseases, Alzheimer's disease, and influenza and pneumonia. Light or moderate alcohol consumption might also have a beneficial effect on mortality from diabetes mellitus and nephritis, nephrotic syndrome, or nephrosis. However, heavy or binge had a higher risk of all-cause, cancer, and accidents (unintentional injuries) mortality.

Source: Tian, Y., Liu, J., Zhao, Y. *et al.* Alcohol consumption and all-cause and cause-specific mortality among US adults: prospective cohort study. *BMC Med* 21, 208 (2023).
<https://doi.org/10.1186/s12916-023-02907-6>

WARNING LABELS ON ALCOHOLIC BEVERAGE CONTAINERS: A PILOT RANDOMIZED EXPERIMENT AMONG YOUNG ADULTS IN MEXICO

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Background: Little is known about the potential impacts of visible and up-to-date health warning labels on alcoholic beverage containers on a range of outcomes in low- and middle-income countries. We conducted an experimental study to test the potential impacts of visible health warning labels (on the principal panel of the package) on thinking about health risks, product attractiveness, visual avoidance, and intention to change alcohol use among students in Mexico aged 18–30 years.

Methods: A double-blind, parallel-group, online randomized trial was conducted from November 2021 to January 2022 in 11 states in Mexico. In the control group, participants were presented with the image of a conventional beer can with a fictional design and brand. In the intervention groups, the participants observed pictograms with a red font and white backgrounds (health warning label in red—

HWL red) or with a black font and yellow backgrounds (health warning label in yellow—HWL yellow), located at the top, covering around one-third of the beer can. We used Poisson regression models - unadjusted and adjusted for covariates- to assess differences in the outcomes across study groups.

Results: Using intention-to-treat analysis (n = 610), we found more participants in groups HWL red and HWL yellow thought about the health risks from drinking beer compared to the control group [Prevalence Ratio (PR) = 1.43, CI95%:1.05, 1.93 for HWL red; PR = 1.25, CI95%: 0.91, 1.71 for HWL yellow]. A lower percentage of young adults in the interventions vs control group considered the product attractive (PR 0.74, 95%CI 0.51, 1.06 for HWL red; PR 0.56, 95%CI 0.38, 0.83 for HWL yellow). Although not statistically significant, a lower percentage of participants in the intervention groups considered buying or consuming the product than the control group. Results were similar when models were adjusted for covariates.

Conclusions: Visible health warning labels could lead individuals to think about the health risks of alcohol, reducing the attractiveness of the product and decreasing the intention to purchase and consume alcohol. Further studies will be required to determine which pictograms or images and legends are most contextually relevant for the country.

Source: López-Olmedo, N., Muciño-Sandoval, K., Canto-Osorio, F., Vargas-Flores, A., Quiroz-Reyes, A., Sabines, A., ... & Barrientos-Gutiérrez, T. (2023). Warning labels on alcoholic beverage containers: a pilot randomized experiment among young adults in Mexico. *BMC Public Health*, 23(1), 1-12. <https://doi.org/10.1186/s12889-023-16069-w>

PEER ELICITED ALCOHOL CRAVING IN ADOLESCENTS AND EMERGING ADULTS: BRIDGING THE LABORATORY AND NATURAL ENVIRONMENT

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Background: Although peers figure prominently in developmental models of alcohol use, our understanding of the influence of peer social context in cue reactivity paradigms with adolescents and emerging adults in the human laboratory and the natural environment is limited. This study tested associations between alcohol craving among youth in the human laboratory using alcohol-related images, with and without peers, and in the natural environment using ecological momentary assessment (EMA).

Methods: Data for this preregistered secondary analysis were collected prior to randomization in two medication trials (N = 115). Participants completed an image cue exposure paradigm at the baseline laboratory session followed by approximately 7 days of EMA.

Results: In the laboratory, model-based mean comparisons from multilevel models (MLMs) showed that all drinking images elicited greater craving than neutral images. No differences were observed across the three image categories containing alcohol. Image category by age interactions demonstrated that, compared to older youth, younger youth displayed lower craving in response to neutral versus social drinking context with peers images and older, compared to younger, youth displayed higher craving in response to nonsocial drinking images versus social drinking contexts with peers images. In the natural environment, craving was greatest when youth were in the presence of alcohol-using peers and alcohol-related cues, regardless of age. Laboratory craving to alcohol images was positively associated with craving in the natural environment.

Conclusions: For youth, peers are a salient social context associated with increased craving, particularly in the natural environment. Laboratory cue reactivity to alcohol images predicted real-world craving, further supporting the ecological validity of this paradigm in youth.

Source: Meisel, S.N., Treloar Padovano, H., Pielech, M., Goodyear, K. & Miranda, R. (2023) Peer elicited alcohol craving in adolescents and emerging adults: Bridging the laboratory and natural environment. *Alcohol: Clinical and Experimental Research*, 00, 1– 11.
<https://doi.org/10.1111/acer.15057>

In the News: Research Society on Alcoholism. (2023, June 5). Among young people, being around peers may elicit greater drinking cravings than the presence of alcohol. *Medical Xpress*.
<https://medicalxpress.com/news/2023-06-young-people-peers-elicite-greater.html>

RACIAL AND ETHNIC DISPARITIES IN MONTHLY TRENDS IN ALCOHOL-INDUCED MORTALITY AMONG US ADULTS FROM JANUARY 2018 THROUGH DECEMBER 2021 **June 2023**

Background: Historically, American Indians/Alaska Natives (AIANs), Blacks, and Hispanics have experienced higher alcohol-induced mortality rates. Given a disproportionate surge in unemployment rate and financial strain among racial and ethnic minorities and limited access to alcohol use disorder treatment during the COVID-19 pandemic, it is essential to examine monthly trends in alcohol-induced mortality in the United States during the pandemic.

Objectives: This study estimates changes in monthly alcohol-induced mortality among US adults by age, sex, and race/ethnicity.

Methods: Using monthly deaths from 2018–2021 national mortality files (N = 178,201 deaths, 71.5% male, 28.5% female) and census-based monthly population estimates, we calculated age-specific monthly alcohol-induced death rates and performed log-linear regression to derive monthly percent increases in mortality rates.

Results: Alcohol-induced deaths among adults aged ≥ 25 years increased by 25.7% between 2019 (38,868 deaths) and 2020 (48,872 deaths). During 2018–2021, the estimated monthly percent change was higher for females (1.1% per month) than males (1.0%), and highest for AIANs (1.4%), followed by Blacks (1.2%), Hispanics (1.0%), non-Hispanic Whites (1.0%), and Asians (0.8%). In particular, between February 2020 and January 2021, alcohol-induced mortality increased by 43% for males, 53% for females, 107% for AIANs, the largest increase, followed by Blacks (58%), Hispanics (56%), Asians (44%), and non-Hispanic Whites (39%).

Conclusions: During the peak months of the pandemic, the rising trends in alcohol-induced mortality differed substantially by race and ethnicity. Our findings indicate that behavioral and policy interventions and future investigation on underlying mechanisms should be considered to reduce alcohol-induced mortality among Blacks and AIANs.

Source: Hyunjung Lee & Gopal K. Singh. (2023). Racial and ethnic disparities in monthly trends in alcohol-induced mortality among US adults from January 2018 through December 2021. *The American Journal of Drug and Alcohol Abuse*. <https://doi.org/10.1080/00952990.2023.2208728>

THE IMPACT OF HELPING CHILDREN WITH DISTANCE LEARNING DURING COVID-19 ON U.S. PARENTS' ALCOHOL CONSUMPTION **July 2023**

Abstract

We examined the impact of distance learning-related parental stress due to COVID-19 on parental alcohol consumption using an online survey in May 2020 with a convenience sample of U.S. adults. This article focuses on the 361 parents who had children under the age of 18 living with them. Seventy-eight percent had children who were engaged in distance learning; 59% reported being

stressed because they were not sure how to help their children with distance learning. Stressed parents reported consuming significantly more alcohol and binge drinking more often than parents who were not stressed by distance learning. We hope that public health professionals can use our findings to better target alcohol prevention programs aimed at parents to reduce parental stress, and hopefully, parental alcohol consumption.

Source: Grossman, E. R., & Sonnenschein, S. (2023). The Impact of Helping Children with Distance Learning During COVID-19 on US Parents' Alcohol Consumption. *Journal of Drug Education*, 00472379231185125. <https://doi.org/10.1177/00472379231185125>