projectextramile
PREVENTING ALCOHOL-RELATED HARM

**RESEARCH SUMMARY**
Date Compiled: July 2025

## Key takeaways from included research:

- This study analyzed alcoholic liver disease (ALD) mortality trends in American Indians and Alaskan Natives (AI/ANs) from 1999 to 2020. Researchers found a significant rise in age-adjusted mortality rates from 27.2 to 88.4 per 100,000. Increases were highest among women, those aged 45–64, rural residents, and those in the Western and Midwestern regions of the U.S. Social disruptions from the COVID-19 pandemic may have contributed, highlighting the need to address social determinants of health in this population.
- Alcohol-associated liver disease (ALD) deaths in the U.S. more than doubled from 1999 to 2022, with the sharpest increases occurring after 2018 and during the COVID-19 pandemic. This study analyzed over 436,000 ALD deaths, finding especially steep mortality increases among women, young adults (ages 25–44), and American Indian/Alaska Native populations. Both alcohol-associated hepatitis and cirrhosis deaths also rose significantly, with women and younger adults showing the most rapid growth. These trends underscore the urgent need for targeted public health strategies to address rising ALD mortality and related health disparities.
- Zero-alcohol drinks (<0.5% ABV) are often perceived by adolescents as alcoholic, especially when branded similarly to alcoholic products. In a study of 331 Australian adolescents, most categorized zero-alcohol drinks as alcohol, though with slower response times than for actual alcoholic beverages. These findings suggest zero-alcohol drinks may influence adolescents to like alcoholic drinks, highlighting the need for stronger regulations.
- This study examined how having a heavy drinker in one's life affects students' experiences and health. After adjusting for demographic and behavioral differences, students with a heavy drinker in their life had higher odds of experiencing alcohol-related harms (e.g., harassment, sexual harm), frequent mental distress, and using services due to someone else's drinking. These effects varied somewhat by the heavy drinker's relationship to the student but were consistently linked to negative outcomes.

## TRENDS IN ALCOHOL-ASSOCIATED LIVER DISEASE MORTALITY RATES IN AMERICAN INDIANS AND ALASKAN NATIVES

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**Introduction:** A leading cause of death among non-Hispanic American Indians or Alaskan Natives (AI/ANs), apart from cardiovascular disease and unintentional injuries, is chronic liver disease (CLD). This study analyzed recent trends in AI/AN ALD mortality, given their increased incidence of alcoholic liver disease (ALD) and high burden of CLD.

**Methods:** This cross-sectional study used data from the Centers for Disease Control and Prevention Wide-Ranging Online Data for Epidemiologic Research (CDC WONDER). Geographic, age and sex-based temporal mortality trends of ALD deaths were analyzed among the AI/AN population in the US from 1999 to 2020. Joinpoint regression analyses determined trends in ALD crude and age-adjusted mortality rates, identifying the annual percent change (APC) in each subgroup.

**Results:** In 1999–2020, the overall age-adjusted mortality rate (AAMR) among AI/ANs increased significantly from 27.2/100,000 to 88.4/100,000. Although men had a higher mortality rate overall, women had a higher increase in APC (2003–2008 APC was 17.7 [95% CI: 9.9–26.0] and 2018–2020 APC was 25.3 [95% CI: 11.4–40.9]) compared to men (1999–2020 APC was 5.8 [95% CI 4.8–6.8]).

All age groups studied witnessed an increase in AAMR. However, the age group 45–64 had the highest mortality overall in the preceding 2 decades. Non-metropolitan geographic regions had the highest mortality rate (2018–2020 APC of 25.5 [95% CI: 5.0–50.0]) compared to medium/small or large metro areas. Western and Midwestern US Census regions had the highest mortality rates.

**Conclusions:** Male sex, age 44–65, and rural dwelling was associated with a greater ALD AAMR in AI/AN populations. Social changes due to the Covid-19 pandemic may have led to increased ALD mortality. Discerning the underlying causality of these associations and examining the impact of the social determinants of health, may represent important opportunities to enhance care for AI/ANs as a vulnerable minority population.

**Source:** Zafar, Y., Dodd, I. M., Iqbal, A. Z., Manzoor, L., Iqbal, N. Z., Dodd, K. D., & Petrasek, J. (2025). Trends in alcohol-associated liver disease mortality rates in American Indians and Alaskan Natives. *BMC Public Health*, *25*(1), 1-9. https://doi.org/10.1186/s12889-025-22895-x

## ALCOHOL-ASSOCIATED LIVER DISEASE MORTALITY

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**Importance:** Alcohol-associated liver disease (ALD) is a major public health concern, accounting for one-quarter of cirrhosis-related deaths and becoming the leading indication for liver transplantation in the US, with concerning increases in mortality during and following the COVID-19 pandemic onset.

**Objective:** To evaluate comprehensive national trends in ALD mortality in the US from 1999 to 2022, with a particular focus on disparities related to sex, race, ethnicity, and age.

**Design, Setting, and Participants:** This retrospective cross-sectional analysis used the Centers for Disease Control and Prevention Wide Ranging Online Data for Epidemiologic Research mortality database from 1999 to 2022, examining death certificates across all 50 states and the District of Columbia. The study included individuals aged 25 years and older. Data analysis was performed from September to November 2024.

**Exposure:** ALD mortality was identified using International Statistical Classification of Diseases and Related Health Problems, Tenth Revision codes (K70.xx) for both alcohol-associated hepatitis (K70.1x) and alcohol-associated cirrhosis (K70.3x).

**Main Outcomes and Measures:** Primary outcomes included age-adjusted annual mortality rates per 100 000 population, stratified by sex, age groups (25-44, 45-64, 65-84, and ≥85 years), race and ethnicity, and geographic regions. Joinpoint regression analysis was used to calculate average annual percentage changes (AAPCs) and to identify significant trend changes.

**Results:** In this study, a total of 436 814 ALD deaths were recorded (308 923 men [70.7%]), with ALD mortality increasing from 6.71 to 12.53 deaths per 100 000 between 1999 and 2022 and significant acceleration during 2018 to 2022 (annual percentage change [APC], 8.94%; 95% CI, 6.27% to 14.51%; P = .001). Women showed more rapid increases than men (AAPC, 4.29% [95% CI, 3.09% to 5.51%] vs 2.50% [95% CI, 1.51% to 3.51%]), whereas young adults (aged 25-44 years) demonstrated concerning trends (AAPC, 4.23%; 95% CI, 3.47% to 4.83%; P = .001). American Indian and Alaska Native populations experienced the highest mortality rates, increasing from 25.21 to 46.75 deaths per 100 000 (AAPC, 4.93%; 95% CI, 3.45% to 5.96%; P = .001). Alcohol-associated hepatitis mortality increased from 0.47 to 0.76 deaths per 100 000 (AAPC, 2.08%; 95% CI, 1.27% to 3.05%; P = .001), with women showing steeper increases than men (AAPC, 3.94% [95% CI, 2.58% to 5.46%] vs 1.56% [95% CI, 0.73% to 2.42%]). Alcohol-associated cirrhosis mortality increased from 4.09 to 9.52 deaths per 100 000 (AAPC, 4.00%; 95% CI, 3.63% to 4.40%; P = .001), with particularly concerning trends among women (APC from 2011 to 2022, 8.32%; 95% CI, 7.40% to 9.82%; P = .01) and adults aged 25 to 44 years (APC from 2018 to 2022, 19.51%; 95% CI, 15.00% to 28.53%; P = .001).

**Conclusions and Relevance:** In this cross-sectional study using data from the Centers for Disease Control and Prevention Wide Ranging Online Data for Epidemiologic Research database, ALD mortality increased significantly across demographic groups, with particularly concerning trends among women, younger adults, and American Indian and Alaska Native populations. These findings highlight the urgent need for targeted public health interventions and enhanced surveillance, especially given the sustained impact of COVID-19 pandemic–related changes in alcohol consumption patterns.

**Source:** Pan C, Abboud Y, Chitnis A, Zhang W, Singal AK, Wong RJ. Alcohol-Associated Liver Disease Mortality. *JAMA Netw Open.* 2025;8(6):e2514857. https://doi.org/10.1001/jamanetworkopen.2025.14857

**In the News:** Cueto, Isabella. (2025, June 11). Women, young adults, and Native people hit hard by rapid increase in alcohol liver deaths, study finds. *STAT News.* https://www.statnews.com/2025/06/11/women-young-adults-and-native-people-hit-hard-by-rapid-increase-in-alcohol-liver-deaths-study-finds/

## ALCOHOL ADVERTISING IN DISGUISE: EXPOSURE TO ZERO-ALCOHOL PRODUCTS PROMPTS ADOLESCENTS TO THINK OF ALCOHOL—REACTION TIME EXPERIMENTAL STUDY

**May 2025**

**Background:** Zero-alcohol drinks (<0.5 % alcohol by volume) appear and taste like alcoholic drinks; they may feature brands from alcoholic drinks (“brand extensions”) or “new-to-world” brands. These drinks are not consistently included within many restrictions aimed at reducing adolescents’ exposure to alcohol products and advertising. This online study examined whether adolescents implicitly categorise images of zero-alcohol drinks as alcoholic beverages.

**Methods:** 331 Australian adolescents aged 15–17 years participated in an online within-subjects reaction time experiment. Participants viewed 20 randomly-ordered images of alcohol, zero-alcohol, and soft drink products and were asked to indicate as quickly as possible whether these images made them think of alcohol, with both response time and agreement recorded. Generalised linear mixed effects models were used to examine differences in response time and agreement by drink type,

adjusting for clustering of responses within participants, recent consumption, survey device (mobile/computer), and parental presence.

**Results:** Most images of alcoholic (94.4 %), brand extension zero-alcohol (90.7 %), and "new-to-world" zero-alcohol (85.6 %) drinks prompted participants to think of alcohol, compared to 5.2 % of soft drinks. In the mixed effects model, compared to alcoholic drinks, participants on average responded 72 ms slower to brand extension zero-alcohol drinks and 215 ms slower to "new-to-world" brand zero-alcohol drinks.

**Conclusions:** The combination of high levels of agreement and slower reaction times suggest that adolescents categorise zero-alcohol drinks as non-typical alcoholic drinks, rather than soft drinks. Thus, exposure to zero-alcohol drinks had similar effects to exposure to alcoholic drinks. Urgent regulatory action is required to ensure that restrictions on alcohol advertising and availability to minors extend to zero-alcohol drinks.

**Source:** Bartram, A., Mittinty, M., Ahad, M. A., Bogomolova, S., Dono, J., Brownbill, A. L., ... & Bowden, J. (2025). Alcohol advertising in disguise: Exposure to zero-alcohol products prompts adolescents to think of alcohol—Reaction time experimental study. *International Journal of Drug Policy*, *139*, 104753. https://doi.org/10.1016/j.drugpo.2025.104753

## RISKY RELATIONSHIPS: SECONDHAND HARMS AND HEALTH INDICATORS ASSOCIATED WITH COLLEGE STUDENTS' RELATIONSHIPS WITH HEAVY DRINKERS

**June 2025**

**Background:** Heavy drinking is pervasive on college campuses, yet little is known about how heavy drinkers affect college students around them. People with versus without heavy drinkers in their lives often differ systematically, complicating such analyses. This study tested whether relationships with heavy drinkers were associated with alcohol-related harms to others (AHTOs) and related health indicators among college students after using propensity score weighting to account for demographic and behavioral differences between those with and without heavy drinkers in their lives.

**Method:** Data were from a probability-based survey of 1901 US college students, recruited in November–December 2021 (16% response rate), 271 of whom had a heavy drinker in their life. There were two sets of outcomes: (1) AHTOs (i.e., harassment, physical, sexual) and (2) health indicators (i.e., frequent mental distress and service use because of someone else's drinking). Secondary models were stratified by the heavy drinker's relationship to the participant (i.e., intimate peer, other peer, and family member). To correct for multiple testing, p-values < 0.002 were considered significant.

**Results:** In double-robust propensity score-weighted regressions, relationships with a heavy drinker (vs. not) were associated with harassment (aOR = 3.89 [2.05, 7.38]) and sexual AHTOs (aOR = 2.98 [1.29, 6.88]). Students with a heavy drinker in their life (vs. not) had greater odds of frequent mental distress (aOR = 2.05 [1.28, 3.29]) and service use because of someone else's drinking (aOR = 7.39 [3.32, 16.47]). All relationship types were associated with harassment and service use because of someone else's drinking. Relationships with heavy drinking other peers and family members were associated with frequent mental distress.

**Conclusions:** Relationships with a heavy drinker are associated with college AHTOs and health indicators.

**Source:** Trangenstein, P. J., Rosen, E. M., Tam, C. C., Yeh, J. C., Greenfield, T. K., & Jernigan, D. H. Risky relationships: Secondhand harms and health indicators associated with college students' relationships with heavy drinkers. *Alcohol: Clinical and Experimental Research*. https://doi.org/10.1111/acer.70083