

NIAAA Update

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Collaborative Research on Addiction at the National Institutes of Health
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Alcohol by the Numbers: Scope of the Problem

Alcohol

Past-year use 176,975,000

% of population 63%

DSM-5 AUD 29,544,000

% of population 11%

ED visits 1,714,757
Primary reason

4,936,690
All alcohol-related

Deaths 178,000
Annual deaths

61,000
Acute (e.g., injury)

117,000
Chronic (e.g., liver disease)

Deaths Involving Alcohol Are Increasing

Average estimated annual deaths from excessive alcohol use increased 29% from 137,900 during 2016–2017 to 178,000 during 2020–2021.

Alcohol-related traffic fatalities increased by 14% to 13,384 in 2021 – the highest number since 2007.

Focus Areas of Today's Update

Alcohol in the Context of:

- **Women's Health**
- **Older Adult Health**
- **Whole Person Health**

Women's Health



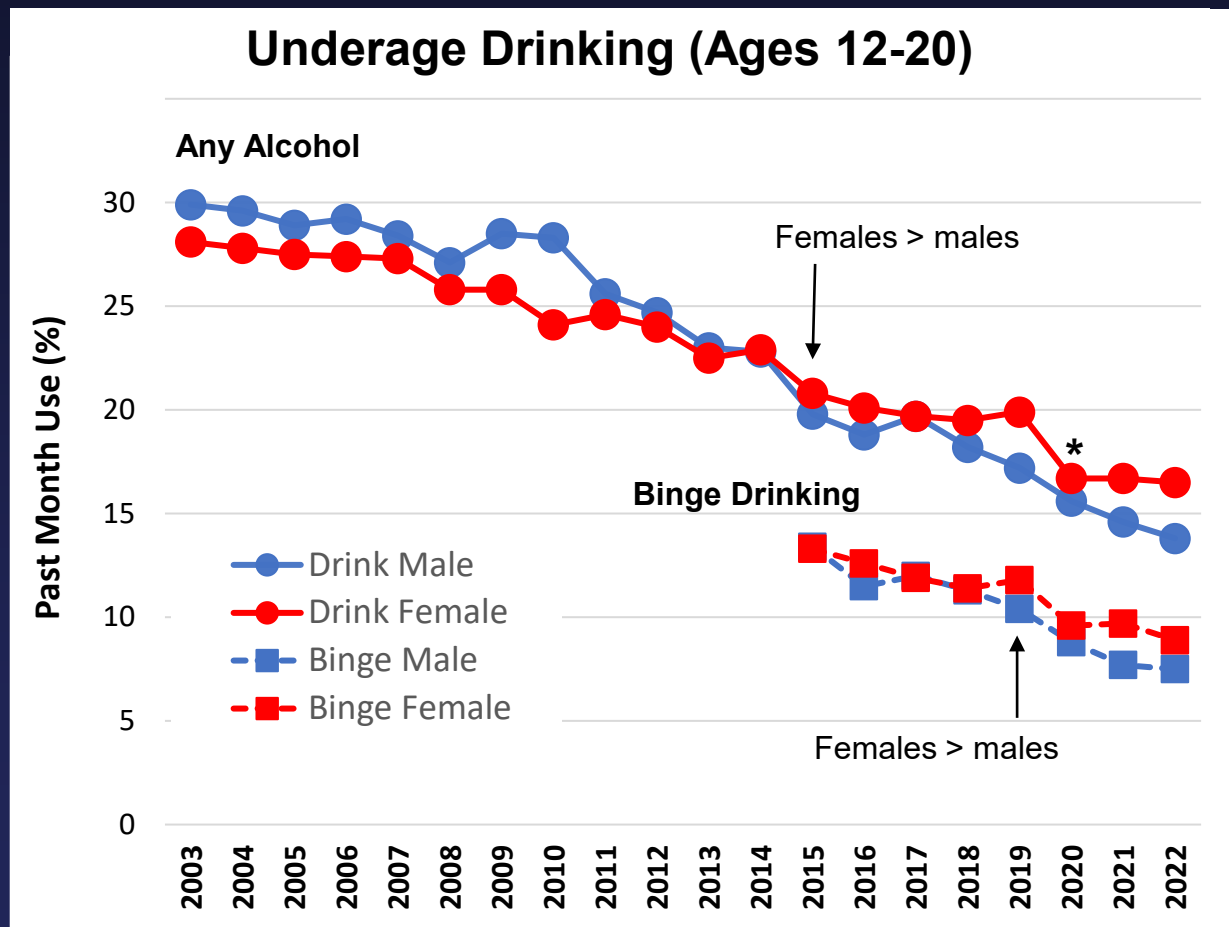
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Trends in Alcohol Use by Girls and Women

For all age groups, differences between females and males in the prevalence of drinking and binge drinking are narrowing.

- People under the age of 21 are drinking less but the declines are bigger for males than females.
- As a result, females in this age group are now more likely than males to drink and binge drink each month.
- A similar pattern occurred for people aged 18-25.
- For adults 26+, alcohol use is increasing for women but not for men.



Source: National Survey on Drug Use and Health, 2002-2020.

*Note: The methods changed in 2020; data might not be comparable to prior years

Concerns About Alcohol and Women's Health

- There is a **risk-severity paradox** for women: Women tend to experience a range of alcohol-related harms at lower doses of alcohol over shorter periods of time than men
- Studies suggest women are more likely to experience hangovers, blackouts, liver disease, brain atrophy, cognitive deficits, cardiomyopathy, and certain cancers. Women also have a faster progression of AUD severity.
- Women are less likely than men to receive treatment for AUD
- In the past two decades, there have been larger increases in alcohol-related emergency department visits, hospitalizations, and deaths for women compared to men
- Alcohol use during pregnancy is still prevalent -- 11% of pregnant people report past month drinking and 5% report binge drinking
- Women are about twice as likely to develop anxiety disorders, PTSD, and depression, which can motivate drinking to cope

Examples of NIAAA Research in Women's Health

- **NIAAA-supported studies include:**
 - Studying sex differences in neurobiological mechanisms underlying alcohol misuse, including the impact of trauma
 - Understanding the neurobiology of negative reinforcement drinking (e.g., drinking to cope), which is more common in women
 - Tracking gender differences and norms in alcohol use across the life course
 - Developing interventions for pregnant and postpartum women
- **New activities include:**
 - Releasing The Model Continuums of Care Initiative
 - Emphasizing areas of interest for the White House Initiative on Women's Health Research



Model Continuums of Care Initiative (MCCI)

to Advance Health Equity and End Health Disparities Among Women and Girls in Racial/Ethnic Minority and Other Underserved Communities

- **The goal of MCCI is to reduce the prevalence and impact of multi-morbidity among racial/ethnic minority women and girls of reproductive age who are at risk of and living with mental health disorders, substance use disorders, and common co-occurring physical conditions.**
- **Using implementation and dissemination science, the initiative proposes a continuum of care approach that integrates preventive health services, primary care, behavioral health, integrative care, and cardiopulmonary and endocrine specialties to fully address health care needs.**

NIH Notice of Special Interest on Women's Health Research

- In coordination with the **White House Initiative on Women's Health Research**, NIH issued a NOSI to highlight our interest in applications focused on diseases and health conditions that predominantly affect women, that present and progress differently in women, or that are female-specific.
- **NIAAA's specific areas of interest are:**
 - Research focused on the mental health of women, including alcohol and other substance use disorders.
 - Research on health issues that affect young women including the etiology, prevention, and treatment of alcohol misuse.
 - Research to understand the mechanisms through which common environmental factors influence resilience and disease among women across the lifespan.

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Older Adult Health



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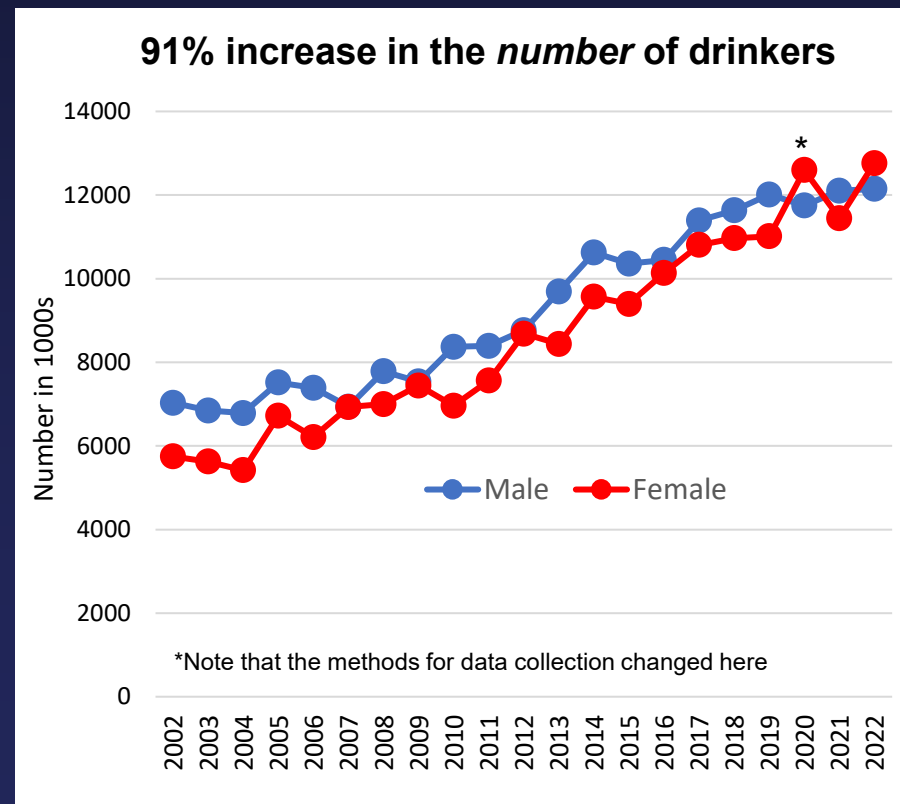
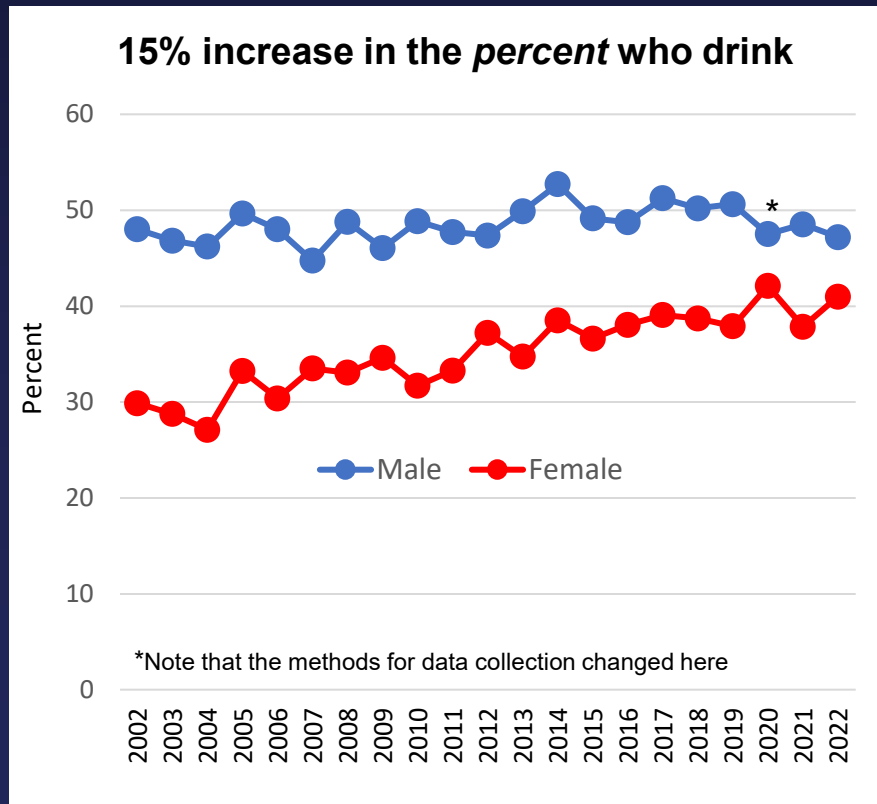


Trends in Alcohol Use by Adults Aged 65+

The size of the population aged 65+ is growing rapidly and both the percent and number of older drinkers are increasing

The *percentage* of people 65+ who drank alcohol in the past month increased 15% overall from 2002-2022, with increase for women (37%) but not men (-1.7%)

Due to the rapid increase in the size of the population 65+, the *number* of people that drink alcohol increased 91% overall between 2002-2022



Concerns about Alcohol and the Health of Older Adults

Alcohol affects behavior and health differently as we age.

- Health consequences of alcohol tend to shift from acute causes (injuries) to chronic causes (e.g., cancer, heart disease) with age.
- Older adults are more sensitive to the sedative effects of alcohol, take more medications that may interact with alcohol, and are more likely to have problems with sleep, which is worsened by alcohol.
- The risk of falls increases with age and alcohol impairs balance and coordination more as we get older.
- Alcohol misuse has been associated with faster cognitive decline, and alcohol may contribute to and worsen Alzheimer's disease and other forms of dementia.



Examples of NIAAA Research Related to Alcohol and Older Adult Health

- In collaboration with the National Institute on Aging, NIAAA is supporting research into the mechanisms by which alcohol affects brain aging processes and influences dementias and Alzheimer's disease.
- Other research projects are focused on:
 - Cognitive decline, behavioral consequences, and functional impairment in older adults, including those with HIV
 - Mechanisms through which alcohol contributes to inflammation and increases risk of infections
 - Factors that influence alcohol use and associated harms in older adults
- Additional priorities include basic, translational, and clinical research on the effects of alcohol on the “health span” of older adults, age-related diseases, and improving alcohol screening, prevention, and treatment for older adults.

Whole Person Health



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Alcohol Affects the Whole Body

Alcohol Misuse is Associated with More Than 200 Diseases and Injury-Related Conditions

The New York Times

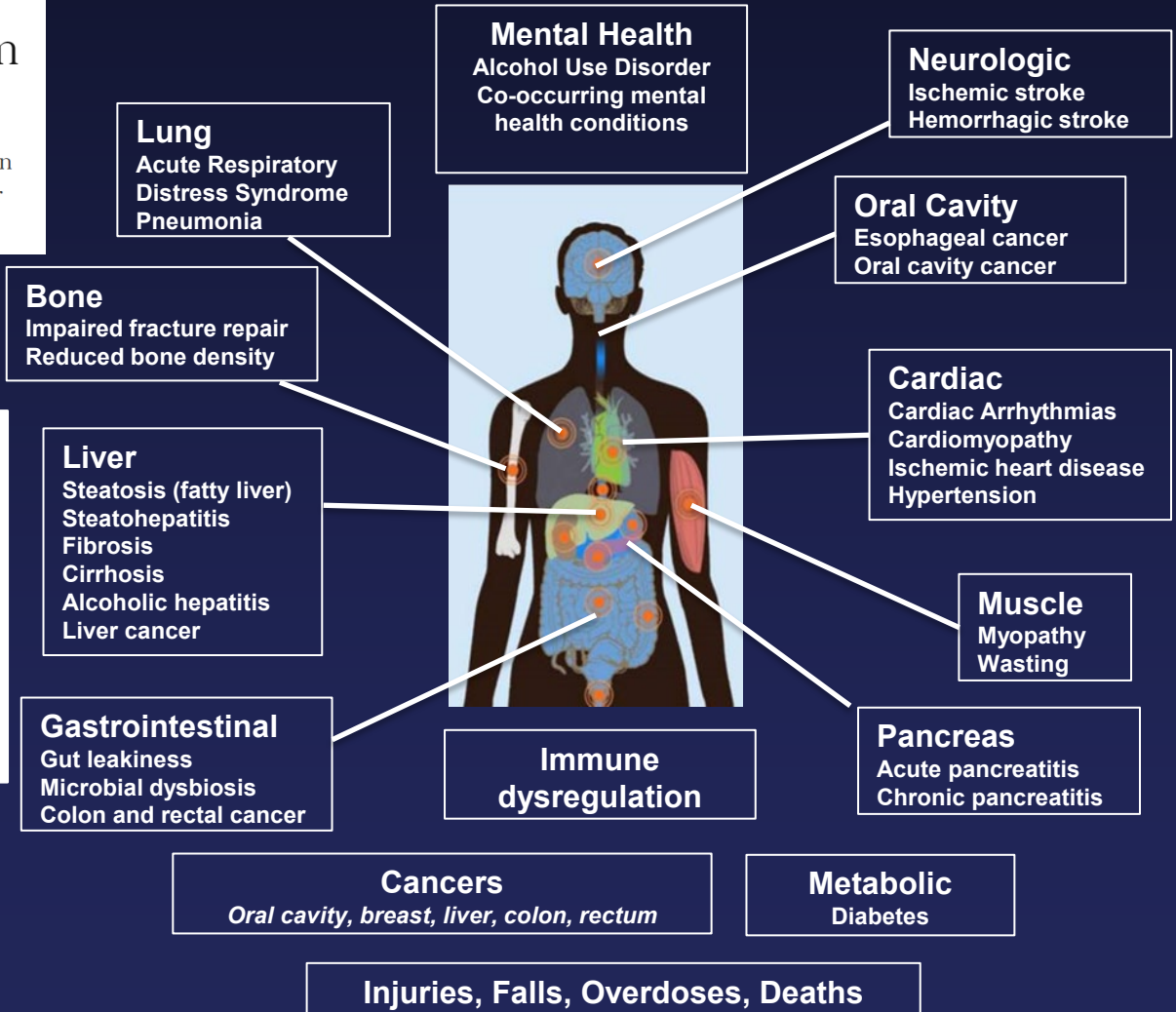
Even a Little Alcohol Can Harm Your Health

Recent research makes it clear that any amount of drinking can be detrimental. Here's why you may want to cut down on your consumption beyond Dry January.

health

January 11, 2023

Drinking Alcohol Increases Cancer Risk—But Very Few Americans Are Aware of the Link



Alcohol and Cancer

- Alcohol is a carcinogen
- In the US, about 5.6% of cancer cases and 4.0% of deaths from cancer can be attributed to alcohol ([Islami et al., 2018](#)).
- Alcohol is the third largest contributor to all cancer cases for women (6.4%; about 50,110 cases per year) and the fourth largest contributor for men (4.8%; about 37,410 cases per year) ([Islami et al., 2018](#)).
- For women, it appears the risk of breast cancer increases by around 5-15% with a single standard US serving per day ([Floud et al., 2023](#); [LoConte et al., 2017](#); [NCI, 2021](#)).
 - Breast cancer is the second leading cause of cancer death in women – only lung cancer kills more women each year
- Unfortunately, awareness of the link between alcohol and cancer is low.
 - A survey by NCI found that about 70% of people are unaware that alcohol can cause cancer and about 10% believe that wine actually reduces the risk of cancer ([Seidenberg et al., 2023](#))

Addressing Alcohol in the Context of Whole Person Health

- **A whole person approach** that looks across different domains of health and integrates the care of alcohol-related problems can improve prevention, diagnosis, treatment, and recovery strategies. Key examples are:
 - Integrating treatment for alcohol use disorder and alcohol-associated liver disease, which has the potential to promote recovery from both conditions and enhance the long-term survival of patients.
 - Alcohol screening, brief intervention, and referral to treatment in primary care can help clinicians identify other physical and mental health-related issues affected by alcohol misuse.
- **Collaborative research** across NIAAA, NIDA, NCI and other Institutes and Centers holds promise for enhancing the understanding of whole person health and improving substance misuse-related health outcomes.

New NIAAA Strategic Plan, Fiscal Years 2024-2028

“Advancing Alcohol Research to Promote Whole Person Health and Well-Being”

- The new NIAAA Strategic Plan is now live on the NIAAA website, <https://www.niaaa.nih.gov/strategic-plan>
- The plan charts a course for alcohol research over the next five years while maintaining flexibility to address emerging research opportunities and urgent public health needs.
- The plan is a living document, and we welcome your feedback.
- Thank you to all NIAAA staff who contributed to the strategic plan content, review, and website.
- Special thanks to the NIAAA Strategic Plan Team: Cara Anjos Breeden, Laura Manella, Laura Brockway-Lunardi, Bridget Williams-Simmons, and former NIAAA staff member Rachel Anderson.



The Future is Now

- **The new strategic plan seeks to advance many long-held NIAAA research and research training priorities, and highlights key areas such as:**
 - **DEIA in the alcohol research enterprise**
 - **Women's health research**
 - **Whole person health and integrated health approaches**
 - **Data science (e.g., artificial intelligence) and data management**
 - **Translation and back translation of research findings**
 - **Social determinants of health in the context of risk and resilience**
 - **Social media impact on alcohol-related behaviors and outcomes, and social media as a tool for innovating interventions**

NIAAA Resources



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Resources for the Public and Healthcare Professionals

Rethinking Drinking

Website and print publication for a general audience to help individuals assess their drinking habits and find ways to make a change.



CollegeAIM

Comprehensive information on prevention approaches found to be effective in college environments.



Alcohol Treatment Navigator

Online resource that helps individuals understand and search for treatment options, including telehealth services. It also includes a portal to assist healthcare providers in making referrals for their patients.



Healthcare Professional Core Resource

Online educational resource that covers the basics of what every healthcare professional needs to know about alcohol, including the many ways that alcohol can impact a patient's health, and provides strategies for alcohol screening and interventions.



niaaa.nih.gov

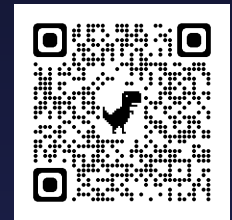
New NIAAA Web Resources For Youth Prevention

NIAAA for Middle School: Contains interactive activities to help parents, caregivers, and teachers introduce and reinforce key messages about peer pressure, resistance skills and other topics related to underage drinking.

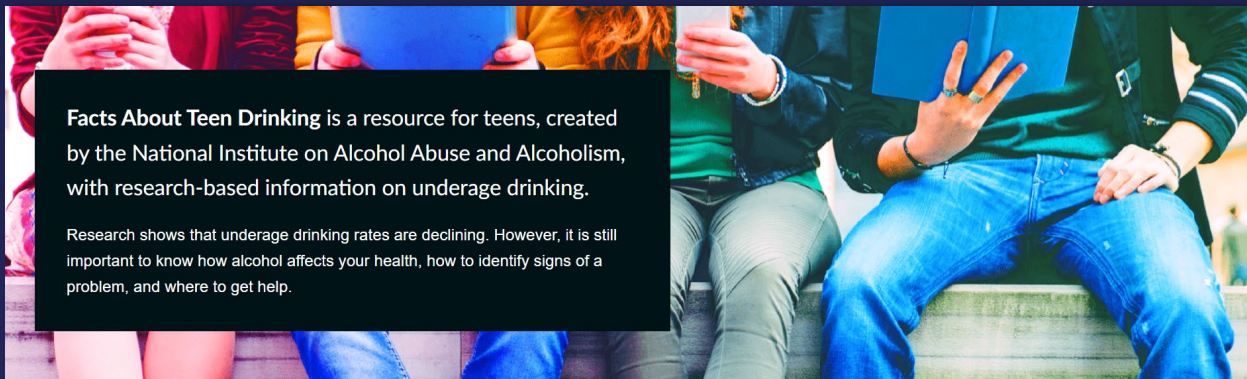
In this Section

- Too Soon = Too Dangerous
- Peer Pressure
- The Right to Resist
- Helpful Resources

NIAAA for Middle School

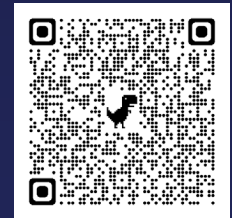


NIAAA for Teens: A research-based online resource for teens highlighting how alcohol affects your health, warning signs and symptoms, and where to get help for alcohol-related problems.



Facts About Teen Drinking is a resource for teens, created by the National Institute on Alcohol Abuse and Alcoholism, with research-based information on underage drinking.

Research shows that underage drinking rates are declining. However, it is still important to know how alcohol affects your health, how to identify signs of a problem, and where to get help.



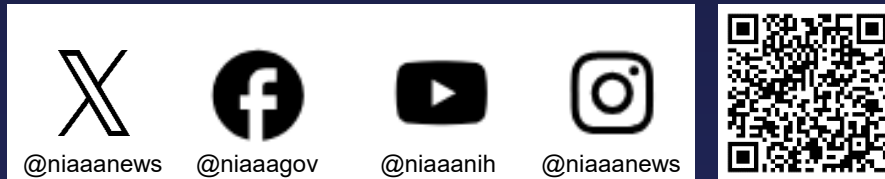
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Special thanks to:

Laura Brockway-Lunardi
Laura Manella
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Bridget Williams-Simmons