



# National Studies (1993–2001) Assess Binge Drinking Among College Students

National study of college drinking patterns and practices

## SUMMARY

From 1993 to 2001, Henry Wechsler, PhD, and researchers at the Harvard University School of Public Health conducted four national surveys examining the drinking patterns and practices of American college students.

The College Alcohol Study identified key individual and environmental factors related to heavy episodic or "binge" drinking and evaluated institutional policies and programs designed to control alcohol problems.

## Key Findings

Key findings from what the *New York Times* called "a landmark national study of binge drinking among college students" (Carey Goldberg, September 11, 1998) encompass more than 80 publications.

These include a 1994 article in the *Journal of the American Medical Association* that drew national attention to the problem of college binge drinking and its "secondhand" effects on non-drinkers, according to the *Boston Globe* (Doloras Kong, September 27, 1997).

Publications on the College Alcohol Study in public health, psychological, economic, medical, psychiatric, educational, alcohol and substance abuse journals are among the most widely cited articles on college drinking, according to the *Science Citation Index*.

Findings include:

- Two in five students attending four-year colleges in the United States are binge drinkers. This result was consistent over the four surveys—1993, 1997, 1999 and 2001.
- Nationally, one in five college students is a frequent binge drinker. Frequent binge drinkers (students who had binged three or more times in the past two weeks) consumed 72 percent of all alcohol consumed by college students.

- The rate of binge drinking remained stable from 1993 to 2001 despite widespread efforts to address the problem through educational and motivational programs aimed at students.
- The alcohol environments in the colleges and their surrounding communities—the availability, price and marketing of alcohol; college prevention policies; community and state laws; and their enforcement—play a significant role in determining binge drinking rates.
- Binge drinkers, particularly those who do so frequently, experience a range of alcohol related problems affecting their physical, psychological, social and educational status.
- The negative impact of college student alcohol abuse is not limited to the drinkers themselves. Students who attended schools with high rates of binge drinking experienced a greater number of secondhand effects, including disruption of sleep or study; property damage; and verbal, physical or sexual violence, than their peers attending schools with low binge drinking rates. Neighbors living in the vicinity of colleges with high rates of binge drinking were also more likely to experience negative effects of heavy drinking, such as noise disturbances and vandalism, compared with people living near colleges with low rates of binge drinking and with people who did not live near a college.

## **Funding**

The Robert Wood Johnson Foundation (RWJF) provided seven grants totaling \$6,501,696 to support the College Alcohol Study and its dissemination from 1992 to 2004.

## **THE PROBLEM**

According to the federal Centers for Disease Control and Prevention, alcohol abuse is a major public health problem, and it is the third leading cause of death in the United States, behind tobacco use and the combined effects of poor diet and sedentary lifestyle. The group most at risk for heavy alcohol consumption may be college students.

Concerns about college drinking among college administrators and parents began to escalate in the 1990s for several reasons, including the persistence of heavy episodic or "binge" drinking and heightened awareness of the dangers of date rape and of serious injury and death due to alcohol-related accidents.

With few exceptions, studies of college drinking prior to the first College Alcohol Study had focused on single college campuses. Wechsler, the College Alcohol Study's director, had studied the problem of college binge drinking in New England and believed that a large-scale national survey was needed, along with a vigorous dissemination campaign to

ensure that survey results reached key audiences, notably college administrators, the general public, federal policy-makers and substance abuse prevention experts.

## CONTEXT

RWJF also funds *A Matter of Degree: Reducing High-Risk Drinking Among College Students* (see [Program Results Report](#)). It is an \$8.6 million, seven-year program designed to foster collaboration between participating universities and the communities in which they are located to address high-risk drinking problems.

Ten university-community coalitions participating in the program are working to build healthier, safer communities. They are:

- [Florida State University](#)–The City of Tallahassee, Florida
- [Georgia Institute of Technology](#)–The City of Atlanta, Georgia
- [Lehigh University](#)–The City of Bethlehem, Pennsylvania
- [Louisiana State University](#)–The City of Baton Rouge, Louisiana
- [University of Colorado](#)–The City of Boulder, Colorado
- [University of Delaware](#)–The City of Newark, Delaware
- [University of Iowa](#)–Iowa City, Iowa
- [University of Nebraska at Lincoln](#)–The City of Lincoln, Nebraska
- [University of Vermont](#)–The City of Burlington, Vermont
- [University of Wisconsin](#)–The City of Madison, Wisconsin

## THE PROJECT

Beginning in 1992, Wechsler and a team of researchers at the Harvard University School of Public Health designed and conducted the College Alcohol Study, a series of four surveys conducted in 1993, 1997, 1999 and 2001 that provided the first nationally representative picture of college alcohol use.

The goal of the study was to describe drinking patterns and practices of American college students, identify key factors related to heavy episodic drinking and understand how institutional policies and programs may help to control alcohol problems.

The Harvard team consisted of researchers from multiple disciplines, including social psychology, social epidemiology, behavioral sciences and biostatistics.

The team also collaborated on studies with other researchers within Harvard University from disciplines such as economics, psychology, epidemiology and medicine. The institutional affiliation of these researchers included:

- University of Illinois, Chicago
- University of California, San Diego
- University of Michigan
- University of Washington
- University of Minnesota
- Boston University
- University of Arizona
- University of Toronto
- University of Western Ontario
- Korean Sahmyook University
- National Institute on Alcohol Abuse and Alcoholism
- Centers for Disease Control and Prevention

Although the College Alcohol Study examined seven measures of drinking behavior, the main variable studied was binge drinking. Behavior categories studied and described in [Findings](#) included:

- **Binge drinkers:** Men who consumed five drinks in a row or women who consumed four drinks in a row on one or more occasions during the two-week period immediately prior to the survey.
- **Frequent binge drinkers:** Students who had binged three or more times in the past two weeks.
- **Non-binge drinkers:** Students who had consumed alcohol in the past year but had not binged in the previous two weeks.
- **Abstainers:** Students who had not consumed any alcohol in the past year.

In addition to the comprehensive information about drinking behaviors, each of the surveys collected information about the use of tobacco and illicit drugs and other high-risk behaviors of college students. Examples of additional research questions addressed by individual surveys included:

- What groups of students were most likely to drink heavily?

- To what extent did fraternities and sororities and intercollegiate athletics affect the campus drinking culture?
- What was the impact of drinking patterns on campus on students who did not binge drink? In other words, what were the "secondhand effects" of college binge drinking?
- To what extent did colleges with high binge drinking rates affect neighbors residing near campus?
- What were the sales practices used to market alcohol near college campuses? How easy and inexpensive was it to buy alcohol? And what was the relationship of price and promotion to binge drinking rates on campus?
- Did state rates of drinking and state control policies affect college binge drinking rates?
- To what extent did underage students drink and how did they get their alcohol?

## **Student Surveys**

For the first survey in 1993 (Grant ID# 019547), the researchers recruited a random sample of 140 colleges from the American Council of Education's list of accredited four-year colleges. They mailed a self-administered questionnaire to a randomly selected sample of students in each of the colleges.

After the first survey, the researchers resurveyed a nationally representative sample of students at most of the same colleges in 1997, 1999 and 2001 (Grant ID#s 029870, 030249 and 035965), with responses over the four surveys totaling more than 50,000 students.

For all four surveys, administrators at each participating school used guidelines provided by the researchers to randomly select 215 students from their full-time enrolled undergraduates.

Over the course of the surveys, more than 85 percent of the original colleges continued to participate in the study. The goal of the three follow-up surveys was to measure changes in binge drinking and other high-risk alcohol use behaviors since the 1993 survey and to determine to what extent observed changes reflected the influence of environmental conditions and interventions.

## **Questions for Students**

The researchers used a 20-page self-administered survey to ask students about their drinking behavior, alcohol-related health problems and other problems, including tobacco and illicit drug use.

Students who drank alcohol in the previous year were asked a series of questions about their experience of alcohol-related problems and the health and behavioral consequences of their own drinking, such as having a hangover, missing a class, engaging in unplanned sexual activity, damaging property or getting in trouble with campus or local police.

Students were also asked whether they experienced "secondhand effects," e.g., problems caused by other students' drinking, such as being insulted or humiliated, having sleep or study interrupted, experiencing an unwanted sexual advance or being the victim of sexual assault or date rape.

## **Administrator Surveys**

In addition to students, the College Alcohol Study also surveyed college administrators in order to determine the alcohol-related programs and policies that were in effect during each of the four survey years and to examine the relationship between college efforts to prevent alcohol use and student reports of drinking behavior.

The researchers mailed questionnaires to key administrators, including deans of students, deans of judicial affairs, alcohol and drug education directors, chiefs of campus security, directors of student health clinics and directors of residential life at the same colleges sampled for the student surveys. Data were collected from administrators at nearly all of the participating colleges.

Administrators rated the perceived severity of alcohol-abuse problems among students on their campuses, specified approaches their colleges used to address binge drinking and described prevention resources.

## **Questionnaires**

Researchers developed different versions of the administrators' questionnaire to target specific administrative functions, such as security and health clinic directors.

The questionnaires consisted of both closed- and open-ended questions designed to elicit descriptive information about the types of alcohol education and prevention programs offered to students, as well as the range of campus alcohol-control policies.

## **College President Surveys**

The researchers also conducted surveys of college presidents and senior administrators (whom presidents delegated to complete the survey) at all four-year colleges in the United States in 1999 and in 2002. The purpose of these surveys was to provide a comprehensive overview of prevention efforts nationally, including an examination of institutional allotment of resources for prevention.

College presidents and senior administrators at more than 700 four-year colleges in the United States responded to each of these surveys.

Eligible institutions included all four-year colleges and universities accredited by the American Council on Education that were located in the United States, offered baccalaureate liberal arts or sciences degrees and provided on-campus residences for at least 10 percent of their undergraduates.

### **Questionnaires**

The survey asked presidents to rate the severity of the student alcohol problems at their institutions, describe their alcohol policies and education or prevention efforts, list the sources of funding for their alcohol education-prevention programs and rate the success of their education-prevention efforts.

In 1999, officials at 734 schools mailed back the questionnaire, a response rate of 76.1 percent. Respondents were:

- Presidents (10%).
- Designated student affairs representatives (57.3%).
- Health promotion staff, including persons from wellness, counseling, alcohol and other drug education programs (21.9%).
- Other administrative officers (10.9%).

In 2002, administrators designated by college presidents at 760 schools returned the questionnaire, which was a response rate of 68 percent.

### **Environmental Studies**

The project team also contracted with two national research organizations to conduct additional studies of the environment around the campuses:

- In 1999, researchers from Princeton, N.J.-based Mathematica Policy Research conducted a national telephone survey of residents in areas near colleges in order to examine how the binge drinking of college students affected quality of life in these neighborhoods.
- In 2001, the project team engaged trained observers from Ohio-based Battelle Centers for Public Health Research and Evaluation to visit bars and liquor stores near college campuses in order to examine how retailers marketed alcohol to students, especially through low-price offers.



## **Connection to A Matter of Degree**

In addition to directing the College Alcohol Study, Wechsler was also the principal investigator for the evaluation of *A Matter of Degree*. Wechsler used a group of colleges and universities with high rates of binge drinking, identified by the College Alcohol Study, as a comparison group in the evaluation. (For more information about *A Matter of Degree*, see the [Program Results Report](#) and the national program office [website](#).)

## **Dissemination of Findings**

RWJF also provided three grants to support dissemination of the findings of the College Alcohol Study (Grant ID#s 024464, 033931 and 040869). The goals of the dissemination projects were to ensure that the issue of college student binge drinking received national attention and that various stakeholders were engaged to consider solutions to this problem.

Dissemination activities included efforts to reach people capable of creating institutional change, such as college presidents, deans, trustees, fraternity directors and health directors. Other key audiences included those who could influence the campus environment, such as the roommates of binge drinkers; residential life administrators; security and health officials; parents; prospective students; and federal, state and local policy-makers.

The Harvard School of Public Health subcontracted with Burness Communications, a consulting firm based in Bethesda, Md., to provide public relations support.

## **Publications and Media Coverage**

The College Alcohol Study has received widespread attention from both academic and general audiences beginning with a 1994 article in the *Journal of the American Medical Association* ("Health and Behavioral Consequences of Binge Drinking in College: A National Survey of Students at 140 Campuses") and including the September 11, 1998, article in the *New York Times* which called it "a landmark national study of binge drinking among college students" (Carey Goldberg).

A press conference on December 6, 1994, resulted in a four-minute lead story on "ABC World News Tonight," lead reports and NBC and CBS and 413 total broadcast exposures that reached 150 million people, according to Burness Communications. The findings were been widely reported in newspaper articles, magazines—*Time*, *Newsweek*—and local television and radio shows and online sources. Since then other College Alcohol Study reports also received wide coverage. Selected press coverage of the College Alcohol Study is available on the study's [website](#).



Since 1994 Wechsler and his colleagues have published more than 80 articles in peer-reviewed public health, medical, social science, educational and economic journals, including the *Journal of the American Medical Association (JAMA)*, the *American Journal of Public Health*, *Addiction*, *American Journal of Preventive Medicine*, *Social Science and Medicine*, *Journal of Health Economics*, *Pediatrics*, *Journal of American College Health* and many others. In addition to alcohol, topics have included tobacco and drug use, gambling and gun possession. Abstracts and some full texts of these articles are available on the study's [website](#).

Project staff sent every college president in the United States copies of two reports on the study: *Binge Drinking on American College Campus: A New Look at an Old Problem* and *Binge Drinking on America's College Campuses: Findings for the Harvard School of Public Health College Alcohol Study*.

## FINDINGS

### Findings from the College Alcohol Study Student Surveys

The researchers compiled findings from their published articles in a summary paper, "The Findings and Impact of the Harvard School of Public Health College Alcohol Study: Focusing Attention on Binge Drinking and the College Environment."

They identified the following key findings related to binge drinking and its secondhand effects.

#### **Student Binge Drinking**

- **Two in five students attending four-year colleges in the United States are binge drinkers.** This result was consistent over the four surveys—1993, 1997, 1999 and 2001.
- **Nationally, one in five college students is a frequent binge drinker.** Frequent binge drinkers consumed 72 percent of all alcohol consumed by college students and accounted for the majority of alcohol-related problems experienced by college students.
- **The rate of binge drinking remained stable from 1993 to 2001.** The most notable change during this period was the polarization of drinking behavior, with simultaneous increases in the number of abstainers and in the number of students who engage in frequent binge drinking.
- **Binge drinking rates at the participating colleges varied widely, from zero to nearly 80 percent.** These rates remained stable from 1993 to 2001 despite new groups of students participating in each survey.

- **Many college students who binge drink, particularly those who do so frequently, experience negative academic, social and health consequences as a result.** The risk of experiencing any of these negative outcomes is minimal for those who do not binge drink and greatest for those who do so frequently.
  - Alcohol has a negative impact on academic performance (one in five student drinkers falls behind in schoolwork).
  - Alcohol increases the likelihood of engaging in risky sexual behaviors (one in five drinkers reported engaging in unplanned sexual activity, and one in 10 did not use protection as a result of their drinking).
- **Fraternity and sorority members, athletes and sports fans engage in higher rates of binge drinking than other students.** Students of African and Asian descent; women; those with strong religious beliefs; and married, older or nontraditional students tend to consume less alcohol. White students who attend racially and ethnically diverse colleges tend to have lower drinking rates than white students who attend less diverse schools.

### ***Effects on Other Students***

- **One in 20 female students reported that they were the victims of a sexual assault, and three in four of the students who report being assaulted were under the influence of alcohol at the time of the assault.** These sexual assaults tended to occur more often at colleges with high rates of binge drinking.
- **The negative impact of college student alcohol abuse is not limited to the drinkers themselves.** Students who attended schools with high rates of binge drinking experienced a greater number of secondhand effects, including disruption of sleep or study, property damage, and verbal, physical or sexual violence, than their peers attending schools with low binge drinking rates.
  - Three in 10 college students nationally reported that they were insulted or humiliated by another student who had been drinking, and one in five said they had been in a serious argument or quarrel with an intoxicated student.

### ***Off-Campus Effects***

- **People living in the vicinity of colleges with high rates of binge drinking were more likely to experience negative effects of heavy drinking than those not living near a college or living near colleges with low rates of binge drinking.** Negative effects included noise disturbances and vandalism.
- **Alcohol specials, promotions and advertisements were prevalent in the alcohol outlets around college campuses participating in the College Alcohol Study.** Almost 75 percent of on-premise establishments (bars and restaurants where drinking is done on-premise) offered specials on weekends, and almost half of the on-premise

establishments and more than 60 percent of off-premise establishments (liquor stores, convenience stores, groceries) provided at least one type of beer promotion.

### ***Effects of Policies, Environment and Laws***

- **College policy, drinking culture and laws influence the amount of drinking at a college.** The prevalence of drinking alcohol-and as a consequence the rate of binge drinking-was lower at colleges that banned alcohol on campus. Students who lived at home with their parents and students who lived in substance-free dormitories at college were less likely to binge drink. Students who attended college in states with lower rates of binge drinking among adults were also less likely to binge drink in college. Rates of binge drinking and rates of driving after drinking were lower at colleges in states that had a comprehensive set of alcohol control policies.

### ***Tobacco Use***

The College Alcohol Study examined tobacco use among college students. Wechsler and his colleagues reported the following findings, in the articles noted:

- **Tobacco use is common among college students and is not limited to cigarettes.**
  - Nearly half (45.7%) of students who responded to the 1999 survey had used a tobacco product in the past year and a third (32.9%) currently used tobacco.
  - Cigarettes accounted for most of the current tobacco use (28.5 percent of those surveyed), but cigar use was also substantial (8.5%).
  - The article's authors concluded that "college appears to be a time when many students are trying a range of tobacco products and are in danger of developing lifelong nicotine dependence. National efforts to monitor and reduce tobacco use of all types should expand to focus on college students and other young adults." (Rigotti, Lee and Wechsler, "US College Students' Use of Tobacco Products: Results of a National Study," 2000)
- **Nine in 10 students who were current smokers had their first cigarette before age 19.** More than a quarter of college smokers began smoking regularly only after age 19 (many of them may have tried cigarettes in high school but did not become regular smokers until college). (Wechsler, Rigotti, Gledhill-Hoyt and Lee, "Increased Levels of Cigarette Use Among College Students: A Cause for National Concern," 1998)
- **Half of college smokers were "social smokers," who primarily smoked with others in social settings.** These social smokers smoked less often and with less intensity than other smokers and were less likely to have symptoms of nicotine addiction. Social smokers were less likely to report that they intended to quit, however. (Moran, Wechsler and Rigotti, "Social Smoking Among US College Students," 2004)

- **Smoking and drinking are closely tied.** The risk of smoking is higher among binge drinkers, those who drink to get drunk and students with diagnosable alcohol abuse symptoms. (Weitzman and Chen, 2005)
- **College students are important targets for tobacco marketing, since they are part of an age group (18–24 year olds) that is the youngest legal audience for the product.** One in 12 (8.5%) of students reported attending a bar, nightclub or campus social event where free cigarettes were distributed as part of a tobacco marketing campaign. Students at all but one of the 119 colleges surveyed reported observing this practice. (Rigotti, Moran and Wechsler, "US College Students' Exposure to Tobacco Promotions: Prevalence and Association with Tobacco Use," 2004)
- **To reduce student smoking rates, colleges have instituted bans on smoking in student dormitories, offices and all public areas on campus.** (Wechsler, Kelley, Seibring, Kuo and Rigotti, "College Smoking Policies and Smoking Cessation Programs: Results of a Survey of College Health Center Directors," 2001)
- **Smoke-free dorms appear to have the effect of lowering tobacco use rates.** (Wechsler, Lee and Rigotti, "[Cigarette Use by College Students in Smoke-Free Housing: Results of a National Study](#)," 2001)
- **College students strongly support a variety of tobacco control policies.** Three in four students supported policies making all college buildings, residences and dining areas smoke-free. Three in five students supported a prohibition on tobacco sales on campus and 51 percent supported smoke-free campus bars. These tobacco control policies had more support among non-smokers than smokers, although the support among smokers was also strong. (Rigotti, Regan, Moran and Wechsler, 2003)

### ***Illicit Drug Use***

The College Alcohol Study also examined college students' use of illicit drugs. Wechsler and his colleagues reported these findings in the journal articles cited:

- **Marijuana is the most common illicit drug used by college students.** In 1997, one in four college students reported using marijuana in the past year. Marijuana users were more likely than non-users to engage in other high-risk behaviors, such as binge drinking, cigarette smoking and having multiple sexual partners. (Bell, Wechsler and Johnston, "Correlates of College Student Marijuana Use: Results of a US National Survey," 1997)
- **Nonmedical use of prescription opioids, such as codeine and morphine, is also a problem on college campuses.** Approximately 12 percent of college students who responded to the 2001 survey reported nonmedical use of prescription opioids in their lifetime; 7 percent had used them in the past year. White students, males, fraternity and sorority members, and students with low grade point averages were more likely to use these substances. (McCabe, Knight, Teter and Wechsler, "Non-Medical Use of

Prescription Stimulants Among US College Students: Prevalence and Correlates from a National Survey," 2005)

### **Other High-Risk Behaviors**

The College Alcohol Study also examined other high-risk behaviors. The researchers reported the following findings related to gun ownership and gambling by college students in the articles cited:

- **Approximately 4 percent of college students reported that they had a working firearm with them at college.** Two percent of students said they had been threatened with a gun while they were at school. Students who kept guns were more likely than non-gun owners to be male, live off campus, binge drink, drive under the influence of alcohol and engage in vandalism. (Miller, Hemenway and Wechsler, "Guns at College," 1999, and "Guns and Gun Threats at College," 2002)
- **Two in five students (42%) reported gambling in the past year, and 3 percent gambled weekly or more frequently.** Gambling was associated with being male, drinking, binge drinking, illicit drug use, low academic performance and less time spent studying. (LaBrie, Shaffer, LaPlante and Wechsler, "Correlates of College Student Gambling in the United States," 2003)

### **Findings from College Alcohol Study Surveys of College Administrators**

The researchers identified the following key findings from the surveys of college presidents and senior administrators in 1999 and 2002. Additional detail on these surveys can be found in articles listed in the [Bibliography](#).

- **College administrators at most schools were aware of student drinking problems and engaged in a wide variety of efforts designed to prevent binge drinking, but they tended to focus those efforts on the individual student.** According to respondents to the 1999 survey:
  - Almost all colleges offered general educational interventions while some had educational efforts that targeted high-risk groups.
  - Schools implemented social norms campaigns designed to change student perception of normative drinking on campus.
  - Some schools had programs that extended beyond the campus to reach families or high school students.
  - Fewer schools directed attention to factors that may promote heavy drinking in their surrounding communities, such as lax local law enforcement and alcohol control policies, or density of alcohol outlets.
- **Nationally, most of the colleges surveyed in 1999 reported having a campus alcohol specialist, many had task forces and about half were performing in-**

**house data collection.** Less common were cooperative agreements with community agencies to share data, resources or strategies. Few administrators reported meeting regularly with neighbors or community groups to address problems related to student drinking.

- **Prevention practices varied with institutional characteristics and the administrators' perceptions of the severity of alcohol problems.** Respondents to the 1999 survey who perceived student alcohol abuse to be a major problem were much more likely to support implementation of various institutional actions than were their peers who perceived alcohol-related problems as less severe.
- **According to respondents to the 2002 college administrators' survey, most schools conducted targeted alcohol education and invested in institutional prevention efforts.**
  - Half conducted social norms campaigns, and a sizeable minority restricted alcohol on campus.
  - Schools that focused their efforts on reducing student demand for alcohol were less likely to curtail alcohol use on campus or at certain events.
- **In the 2002 survey, one in three schools received funding for their alcohol education and prevention programs from governmental agencies, and one in five received support from the alcohol industry.**
  - Schools that received government or industry funding were more likely to conduct targeted alcohol education and social norms programs and were less likely to restrict alcohol use on campus or at college events.

## Limitations

The College Alcohol Study employed a cross-sectional design (a descriptive study of a defined population at a particular point in time) and obtained self-reported data from students. The researchers noted several general limitations of this type of research.

- Responses to the College Alcohol Study surveys are self-reports to a mailed questionnaire. As with any self-report survey, responses are subject to sources of error associated with this approach, including intentional or unintentional response distortion and decreases in sample size through non-response.
- The study was administered during the spring semester; student behaviors may not be similar during other times of the year.
- The response rate to the student surveys declined after the initial 1993 survey and may have biased the results of later surveys. However, rates of drinking and other substance use in the College Alcohol Study closely matched rates found in other major national surveys. In addition, study researchers found no association between student response levels and binge-drinking rates.



## CONCLUSIONS

Wechsler and his colleagues drew the following conclusions from the College Alcohol Study, which they reported in their summary ("The Findings and Impact of the Harvard School of Public Health College Alcohol Study: Focusing Attention on Binge Drinking and the College Environment"):

- **Researchers should be wary of the results of single-college studies, given the great variability of college binge drinking rates nationally.** The findings of the College Alcohol Study suggest that associations found on one campus may be a result of factors specific to that school.
- **The lack of change in binge drinking among college students since 1993 is notable, given the significant efforts to combat the problem on college campuses.** The 2001 survey found that more students were exposed to educational materials about the risks and consequences of drinking, and a small but growing number reported experiencing sanctions, such as fines, community service requirements and other disciplinary actions. However, these efforts may not have been sufficient in their intensity or reach to impact binge-drinking levels.
- **For prevention efforts to be successful, schools and communities must go beyond "one-size-fits-all" approaches.** Heavy drinking behavior differs according to many personal factors—including gender, age, year in school, place of residence, interest in athletics or social activities—and other environmental factors—such as drinking levels at the school and in the state, state laws and college control policies. These results suggest that segmenting and tailoring efforts for specific populations may be important for successful prevention.
- **Prevention efforts should attempt to influence campus environments that promote alcohol.** Past prevention efforts have largely emphasized changing characteristics of individual drinkers, such as their knowledge, attitudes and experiences. Future prevention efforts should also focus on limiting the exposure of students to aggressive alcohol marketing, reducing the easy access to low-priced alcohol and other environmental factors that promote binge drinking.
- **Addressing environmental prevention will require that colleges work in partnership with agencies and organizations in the community, such as state and local lawmakers, regulatory agencies, public and private service providers and businesses.** Unfortunately, activism in these areas often falls outside the comfort level and expertise of traditional college alcohol-prevention staff. Given the unchanged nature of heavy drinking among college students and the serious health and social effects that result, campuses and communities may benefit from new and comprehensive approaches.



## SIGNIFICANCE TO THE FIELD

According to Wechsler's research team, the College Alcohol Study has played an important role in the national policy debate about drinking among college students and influenced major national and governmental action. As evidence, they note that:

- The office of the U.S. Surgeon General established a national goal to reduce college binge drinking by 50 percent as part of the "Healthy People 2010: Goals for the Nation."
- The National Institute of Alcoholism and Alcohol Abuse established a "college drinking" task force to make recommendations about the problem and targeted special grant programs to address this problem. The institute also adopted the 5/4 definition of binge drinking.
- The media and scientific communities commonly use the term "binge drinking" to describe the heavy drinking of college students. During the 1990s, the researchers observed a marked increase in the number of articles in major newspapers using the term "binge drinking," with the frequency of those stories increasing significantly following release of the College Alcohol Study findings in 1994.
- Since 1995, the Centers for Disease Control and Prevention has included annual measures of binge drinking in its state-by-state reports.
- The World Health Organization created a special program to address binge drinking.
- Researchers in nations including China, Korea, Poland, Switzerland and Great Britain have adapted questions from the College Alcohol Study surveys to use in their countries.
- The alcohol industry, particularly the large national breweries, have devoted significant resources and public relations efforts in an attempt to minimize the extent of the college alcohol problem; they have supported groups that attack the term binge drinking and the 5/4 measure (drinks for a man and for a woman).
- Graduate students at universities throughout the United States have authored 66 theses on the topic of binge drinking.
- College Alcohol Study articles make up seven of the top 10 most cited scientific papers on the topic of college drinking, including four of the top five.

## LESSONS LEARNED

1. **The communication of findings is an important element of carrying out a research study.** Publishing study results in peer reviewed professional journals is necessary to give the results credibility, but it involves a slow review process that may delay getting results to those who can act on them. Publishing the findings is

only the first step in dissemination. It is crucial to present the findings to the general public and to community leaders. (Project Director)

2. **When a health behavior such as binge drinking concerns a legal substance which is manufactured for profit, industry opposition to the findings should be anticipated and addressed.** The role of the alcohol industry on college campuses is pervasive and complex. Alcohol beverage manufacturers contribute to campus environments that promote drinking in a variety of ways, such as through college athletics; omnipresent signs, logos, and advertising of alcohol on campus; and the large number of alcohol outlets surrounding most campuses. (Project Director)
3. **Researchers found that working with colleagues from a variety of other academic disciplines and from other institutions was important.** Other researchers bring different perspectives to the data, enhance the scientific value of the work and help to increase the effective use and dissemination of the data collected. (Project Director)

## AFTERWARD

In a new review that examines the findings from the College Alcohol Study and their implications, the researchers conclude that heavy drinking behavior of students was more common in college environments that have a strong drinking culture, few alcohol control policies on campus or in the surrounding community, weak enforcement of existing policies, and alcohol made easily accessible through low prices, heavy marketing and special promotions. The review appears in the July 2008 issue of the *Journal of Studies on Alcohol and Drugs*. The review was conducted by the College Alcohol Study director Wechsler, and assistant director Toben Nelson, assistant professor of epidemiology and community health at the University of Minnesota.

The Harvard School of Public Health College Alcohol Study's most recent paper (in the *Journal of Studies on Alcohol and Drugs*, 69(4): 481–490, 2008; see [abstract](#)) reviews 14 years of findings from the College Alcohol Study and supplemental surveys. The authors refer to the combination of factors that promote heavy drinking as being a "wet environment." These factors include, but are not limited to:

- Easy accessibility to outlets that sell alcohol.
- Low prices for alcohol.
- Residential environments that encourage drinking.

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Program area: Vulnerable Populations

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## Data Tapes

All the national CAS data sets are available from the Inter–University Consortium for Social and Policy Research [website](#).

## Grantee Websites

<http://archive.sph.harvard.edu/cas>. The website of the Harvard College Alcohol Study offers extensive information of the study goals staff and findings. Users can access abstracts and the full text of all articles published on the study.

[www.alcoholpolicymd.com/programs/amod.htm](http://www.alcoholpolicymd.com/programs/amod.htm). The "A Matter of Degree" program evaluation website provides an overview of this project, links to findings and links to project partners.