



College Drinking

Harmful and underage college drinking are significant public health problems, and they exact an enormous toll on the intellectual and social lives of students on campuses across the United States.

Drinking at college has become a ritual that students often see as an integral part of their higher education experience. Many students come to college with established drinking habits, and the college environment can exacerbate the problem. According to a national survey, almost 55 percent of college students ages 18–22 drank alcohol in the past month,¹ and more than 1 out of 3 of them engaged in binge drinking during that same timeframe.¹



Consequences of Harmful and Underage College Drinking

Drinking affects college students, their families, and college communities at large. Researchers estimate that each year:

Death

About 1,825 college students between the ages of 18 and 24 die from alcohol-related unintentional injuries, including motor-vehicle crashes.²

Assault

About 696,000 students between the ages of 18 and 24 are assaulted by another student who has been drinking.³

Sexual Assault

About 97,000 students between the ages of 18 and 24 report experiencing alcohol-related sexual assault or date rape.³

What is “binge drinking?”

Many college alcohol problems are related to **binge drinking**. Binge drinking is a pattern of drinking that brings blood alcohol concentration (BAC) levels to 0.08 g/dL. This typically occurs after 4 drinks for women and 5 drinks for men—in about 2 hours.

Drinking this way can pose serious health and safety risks, including car crashes, drunk-driving arrests, sexual assaults, and injuries. Over the long term, frequent binge drinking can damage the liver and other organs.



Academic Problems

About 1 in 4 college students report academic consequences from drinking, including missing class, falling behind in class, doing poorly on exams or papers, and receiving lower grades overall.⁴ In a national survey of college students, binge drinkers who consumed alcohol at least 3 times per week were roughly 6 times more likely than those who drank but never binged to perform poorly on a test or project as a result of drinking (40 vs. 7 percent) and 5 times more likely to have missed a class (64 vs. 12 percent).⁵



Alcohol Use Disorder

About 20 percent of college students meet the criteria for an AUD.⁶

Other Consequences

These include suicide attempts, health problems, injuries, unsafe sex, and driving under the influence of alcohol, as well as vandalism, damage, and involvement with the police.

Factors Affecting Student Drinking

Although the majority of students come to college already having some experience with alcohol, certain aspects of college life, such as unstructured time, the widespread availability of alcohol, inconsistent enforcement of underage drinking laws, and limited interactions with parents and other adults, can intensify the problem. In fact, college students have higher binge-drinking rates and a higher incidence of driving under the influence of alcohol than their non-college peers.

The first 6 weeks of freshman year are a vulnerable time for heavy drinking and alcohol-related consequences because of student expectations and social pressures at the start of the academic year.

How much is a drink?

To avoid binge drinking and its consequences, college students (and all people who drink) are advised to track the number of drinks they consume over a given period of time. That is why it is important to know exactly what counts as a drink.

In the United States, a standard drink is one that contains about 14 grams of “pure” alcohol, which is found in:

- » 12 ounces of beer with 5 percent alcohol content
- » 5 ounces of wine with 12 percent alcohol content
- » 1.5 ounces of distilled spirits with 40 percent alcohol content

Unfortunately, although the “standard” drink amounts are helpful for following health guidelines, they may not reflect customary serving sizes. A large cup of beer, an overpoured glass of wine, or a single mixed drink could contain much more alcohol than a standard drink. In addition, while the alcohol concentrations listed are “typical,” there is considerable variability in alcohol content within each type of beverage (e.g., beer, wine, distilled spirits).



Factors related to specific college environments also are significant. Students attending schools with strong Greek systems and with prominent athletic programs tend to drink more than students at other types of schools. In terms of living arrangements, alcohol consumption is highest among students living in fraternities and sororities and lowest among commuting students who live with their families.

An often-overlooked preventive factor involves the continuing influence of parents. Research shows that students who choose not to drink often do so because their parents discussed alcohol use and its adverse consequences with them.



Addressing College Drinking

Ongoing research continues to improve our understanding of how to address the persistent and costly problem of harmful and underage student drinking. Successful efforts typically involve a mix of strategies that target individual students, the student body as a whole, and the broader college community.

Strategies Targeting Individual Students

Individual-level interventions target students, including those in higher-risk groups such as first-year students, student athletes, members of Greek organizations, and mandated students. They are designed to change students' knowledge, attitudes, and behaviors related to alcohol so that they drink less, take fewer risks, and experience fewer harmful consequences. Categories of individual-level interventions include:

- » Education and awareness programs
- » Cognitive-behavioral skills-based approaches
- » Motivation and feedback-related approaches
- » Behavioral interventions by health professionals

Strategies Targeting the Campus and Surrounding Community

Environmental-level strategies target the campus community and student body as a whole, and are designed to change the campus and community environments in which student drinking occurs. Often, a major goal is to reduce the availability of alcohol, because research shows that reducing alcohol availability cuts consumption and harmful consequences on campuses as well as in the general population.

Alcohol overdose and college students

Thousands of college students are transported to the emergency room each year for alcohol overdose, which occurs when high levels of alcohol suppress the nervous and respiratory systems and the body struggles to rid itself of toxins produced from the breakdown of alcohol. Signs of this dangerous condition can include:

- » Mental confusion, stupor, coma, or the person cannot be roused
- » Vomiting
- » Slow or irregular breathing
- » Hypothermia or low body temperature, bluish or pale skin

Alcohol overdose can lead to permanent brain damage or death, so a person showing any of these signs requires immediate medical attention. Don't wait. Call 911 if you suspect alcohol overdose.



A Mix of Strategies Is Best

For more information on individual- and environmental-level strategies, the NIAAA *CollegeAIM* guide (and interactive Web site) rates nearly 60 alcohol interventions in terms of effectiveness, costs, and other factors—and presents the information in a user-friendly and accessible way.

In general, the most effective interventions in *CollegeAIM* (which stands for College Alcohol Intervention Matrix) represent a range of counseling options and policies related to sales and access. Yet, while school officials should be aware of the strategies that came out on top in the ratings—and those that rated poorly—they should use *CollegeAIM* as a resource to find the best mix of individual and environmental strategies for their unique circumstances. After analyzing alcohol problems at their own schools, officials can use the *CollegeAIM* ratings to find the best combination of interventions for their students and budgets.

The greatest chance for creating a safer campus will likely come from a combination of individual- and environmental-level interventions that work together to maximize positive effects. Strong leadership from a concerned college president, in combination with an involved campus community and a comprehensive program of evidence-based strategies, can help address harmful student drinking.



For more information, please visit www.collegedrinkingprevention.gov/CollegeAIM

¹ SAMHSA. The estimates are weighted by the person-level analysis weight and derived from the 2018 NSDUH public-use data file. Past-month alcohol use: a drink of an alcoholic beverage (a can or bottle of beer, a glass of wine or a wine cooler, a shot of distilled spirits, or a mixed drink with distilled spirits in it), not counting a sip or two from a drink in the past 30 days. Past-month binge alcohol use: 5 or more drinks on the same occasion for males or 4 or more drinks on the same occasion for females on at least 1 day in the past 30 days. Full-time college students: full-time students ages 18 to 22 enrolled in school and at college level. National Survey on Drug Use and Health (NSDUH) 2018 (NSDUH-2018) Public-Use File Dataset. Available at: <https://www.datafiles.samhsa.gov/study/national-survey-drug-use-and-health-nsduh-2018-nid18757>. Accessed November 15, 2019.

² Hingson, R.W.; Zha, W.; and Weitzman, E.R. Magnitude of and trends in alcohol-related mortality and morbidity among U.S. college students ages 18–24, 1998–2005. *Journal of Studies on Alcohol and Drugs* (Suppl. 16):12–20, 2009. PMID: 19538908 <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2701090/>

³ Hingson R, Heeren T, Winter M. et al. Magnitude of alcohol-related mortality and morbidity among U.S. college students ages 18–24: changes from 1998 to 2001. *Annual Review of Public Health* 26: 259–279, 2005. PMID: 15760289 <http://www.ncbi.nlm.nih.gov/pubmed/15760289>

⁴ Wechsler, H.; Dowdall, G.W.; Maenner, G.; et al. Changes in binge drinking and related problems among American college students between 1993 and 1997: Results of the Harvard School of Public Health College Alcohol Study. *Journal of American College Health* 47(2):57–68, 1998. PMID: 9782661 <http://www.tandfonline.com/doi/pdf/10.1080/07448489809595621>

⁵ Thombs, D.L., Olds, R.S., Bondy, S.J., et al. Undergraduate drinking and academic performance: A prospective investigation with objective measures. *Journal of Studies on Alcohol and Drugs*. 2009;70(5):776–785. PMID: 19737503 <http://www.ncbi.nlm.nih.gov/pubmed/19737503>

⁶ Blanco, C.; Okuda, M.; Wright, C. et al. Mental health of college students and their non-college-attending peers: Results from the National Epidemiologic Study on Alcohol and Related Conditions. *Archives of General Psychiatry* 65(12):1429–1437, 2008. PMID: 19047530 <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2734947>

