



RESEARCH SUMMARY
Date Compiled: June 2023

Key takeaways from included research:

- To better understand the population coverage of alcohol delivery and to-go policies and identify characteristics associated with these purchases, researchers examined data within the National Alcohol Survey and Alcohol Policy Information System. They found that between December 2019 and 2020, 7.5% of adults had alcohol delivered and 14.5% bought alcohol to-go. Researchers also determined that the number of people living in states allowing alcohol delivery rose by 284% and to-go sales by 627% -- demonstrating the proliferation of these new types of sales.
- Data from lifetime drinkers was utilized to estimate the use of home delivery and other methods of obtaining alcohol and the rates of ID checking for delivery purchases. Researchers found that about 7.4% of the sample purchased alcohol via delivery or to-go and of those, only 12.1% had their ID checked when 10.2% of the purchasers were under the legal drinking age. They concluded that alcohol home delivery and to-go purchases provide easy alcohol access for underage consumers.
- Researchers examined associations between daytime drinking, pregaming/pre-partying, and playing drinking games with variability in alcohol consumption, consequences, and simultaneous alcohol and marijuana use among young adults. They determined that these drinking behaviors are high-risk contexts for month-to-month and long-term risks. Each behavior was associated with negative consequences with more frequent daytime drinking and pregaming being associated with increased AUDIT scores at the 30-month follow-up.
- A study identified and prioritized measures to enhance alcohol health literacy to reduce alcohol consumption in Germany as an example. Researchers found three key areas of action: education & information, health care system, and alcohol control policies. They concluded that a comprehensive alcohol strategy is needed to curb health, social, and economic burdens of alcohol.
- With increased use of electronic cigarettes among adolescents, researchers examined how vaping intersects with other substance use behaviors. They found that nicotine use patterns were strongly associated with the likelihood of cannabis use and binge drinking. Based on Monitoring the Future data, adolescents who smoked and vaped nicotine had 36.53 times higher odds of having 10+ past 2-week binge drinking episodes. Researchers called for sustained interventions, advertising and promotion restrictions, and education efforts to reduce vaping and co-occurring use.

CHARACTERISTICS ASSOCIATED WITH BUYING ALCOHOL TO-GO AND FOR DELIVERY DURING THE FIRST YEAR OF THE COVID-19 PANDEMIC AMONG A NATIONAL SAMPLE OF US ADULTS

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Introduction: This study: (i) determined the population coverage of alcohol delivery and to-go/carryout policies (i.e., policies permitting bars/restaurants to sell individual drinks for off-site consumption) in 2019 and 2020; and (ii) identified characteristics associated with alcohol delivery and to-go purchases.

Methods: Data are from the National Alcohol Survey and Alcohol Policy Information System (n = 1677 adults, 52.1% female). Population coverage models summed state populations across state-level bar/restaurant delivery and to-go/carryout policies by beverage. Regression outcomes were past-year alcohol delivery and to-go purchases. Independent variables included demographics, excessive drinking, COVID-19 impacts and state COVID-19 bar/restaurant alcohol laws. Chi-squared tests and logistic regression models tested associations between delivery/to-go purchases and independent variables.

Results: Overall, 7.5% of adults had alcohol delivered and 14.5% bought alcohol to-go. From December 2019 to December 2020, the number of people living in states allowing beer/wine/spirits delivery (284%) and to-go sales (627%) rose steeply. People who were Black (vs. White; adjusted odds ratio [aOR] 2.92, $p < 0.001$), excessive drinkers (vs. non-excessive drinkers; aOR 2.06, $p < 0.001$) or lived in states allowing beer/wine/spirits to-go sales (aOR 2.20, $p = 0.01$) had higher odds of buying alcohol to-go. Conversely, older people had lower odds of buying alcohol to-go (aOR 0.97, $p < 0.001$). People with some college or more (vs. high school degree or less, aOR 2.21, $p < 0.001$) and a higher economic burden (vs. fewer COVID-19 impacts, aOR 2.32, $p = 0.05$) had higher odds of alcohol delivery.

Discussion and Conclusions: A select sub-population defined by socioeconomic status, race, excessive drinking and state policies bought alcohol for delivery or to-go in the United States.

Source: Trangenstein, P. J., Karriker-Jaffe, K. J., Greenfield, T. K., & Kerr, W. C. (2023). Characteristics associated with buying alcohol to-go and for delivery during the first year of the COVID-19 pandemic among a national sample of US adults. *Drug and Alcohol Review*. <https://doi.org/10.1111/dar.13659>

IMPACT OF ALCOHOL HOME DELIVERY AND OTHER METHODS OF OBTAINING ALCOHOL IN YOUNG ADULTS

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Aims: To estimate the use of home alcohol delivery and other methods of obtaining alcohol, rates of ID checking for home alcohol delivery purchases, and associations with alcohol-related consequences.

Methods: Surveillance data from 784 lifetime drinkers participating in the 2022 Rhode Island Young Adult Survey were used. The method of obtaining alcohol (e.g. type of purchase, gifted, theft) was assessed. The Alcohol Use Disorders Identification Test, Brief Young Adults Alcohol Consequences Questionnaire, and a drinking and driving question were used to measure high-risk drinking behaviors, experiencing negative alcohol questions, and history of drinking and driving. Logistic regression models adjusting for sociodemographic variables were used to estimate main effects.

Results: About 7.4% of the sample purchased alcohol through a home delivery or to-go purchase; 12.1% of participants who obtained alcohol this way never had their ID checked during the purchase attempt, and 10.2% of these purchases were completed by participants under the legal purchase age.

Home delivery/to-go purchases were associated with high-risk drinking. Alcohol theft was associated with high-risk drinking, experiencing negative alcohol consequences, and drinking and driving.

Conclusions: Home alcohol delivery and to-go purchases may provide an opportunity for underage access to alcohol, but their current use as a method of obtaining alcohol is rare. Stronger ID checking policies are needed. Alcohol theft was linked to several negative alcohol outcomes, and home-based preventive interventions should be considered.

Source: Noel, J. K., & Rosenthal, S. R. (2023). Impact of alcohol home delivery and other methods of obtaining alcohol in young adults. *Alcohol and Alcoholism*, agad035.

<https://doi.org/10.1093/alcalc/agad035>

LONGITUDINAL EXAMINATION OF HIGH-RISK DRINKING CONTEXTS: DAYTIME DRINKING, PREGAMING, AND DRINKING GAMES LINKED TO HIGH-RISK ALCOHOL USE AND NEGATIVE CONSEQUENCES IN YOUNG ADULTS

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Background: The contexts in which young adults drink alcohol play a salient role in alcohol-related outcomes and negative consequences at an event-level, but less is known about longitudinal risks. We collected longitudinal monthly data across 2 years on (a) daytime drinking, (b) pregaming/pre-partying, and (c) playing drinking games. We then examined associations between drinking in these contexts and within-person variability in alcohol consumption, consequences, and simultaneous alcohol and marijuana (SAM) use in a given month. We also examined the extent to which drinking in these contexts predicted hazardous drinking (using Alcohol Use Disorders Identification Test (AUDIT) scores) at a distal follow-up timepoint, controlling for baseline AUDIT scores.

Method: A community sample of 759 young adults (Mage = 21.1 years; 56.4% female) completed monthly surveys for 24 consecutive months and a distal 30-month follow-up. Multilevel models estimated within- and between-person associations between drinking context frequencies (daytime drinking, pregaming, drinking games) and alcohol-related outcomes (weekly consumption, consequences, SAM use). A single-level negative binomial regression tested associations between drinking context frequency averages across a two-year period and changes in AUDIT scores from baseline to a follow-up 2.5 years later.

Results: Over 75% of the sample of non-abstaining young adults reported drinking in each of the three contexts at least once during the 24-month period. Within-persons, young adults reported greater consumption, more negative consequences, and increased likelihood of SAM use during months that they drank in these contexts more often than usual. Each context was associated with negative consequences, even when controlling for alcohol use frequency. More frequent daytime drinking and pregaming, but not drinking games, were associated with increases in AUDIT scores at the 30-month follow-up, suggesting that there are potential long-term risks of drinking in these contexts.

Conclusions: Findings suggest that daytime drinking, pregaming, and playing drinking games are high-risk contexts in terms of month-to-month and long-term risks. Additional research is needed on the various contexts in which young adults drink alcohol and the extent to which contextual factors interact with one another to amplify/reduce risks and harms.

Source: Graupensperger, S., Calhoun, B. H., Fleming, C. N., Patrick, M. E., & Lee, C. M. (2023). Longitudinal examination of high-risk drinking contexts: Daytime drinking, pregaming, and drinking games linked to high-risk alcohol use and negative consequences in young adults. *Alcoholism: clinical and experimental research*. <https://doi.org/10.1111/acer.15095>

IMPROVING ALCOHOL HEALTH LITERACY AND REDUCING ALCOHOL CONSUMPTION: RECOMMENDATIONS FOR GERMANY

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Background: Although the detrimental health effects of alcohol are well established, consumption levels are high in many high-income countries such as Germany. Improving alcohol health literacy presents an integrated approach to alcohol prevention and an important complement to alcohol policy. Our aim was to identify and prioritize measures to enhance alcohol health literacy and hence to reduce alcohol consumption, using Germany as an example.

Methods: A series of recommendations for improving alcohol health literacy were derived from a review of the literature and subsequently rated by five experts. Recommendations were rated according to their likely impact on enhancing (a) alcohol health literacy and (b) reducing alcohol consumption. Inter-rater agreement was assessed using a two-way intra-class correlation coefficient (ICC).

Results: Eleven recommendations were established for three areas of action: (1) education and information, (2) health care system, and (3) alcohol control policy. Education and information measures were rated high to increase alcohol health literacy but low to their impact on alcohol consumption, while this pattern was reversed for alcohol control policies. The ratings showed good agreement (ICC: 0.85–0.88).

Conclusions: Improving alcohol health literacy and reducing alcohol consumption should be considered complementary and become part of a comprehensive alcohol strategy to curb the health, social, and economic burden of alcohol.

Source: Manthey, J., Kokole, D., Riedel-Heller, S., Rowlands, G., Schäfer, I., Schomerus, G., ... & Kilian, C. (2023). Improving alcohol health literacy and reducing alcohol consumption: recommendations for Germany. *Addiction Science & Clinical Practice*, 18(1), 1-12.
<https://doi.org/10.1186/s13722-023-00383-0>

NICOTINE VAPING AND CO-OCCURRING SUBSTANCE USE AMONG ADOLESCENTS IN THE UNITED STATES FROM 2017-2019

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Background: The use of electronic cigarettes (or “vaping”) among adolescents remains a public health concern given exposure to harmful substances, plus potential association with cannabis and alcohol. Understanding vaping as it intersects with combustible cigarette use and other substance use can inform nicotine prevention efforts.

Methods: Data were drawn from 51,872 US adolescents (grades 8, 10, 12, years: 2017–2019) from Monitoring the Future. Multinomial logistic regression analyses assessed links of past 30-day nicotine use (none, smoking-only, vaping-only, and any smoking plus vaping) with both past 30-day cannabis use and past two-week binge drinking.

Results: Nicotine use patterns were strongly associated with greater likelihood of cannabis use and binge drinking, particularly for the highest levels of each. For instance, those who smoked and vaped nicotine had 36.53 [95% CI:16.16, 82.60] times higher odds of having 10+ past 2-week binge drinking instances compared to non-users of nicotine.

Discussion: Given the strong associations between nicotine use and both cannabis use and binge drinking, there is a need for sustained interventions, advertising and promotion restrictions, and national public education efforts to reduce adolescent nicotine vaping, efforts that acknowledge co-occurring use.

Source: Kreski, N. T., Ankrum, H., Cerdá, M., Chen, Q., Hasin, D., Martins, S. S., ... & Keyes, K. M. (2023). Nicotine Vaping and Co-occurring Substance Use Among Adolescents in the United States from 2017–2019. *Substance Use & Misuse*, 1-5. <https://doi.org/10.1080/10826084.2023.2188462>

In the News: Cara Murez. (2023, May 18). Vaping Could Up Teens' Odds for Marijuana Use, Binge Drinking. *US News*. <https://www.usnews.com/news/health-news/articles/2023-05-18/vaping-could-up-teens-odds-for-marijuana-use-binge-drinking>