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Environmental Strategies to Prevent Alcohol Problems on College Campuses

Prepared by

PIRE
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About This Guide

Alcohol problems on and around college campuses are serious and often life threatening. Fortunately, several promising strategies, proven to be effective, have been developed to prevent these problems in our colleges and universities and in the communities in which they reside. Recent research has provided further tools for reducing alcohol related problems among college students. This document describes strategies that are used to create healthier campus environments in which alcohol is less available, more responsibly promoted and served, and poses less of a threat to the health, safety, and well-being of all students.

The strategies described in this document accomplish these objectives by changing conditions on campuses, by coordinating and supporting efforts in communities surrounding campuses, and by fostering better structures within States to support campus efforts.

This document is a general overview and can be used to:

- raise awareness of the seriousness of alcohol problems on college campuses;
- improve understanding of environmental management strategies;
- help in the selection of the most appropriate and effective prevention strategies;
- aid in the coordination of strategies at the campus, community, and State levels; and
- provide other sources of information and guidance on alcohol prevention for college campuses.

Resources for more in-depth publications or "how to guides" that address specific strategies are listed at the end of this document under College Drinking Resources.

Contents

Introduction

Reports of alcohol-related disturbances and tragedies seem to pile up each year on college campuses. They include alcohol poisonings, injuries and deaths due to intoxication, alcohol fueled violence and property destruction. The National Institute on Alcohol Abuse and Alcoholism estimates that each year, drinking by college students has resulted in 1,800 deaths (usually from drinking and driving), 500,000 injuries, 600,000 assaults, and 70,000 sexual assaults or date rapes. Alcohol-fueled riots related to holidays or sports events are all too common.

For years, colleges have relied on educating young people about responsible behavior and the dangers of alcohol, though at the same time alcohol remained easily available, attractive, and inexpensive for students. An alcohol information pamphlet or other educational program cannot compete with "Nickel Beer Nite" at a pub across the street from the dorms or free beer at a fraternity party. In order for college students to behave responsibly, campuses and college communities need to create an environment that supports students in making the right decisions.

Alcohol problems on campuses cannot be solved with simple solutions, such as an alcohol awareness campaign. Instead, dangerous college drinking can be prevented with an array of protective measures that deal with alcohol availability, enforcement of existing laws and rules, and changes in how alcohol is promoted, sold and served.

Many people, particularly college kids themselves, believe that students are going to drink a lot no matter what. Far from being a statement of fact, however, this belief reflects the popular acceptance of the heavy-drinking environment around so many college campuses. That environment can be changed.

This guide describes how environmental management can change campus and community conditions in order to reduce the opportunities for illegal and dangerous alcohol use among students.

Environmental Management

Environmental management is based on the fact that people's behavior, including their use of alcohol, is powerfully shaped by their environment, including the messages and images delivered by the mass media, the norms of their communities and other social groups, the availability of alcohol, and so forth. Thus, effective prevention requires appropriately modifying the physical, legal, economic, and socio-cultural processes of the community at large that contribute to alcohol use and related problems (Holder, 1999). By targeting environmental factors, this approach to prevention differs from more traditional, individually oriented strategies, which tend to accept the environment and the risks it imposes as given and instead focus on enhancing individuals' abilities to resist its temptations.

Prevention directed at the environment generally relies on public policies (e.g., laws, rules, regulations) and other community-level interventions both to limit access to alcohol and to alter the culture and contexts within which decisions about alcohol use are made. Because environmental management affects whole populations and creates changes in the fundamental system wide processes underlying alcohol use, it can

potentially bring about relatively quick, dramatic, and enduring reductions in alcohol use problems. Prevention efforts conducted in communities have incorporated an increasing number of environmental strategies, and a body of research has accumulated showing that these strategies can be effective (for reviews of this literature, see *The Surgeon General's Call to Action on Underage drinking (2007), The Institute of Medicine's Reducing Underage Drinking: A Collective Responsibility,200,* Stewart and Sweedler, 2009, Stewart, 2007).

Recent research has confirmed the effectiveness of these kinds of strategies to reduce dangerous drinking on college campuses (Saltz et al., 2010).

A brief summary of the research evidence regarding environmental strategies for reducing alcohol-related problems is presented in Table 1.

Table 1. Evidence of Effectiveness of Environmental Strategies for Preventing Alcohol Problems

Strategy	Effects
Increasing the minimum purchase age to 21	■ Significant decreases in the number of traffic crashes and crash fatalities among young people (Hedlund, Ulmer, and Preusser, 2001; Toomey, Rosenfeld, and Wagenaar, 1996; Toomey and Wagenaar, 2002a; Voas, Tippetts, and Fell, 2003) ■ Reductions in youth injuries and suicide (Jones, Pieper, and Robertson, 1992; NHTSA, 1997; Yu, Varone, and Robinson, 1996) ■ Reductions in crime to include homicide and vandalism (Parker and Rebhun, 1995; Yu, Varone, and Robinson, 1996) ■ Reductions in consumption (Toomey and Wagenaar, 2002a; Yu, Varone, and Robinson, 1996) ■ Lowering the drinking age to 18 would result in more problem drinking among college students (Rasul et al., 2011)
Enforcing minimum purchase age laws through the use of undercover buying operations and other enforcement efforts	■ Increased retailer compliance with such laws (Lewis et al., 1996; Preusser, Williams, and Weinstein, 1994; Scribner and Cohen, 2001; Wagenaar and Wolfson, 1995; Wagenaar, Toomey, and Erickson, 2005) ■ Lower rates of heavy drinking by students (Harris et al., 2010; Knight and Harris, 2003)

Table 1. (Continued)

Strategy	Effects
Increasing the price of alcohol	■ Reductions in youth consumption (Coate and Grossman, 1988) ■ Reductions in violence on college campuses (Grossman and Markowitz, 2001) ■ Reductions in sexually transmitted diseases (Chesson, Harrison, and Kassler, 2000) ■ Reductions in crime (Saffer, 2001) ■ Reductions in motor vehicle mortality (Dee, 1999; Grossman, Chaloupka, Saffer, and Laixuthai, 1994) ■ Decreases in driving while intoxicated, rapes, and robberies (Cook, 1981; Cook and Moore, 1993; Cook and Tauchen, 1984) ■ Reductions in cirrhosis mortality rates (Becker, Grossman, and Murphy, 1991; Cook, 1981) ■ Campuses with lower prices had higher rates of heavy drinking (Williams et al., 2002)
Combining the training of managers and alcohol servers in responsible beverage service (RBS) techniques with enforcement of laws against service to intoxicated persons	■ Increased refusals of service to patrons who appear to be intoxicated and decreases in the number of arrested impaired drivers coming from bars and restaurants (McKnight and Streff, 1994; Toomey et al., 2001; Toomey et al., 2004)
Using legal deterrence measures designed to prevent impaired driving—lower blood alcohol concentration (BAC) limits for the general population and zero tolerance laws for youth	■ Reductions in the number of alcohol-related crashes and fatalities in numerous studies (Johnson, 1995; Shults et al., 2001; Voas, Tippetts, and Fell, 2003; Zwerling and Jones, 1999
Controlling outlet density of alcohol establishments	■ Reductions in underage youth access to alcohol, as well as drinking and driving by youth and riding with drinking drivers (Treno, Grube, and Martin, 2003; Treno and Holder, 1998) ■ Higher density in communities surrounding campuses associated with heavy drinking among students (Scribner et al., 2008)
Combining environmental strategies including 1) nuisance party enforcement operations that stepped up police response to disruptive parties and parties where alcohol was served to minors, 2) minor decoy operations to prevent sales of alcohol to minors, 3) driving-under-the-influence checkpoints, and 4) social host ordinances that held party hosts or organizers responsible for nuisance parties.	■ Reductions in heavy and risky drinking among students. (Saltz et al. 2010; Ringwalt et al., 2011)

The Focus on Alcohol on Campus

Surveys indicate that alcohol is the drug of choice on U.S. college and university campuses. The Monitoring the Future survey found that 79% of college students report alcohol use in the past year (Johnston et al., 2010). This percentage has declined somewhat in the past decade, but more troubling is that there are more than 1800 alcohol-related deaths each year among college students, while other negative effects related to college student drinking extend far beyond this figure to include 590,000 accidental injuries; more than 690,000 students assaulted by another student; more than 97,000 victims of sexual assault or date rape; and about 25% of college students reporting negative academic consequences (Hingson et al., 2009).

The Challenges for Colleges and Universities in Dealing with Alcohol Problems

Colleges and universities are in a unique and difficult position when it comes to dealing with students' use of alcohol. By the time they enter college, many young people have been drinking for years, albeit illegally. In addition to established drinking patterns, many students bring to campus strongly held expectations that drinking alcohol is an integral part of the college experience and the belief that to do so is their right. Such beliefs and expectations are often reinforced by various groups on campus.

Aside from the beliefs and behaviors that accompany students to campus, social and organizational factors also contribute to substance use and related problems. Enrollment at a traditional residential college or university typically affords young people increased privacy, decreased adult supervision, and more liberal norms than they experienced during high school when living with family members. Because some students are often aged 21 and older, campuses are home to both students younger than the minimum legal drinking age and students who can purchase alcohol and drink legally. Finally, there is significant ambivalence among administrators, parents, alumni, and faculty about how to deal with alcohol use among college students. This ambivalence comes from many sources:

- Personal experience (e.g., having been a drinker in college or attended college when most students could drink legally)

- General attitudes (e.g., drinking is an innocent rite of passage; experimentation and learning how to moderate alcohol use are a part of the educational experience of college students)

- Specific beliefs about alcohol problem prevention on campus (e.g., there is nothing institutions can do to prevent students from misusing alcohol because drinking on campus is a longstanding tradition or because drinking patterns are already set before students enroll; strictly enforcing alcohol policies may alienate alumni or place schools at a disadvantage in competing for students)

These factors encouraging college drinking have been part of the cultural landscape for decades. The situation has changed in more recent years, however. The emergence and proliferation of social networking has increased the ability of students to communicate about social life, for example, disseminating information about parties. Research about social networking shows that it can foster the impression ,among young people that drinking is normative and expected behavior (Litt and Stock 2011).

Some university administrators have advocated lowering the drinking age once again in order to relieve them of the responsibility of dealing with underage drinking. There is no research support for this strategy and in other places where the drinking age has been lowered, negative outcomes have been experienced (***New Zealand) Recent research modeling drinking behavior among students indicates that lowering the drinking age as suggested by proponents would not reduce problematic drinking among college students. (Rasul et al., 2011).

Institutions of higher education have faced increasing legal and political pressures during the past decades to reduce student misuse of alcohol and related problems. The Federal Government, through the U.S. Drug-Free Schools and Communities Act, requires colleges and universities to establish and enforce clear standards of conduct prohibiting the unlawful possession, use, or distribution of alcohol and illicit drugs by students and employees; failure to meet these and other requirements can put a school's Federal funding in jeopardy. Case law, including court rulings that have been increasingly sympathetic to victims who have sued third parties for damages caused by someone who was drinking, increases the potential liability of schools. Institutions of higher education can face criminal and civil lawsuits as licensed vendors or dram shops when they sell alcohol (as in a campus pub); as social hosts when they are considered agents, such as administrators or faculty when they serve alcohol or sponsor events where alcohol is served; and as proprietors or property owners when they fail to maintain safe premises by taking reasonable protective measures to guard against foreseeable risks (DeJong & Langenbahn, 1997).

Administrators are caught between the fear that a tragic event will occur if they do not tighten controls over alcohol and the threat of student protests and potential riots if they do (Wechsler, Nelson, and Weitzman, 2000b). The 2002 National Institute on Alcohol Abuse and Alcoholism (NIAAA) Task Force on College Drinking Report concluded that universities are often afraid to reveal that they have a problem with alcohol, even though they know a problem exists (NIAAA, 2002). Yet, administrators often recognize that their institutions are losing money due to the effects of alcohol use and misuse. The NIAAA report also asserted that the first six weeks of the semester are particularly critical to a first-year students' academic success. The binge drinking that occurs during these initial weeks of college often sets the pace for the rest of the year.

Political and legal developments, as well as increased general concern about student misuse of alcohol, have prompted schools to broaden their search for more effective prevention strategies. In 1995, the President of the University of Rhode Island took a hard line, banning alcohol at all social and athletic events. He implemented a "three strikes" policy in which a student found guilty of underage or public drinking is fined on a graduated scale for the first two offenses and suspended for a year for a third offense. According to the University's President, there were numerous benefits of taking a firm stand on alcohol, including increases in enrollment applications, better quality students, and greater participation in student activities such as drama and music, and alumni-giving (NIAAA, 2002).

Applying Environmental Strategies to College Campuses

In the past 10 to 15 years, colleges and universities have begun incorporating environmental management in their efforts to address campus substance abuse problems, and a variety of promising strategies have evolved. A few of these are truly unique to college and university settings, such as parental notification, substance-free dormitories, and interventions with Greek-letter organizations. The vast majority, however, are creative adaptations of strategies that have been used in other settings or with other target populations, including responsible beverage service (RBS) programs (typically used in community retail alcohol outlets), restrictions on alcohol marketing (traditionally implemented to protect youth in general from messages promoting substance use), and enforcement of minimum age purchase laws and laws against selling to intoxicated patrons.

To mount a comprehensive effort, colleges and universities have been encouraged to take action in three spheres where they have influence:

the institution, the surrounding community, and State-level public policy (DeJong et al., 1998). Efforts to address institutional and community factors typically involve collaboration among different groups—such as the administration, faculty, student health service (which includes counseling and treatment), athletic department, residential life, loss prevention, religious leaders, students, campus enforcement, and judicial affairs—that participate on a campus-wide taskforce; or collaboration among law enforcement agencies, students, alcohol retailers, public officials, and other concerned citizens as members of a campus-community coalition. Conversely, advocating for public policy changes is typically undertaken by individuals connected to the institution, such as administrators, faculty, and students acting as private citizens.

Facts about College Drinking

Although most students at institutions of higher education either do not drink or drink moderately, a sizeable minority of students report heavy alcohol use. Following are some examples:

- 73 percent of fraternity and 57 percent of sorority members are binge drinkers (Wechsler and Wuethrich, 2002)
- 58 percent of male athletes and 47 percent of female athletes are binge drinkers (Wechsler and Wuethrich, 2002)
- Frequent binge drinkers constitute less than one-quarter of all students (23 percent), but consume three-quarters (72 percent) of the alcohol that college students drink (Wechsler and Wuethrich, 2002)
- About one in seven college students (14%) reported having ***10 or more drinks in a row*** at least once in the prior two weeks, and 5% (or 1 in 20) reported ***15 or more drinks in a row***. (Johnston et al., 2010)

With these very heavy drinking incidents, it is not surprising that alcohol poisonings occur or that students are injured or killed in accidents as simple as falling out of a dormitory window. In other nationwide studies, researchers found the following:

- Drinking by college students aged 18-24 contributes to an estimated 1,800 student deaths, 590,000 injuries, 690,000 alcohol-involved assaults, more then 97,000 cases of sexual assault or date rape each year. (Hingson et al., 2009).
- In 2009, college students were modestly higher in lifetime, annual, and 30-day use of ***alcohol*** than the noncollege group; the difference was largest in the 30-day rate (66% vs.56%) (Johnston et al., 2010).
- College students had a higher prevalence of ***occasions of heavy drinking*** (five or more drinks in a row in the past two weeks)—37% versus 30% among their age peers. *Indeed, nearly half of all college students (42%) report having* ***been drunk*** *in the prior 30 days, compared to 37% of the noncollege respondents* (Johnston et al., 2010).
- In high school, college-bound students, especially in earlier grades, were far less likely to drink alcohol at any level compared to their non-college-bound peers (Johnston et al., 2010)

- About 25 percent of college students report negative academic consequences from their drinking, including missing class, falling behind, doing poorly on exams or papers, and receiving lower grades overall (Hingson et al, 2009)
- Problems associated with alcohol are not only experienced by heavy drinkers, but also by abstainers and moderate drinkers who have had their sleep or study interrupted, have had to take care of a drunken student, have been insulted or humiliated, have had a serious argument or quarrel, have experienced an unwanted sexual advance or sexual violence (females only), have experienced physical violence, and have been the victim of property damage (Wechsler, et al., 2002).

NIAAA Report
A Call to Action: Changing the Culture of Drinking at US Colleges
April 2002

The Task Force on College Drinking released a report titled "A Call to Action: Changing the Culture of Drinking at U.S. Colleges." This report was commissioned by NIAAA to determine the factors that influence college drinking, approaches to help college administrators address the problem, and resources for more detailed information on the topic. The report described dangerous drinking behaviors by college students and associated consequences for both drinkers and nondrinkers. The task force recommended a series of evidence-based strategies, calling for collaboration between colleges and universities and researchers. The task force suggested four tiers of recommendations.

Tier 1: Evidence of Effectiveness Among College Students:

- Combining cognitive-behavioral skills with norms clarification and motivational enhancement interventions;
- Offering brief motivational enhancement interventions; and
- Challenging alcohol expectancies.

Tier 2: Evidence of Success with General Populations that Could be Applied to College Environments:

- Increased enforcement of minimum drinking age laws;
- Implementation, increased publicity, and enforcement of other laws to reduce alcohol-impaired driving;
- Restrictions on alcohol retail outlet density;
- Increased prices and excise taxes on alcoholic beverages;
- Responsible beverage service policies in social and commercial settings; and
- The formation of a campus and community coalition involving all major stakeholders may be critical to implement these strategies effectively.

Tier 3: Evidence of Logical and Theoretical Promise, but Require More Comprehensive Evaluation:

- Adopting campus-based policies and practices that appear to be capable of reducing high-risk alcohol use such as:
  - reinstating Friday classes and exams to reduce Thursday night partying; possibly scheduling
  - Saturday morning classes;
  - implementing alcohol-free, expanded late-night student activities;
  - eliminating keg parties on campus where underage drinking is prevalent;
  - establishing alcohol-free dormitories;
  - employing older, salaried resident assistants or hiring adults to fulfill that role;
  - further controlling or eliminating alcohol at sports events and prohibiting tailgating parties that model heavy alcohol use;
  - refusing sponsorship gifts from the alcohol industry to avoid any perception that underage drinking is acceptable; and
  - banning alcohol on campus, including at faculty and alumni events.
- Increasing enforcement at campus-based events that promote excessive drinking;
- Increasing publicity about and enforcement of underage drinking laws on campus and eliminating "mixed messages";
- Consistently enforcing disciplinary actions associated with policy violations;
- Conducting marketing campaigns to correct student misperceptions about alcohol use;
- Provision of "safe rides" programs;
- Regulation of happy hours and sales; and
- Informing new students and their parents about alcohol policies and penalties before arrival and during orientation periods.

Tier 4: Evidence of Ineffectiveness:

- Informational, knowledge-based, or values clarification interventions about alcohol and the problems related to its excessive use, when used alone.
- Providing blood alcohol content feedback to students receiving lower grades overall (Engs, Diebold, and Hansen, 1996; Wechsler et al., 2002).

A status report on progress to implement the NIAAA recommendations was published in 2010 (Nelson, et al.). This survey of college and university administrators found that the primary approach colleges use to address student alcohol use is student education. This despite the fact that the NIAAA College Drinking Task Force report found strong evidence that educational programs, by themselves, were ineffective in reducing student alcohol use and related problems (Malloy et al., 2002).

The best available scientific evidence indicates that colleges can effectively address student drinking by working with authorities in their surrounding communities to implement efforts to reduce access to alcohol, including compliance checks, reducing alcohol outlet density, mandatory responsible beverage service training, and increasing the price of alcohol (Malloy et al., 2002). According to the 2010 progress report, despite these recommendations and strong evidence of continued problems with heavy drinking by students, very few colleges have taken steps to collaborate with local authorities or advocacy groups to implement these recommendations.

Specific findings include:

- Most administrators reported that they had not implemented, planned, or discussed efforts to restrict the number of retail alcohol outlets (79%), increase the price of alcohol (86%) or institute mandatory responsible beverage service training (73%)
- Only 1 in 3 administrators reported that compliance checks at alcohol outlets were conducted in their college communities
- Approximately 2 in 3 colleges (67%) reported that they provide intervention programs for students who are problem drinkers or at high risk for experiencing drinking-related problems (a Tier 1 strategy) Overall, only half the colleges (50%) offered empirically supported intervention programs.
- Nearly all colleges (98%) reported that they use 1 or more methods to educate their students about the risks of alcohol use. Less than half of colleges require some or all of their undergraduate students to participate in alcohol education programs (42%).
- Large schools were more likely to provide intervention programs for high-risk students. They were also more likely to have mandatory responsible beverage service training for servers and compliance checks to monitor sales to underage patrons in their communities (Nelson et al., 2010).

The following sections include descriptions of strategies used by institutions of higher education across the three spheres of influence: the institution, the surrounding community, and State-level public policy. Where available, brief case study examples are given and research findings are discussed.

Environmental Prevention Strategies for Colleges and Universities

Campus Strategies

The greatest numbers of strategies have been developed for addressing institutional factors on campus related to substance abuse. Although all students may be considered "at risk" as potential violators or victims of alcohol-related problems, four main "at risk" groups emerge from anecdotal and research observations: college freshmen, athletes, Greek-letter organizations, and habitual heavy drinkers. It is important that campuses and communities focus on the locations and contexts in which these "at risk" groups drink, rather than focusing on only the groups themselves, when applying environmental management strategies.

Examples of campus-wide processes contributing to student substance abuse include lax enforcement of school policies prohibiting illegal substance use, campus social traditions centered on drinking, extensive marketing directed at students by the alcohol industry, the availability of alcohol and other drugs, and campus social norms supportive of use. Strategies to combat these problems include better policies that are clear, concise, well communicated and consistently enforced; provision of more alcohol-free activities; responsible beverage service programs; restrictions on alcohol marketing; changing social norms; substance-free housing; and interventions with Greek-letter organizations. Table 2 provides examples of the strategies outlined below and how they have been successfully implemented at colleges in the United States.

Policies

Policies are often the cornerstone of college/university efforts to prevent substance abuse by students and create a safer campus environment. As previously mentioned, the Drug-Free Schools and Communities Act mandates that schools enact policies for preventing the unlawful use, possession, sale, or distribution of alcohol and illicit drugs by students and employees. Further, as a condition of receiving any Federal financial assistance, the institutions must inform students annually of, among other things, their standards of conduct that clearly prohibit unlawful alcohol- and drug-related behavior; the applicable legal and disciplinary sanctions

"Safer" Colleges can Reduce Heavy Drinking

A recent study shows that changing rules and enforcement on and near college campuses can significantly reduce heavy and dangerous drinking among college students. The Safer California Universities study was designed to identify those areas of the campus environment in which heavy and dangerous drinking occurred and to implement strategies to change that environment in positive ways. The study involved 14 large public universities in the state, half of which were assigned randomly to the Safer intervention condition after baseline data collection in 2003.

Environmental interventions took place in 2005 and 2006 after one year of planning with seven Safer intervention universities. The Safer environmental interventions included 1) nuisance party enforcement operations that stepped up police response to disruptive parties and parties where alcohol was served to minors, 2) minor decoy operations to prevent sales of alcohol to minors, 3) driving-under-the-influence checkpoints, and 4) social host ordinances that held party hosts or organizers responsible for nuisance parties. Campus and local media were used to increase the visibility of environmental strategies.

Survey results showed that students were significantly less likely to become intoxicated at off-campus parties and bars/restaurants at the Safer intervention universities compared to the control campuses. Significantly fewer students at the Safer intervention schools also reported that they became intoxicated the last time they drank at an off-campus party; a bar or restaurant; or any setting.

One very important finding was that there was no increase in intoxication in other settings. Therefore, the researchers concluded that students simply drank less – they didn't just move their drinking to a different venue.

Lead researcher, Dr. Robert. Saltz stated, "College drinking has become a dangerous and persistent problem. But these findings should give college administrators and communities around colleges the evidence and motivation they need to put effective strategies in place. The take-home message is that it is possible to combine well-chosen, evidence based strategies that change the college environment and ratchet down the harm currently produced by alcohol use by college students." (Saltz et al. 2010)

Jeanne Clery Disclosure of Campus Security Police and Campus Crime Statistics Act

In addition to requirements established in the Drug Free Schools and Communities Act, college campuses are required by the Jeanne Clery Disclosure of Campus Security Policy and Campus Crime Statistics Act to report campus crime statistics (including alcohol-related crimes) annually in a consistent manner. Schools must issue timely warnings to the campus community about crimes that pose an ongoing threat to students and employees. The Act also requires campuses to describe their crime prevention programs and strategies to increase awareness about the issues and promote behavioral change, particularly among female students. Because the law is tied to participation in Federal student financial aid programs, it applies to most public and private institutions of higher education. The law is enforced by the U.S. Department of Education.

The Campus Security Act has been a useful tool for college communities. It has helped students and parents become better informed about campus-related crimes so they can take preventive measures to avoid victimization. It also has aided campus law enforcement officials in bringing together campus administrators and students as part of the campus security team. Most importantly, it has acted as a motivating force for change within campus and community environments to protect students from alcohol-related crime and other negative consequences.

Table 2. Campus Strategies

Strategy	Example
Policies Clear rules regarding the sale, provision, possession, and use of alcohol on campus, as well as consistently enforced penalties for violating the rules	In 1999, Lehigh University implemented several new policies to limit the amount of alcohol being served at fraternity and other social events. These policies included limiting the amount of alcohol permitted at the event, monitoring of the event by University staff, and using hired bartenders who have completed required server training. The University also clarified disciplinary action for behavior that promoted alcohol abuse (e.g., "shot gunning") and implemented a parental notification policy for alcohol violations (Higher Education Center, n.d.). The University experienced a dramatic reduction in alcohol-related crimes on campus. Overall, crime on campus decreased 39.8 percent between 1996 (base year) and 2000. Alcohol-related crimes included disorderly conduct, driving under the influence (DUI), assault, and vandalism (Smeaton, Eadline, Egolf, and DeJong, 2003). A study of 14 California universities found that a combination of well-publicized rules, enforcement and penalties resulted in a reduction in heavy and risky drinking (Saltz 2010).
Parental Notification A policy option in which institutions inform parents/guardians of alcohol and other drug offenses committed by students who are younger than age 21	Since the implementation of a parental notification policy at Texas A&M University in 1999, the University has seen a significant decrease in the number of alcohol violations and recidivism rates of its students. The majority of parents have been supportive of the policy, and more than 25 other colleges and universities across the State have implemented parental notification policies following the Texas A&M model (Underage Drinking Enforcement Training Center, 2004b).
Alcohol-Free Alternatives Venues and events that provide students with the opportunity to socialize in an alcohol-free environment	Pennsylvania State University now allocates more than $110,000 a year for activities scheduled from 10 p.m. to 2 a.m. on weekend nights, including first-run movies, hypnotist shows, ballroom-dancing lessons, and concerts. The school has seen attendance at these events more than triple, to 24,000 students a semester, in just 2 years (Kleiner, 2005).
Responsible Beverage Service (RBS) Training for managers, alcohol servers, and social hosts to reduce the risks of sales to minors, intoxication, and impaired driving	The University of Vermont led a cooperative effort to develop a responsible alcohol beverage service training for bar owners, managers, and servers. The training now supplements a statewide Department of Liquor Control (DLC) education program by requiring more frequent training for all bar employees in the city of Burlington. The University-led coalition also met success with development of more stringent guidelines for events in bars such as no entry after 11 p.m., no re-entry into the event, and registration of the event with the police department. The training and guidelines are now written into the annual liquor license renewal process for bars in Burlington (Silver Gate Group, 2003).

Table 2. (Continued)

Strategy	Example
Restrictions on Industry Marketing Limitations on the amount and type of pro-drinking messages that students see on campus and in association with campus events	The State University of New York at Albany's Committee on University and Community Relations developed a voluntary "Tavern Owner Advertising Agreement" that specifies allowable on-campus advertising and encourages avoidance of language that may promote excessive or irresponsible drinking. Participating tavern owners agree to review the content of their advertisements, and committee members also monitor on-campus advertising and revise unsuitable ads to meet guidelines. Since installing this program, the University at Albany has seen an 89 percent reduction in hotline calls with complaints about off-campus student drinking, plus an equally dramatic reduction in noise violations recorded by Albany police (Higher Education Center, n.d.). In 2002, the University of the Incarnate Word (UIW) in San Antonio, Texas, banned alcohol advertising and promotions on its campus. To enforce the ban, UIW partnered with the Texas Alcoholic Beverage Commission (TABC). UIW campus police report policy violators to TABC, and the agency, in turn, contacts the establishment to explain the policy and encourage compliance. The University has witnessed a significant decrease in the number of alcohol advertisements that appear on campus (Underage Drinking Enforcement Training Center, 2005b).
Social Norms Interventions Efforts to establish positive social norms and expectations about alcohol use, including strong intolerance for alcohol misuse	Western Washington University (WWU) found that using consistent normative messages about the moderate, non-problematic drinking of the majority of students has produced a 35 percent decrease in self-reported frequent heavy drinking among WWU students (Higher Education Center, n.d.).
Substance-Free Housing On-campus residences set aside for students who are committed to living in an environment free of illicit drugs, and often alcohol and cigarettes as well	The University of Michigan began its substance-free housing program with just 500 students. Within 5 years, 30 percent of the school's undergraduates were living on campus in substance-free settings (Higher Education Center, n.d.).
Interventions with Campus Greek Organizations Strategies focused specifically on fraternities and sororities, organizations often associated with high levels of binge drinking and alcohol-related problems	The North American Interfraternity Conference (NIC) provides resources for its members to plan social events that are substance-free with the help of "theme party kits". Kits provide tips for hosting parties in which alcohol is served, such as hiring third-party vendors, establishing a ticket system for those older than age 21, and limiting the amount of alcohol at an event. NIC also provides guidance on establishing alcohol-free housing (NIC, 2005). California State University-Fullerton (CSFU) implemented new party standards to address alcohol-related issues and general safety. The new rules require fraternities to hire a minimum of two security guards to monitor events, to prohibit fraternity chapters from hosting parties on the same night, and to supply a guest list of party invitees that is strictly enforced by campus security (Bellendir, 2005).

Table 2. (Continued)

Strategy	Example
Campus-Community Collaborative Strategies Efforts to ensure that schools and their surrounding communities work together to enforce relevant alcohol-related laws and establish consistent messages about responsible hospitality	Campus-community collaboration to address "out-of-control" parties through enforcement initially resulted in more than 200 citations for students at the University of Nebraska-Lincoln. Interventions with property owners involved warnings for landlords of student housing units with multiple "disorderly house" citations. Owners were informed of sanctions that could be imposed in the future. Efforts in Lincoln ultimately resulted in a significant decline in citizen complaints and calls for police service (Silver Gate Group, 2003). Eastern Illinois University (EIU) and the City of Charleston were awarded an Enforcing Underage Drinking Laws (EUDL) college discretionary grant to support its efforts in preventing underage drinking. Its strategies resulted in strong campus/community collaborations that included increased enforcement supported by education and policy change. Its results were significant. EIU and the City of Charleston improved campus and community environments by a *100 percent* retailer compliance with minimum legal drinking age laws (school year 2010–2011) and reduced recidivism rates of student alcohol-related offenses by 16 percent (in the first 6 weeks of the school year) through high-visibility enforcement and information dissemination. A referral system was established to create a consistent campus response to student alcohol-related offenses, *whether committed in the local community or on campus*. A local ordinance was passed to prohibit restaurants from serving alcohol after their kitchens have closed. The ordinance also encourages a "two ID" check system that is expected to reduce the number of borrowed identifications and make identifications more difficult to borrow. (UDETC 2011) The University of Nevada Reno has formed a coalition with local law enforcement agencies to address underage drinking. The coalition has three goals: to (1) change the social norms that encourage or support underage student drinking behaviors; (2) reduce the availability of alcohol to underage students on and off campus through enforcement; and (3) enhance existing alcohol laws, policies, and practices addressing underage student drinking behaviors. One result of coalition activities was that Reno judges agreed to pilot uniform and consistent sentencing practices for first time and repeat student offenders to rectify disparities between adjudication of on-campus and off-campus violations of alcohol laws and policies. At UNR, the student code of conduct only allows for interventions of alcohol-related incidents that occur on campus property. The new sentencing pilot with local judges helps create a unified approach to adjudication of on-campus and off-campus alcohol-related violations. (UDETC 2011)

Table 2. (Continued)

Strategy	Example
Combined Enforcement and Policy Strategies included 1) nuisance party enforcement operations that stepped up police response to disruptive parties and parties where alcohol was served to minors, 2) minor decoy operations to prevent sales of alcohol to minors, 3) driving-under-the-influence checkpoints, and 4) social host ordinances that held party hosts or organizers responsible for nuisance parties	A combination of strategies at 14 large public universities in California resulted in reductions in heavy and risky drinking among students (Saltz et al., 2010).

for violating the standards of conduct; and a clear statement that the school will impose disciplinary sanctions on violators. Other behaviors linked with alcohol misuse that are frequently covered by student codes of conduct include endangerment of students' health or safety, such as alcohol poisoning, hazing, disruptive behavior, vandalism, harassment, and criminal offenses, such as sexual assault, physical assault, and driving under the influence (DUI) of alcohol.

According to one study, binge drinking can either be acquired or avoided in college among students who report they did not binge drink in high school. College students who reported that they were exposed to "wet" environments were more likely to engage in binge drinking than were their peers without similar exposures. Wet environments included social, residential, and market surroundings in which drinking is prevalent and alcohol cheap and easily accessed. Students who picked up binge drinking in college also were more likely than their peers to report inflated definitions of binge drinking and more permissive attitudes about appropriate ages for legal consumption. Thus, reducing college binge drinking may require efforts to limit access/availability, control cheap prices, and maximize substance free environments and associations (Weitzman and Nelson 2003).

Aside from policies specific to unlawful substance use, schools also establish policies governing the conditions of alcohol use and sales on campus for those older than 21. For instance, schools that permit students older than 21 to use alcohol on campus can designate specific locations where drinking is permitted, such as faculty housing, private dormitory rooms, fraternity or sorority houses, or a variety of public venues such as common spaces in residence halls (e.g., hallways, lounges). Policies also can designate the locations where alcohol can be sold on campus, such as the faculty lounge, athletic stadiums, the student union, or a campus pub.

Schools also can place restrictions on the use of alcohol at certain types of events. For example, in September 1999, the University of Delaware began to enforce an 11-year-old policy that requires tailgating to cease during any athletic event. It clearly states that "all tailgating must end at the start of the game and fans must either enter the stadium or leave University of Delaware property." As a result, there has been a reduction in the number of alcohol poisonings and arrests during home football games (Higher Education Center, n.d.).

In 1996, the University of Colorado at Boulder instituted a temporary ban on beer sales in its campus stadium, Folsom Field, and made it a permanent policy in 1998. Bormann and Stone (2001) collected two years of incident data following the ban and their study showed a dramatic decrease in arrests, assaults, ejections from the stadium, and student referrals to the judicial affairs office. Consequently, the University adopted a zero tolerance approach to violations of rules on substances banned from football games and a "two strikes" policy for alcohol-related violations, which may result in suspension and/or ejection from the institution.

No single set of policies works best across all institutions. Each university, therefore, must develop its alcohol-related rules and regulations based on the university's environment. Research clearly indicates, however, that while college students are heavy drinkers as a group, drinking behavior varies widely by college. College environments that afford easy access to low-cost alcohol, have few policies restricting accessibility to alcohol, and have lax enforcement of existing policies create the conditions for heavy drinking among college students (Wechsler et al., 2008)

In another study of the state university system in Massachusetts, stricter enforcement by campus security officers of policies that limit underage drinking were associated with lower rates of heavy drinking by students (Harris et al., 2010; Knight and Harris, 2003)

Another point on which there is consensus is that for policies to be effective, they must be clear; concise; well communicated; and strongly, fairly, and consistently enforced. Thus, schools are urged to develop their policies and sanctions carefully. Any ambivalence that results in uneven enforcement can lead to mixed messages about what are acceptable behaviors, as well as resentment if some groups are held accountable while others are not. The Department of Public Safety at Saint Louis University applies an environmental management approach to their enforcement practices—a combination of awareness building; policy development; community involvement; enforcement of campus, local, State, and Federal laws and policies; and effective use of media— to more effectively address underage and high-risk drinking on and off campus. Crime statistics from 1999 to

2004 demonstrate a strong correlation between increased levels of consistent enforcement and positive effects on reductions in alcohol-related incidences (Department of Public Safety, Saint Louis University, 2005).

The Higher Education Center for Alcohol and Other Drug Prevention recommends that firm and consistent enforcement on campus of the minimum legal drinking age and DUI include:

- establishing a zero tolerance policy for the use of fake age-identification (IDs) cards; and
- taking meaningful disciplinary actions against those who serve alcohol to minors on campus and students who drive or commit other infractions such as assault, theft, and vandalism while under the influence of alcohol (DeJong, n.d.; Wechsler, Moeykens, & DeJong, n.d.).

Further, it advises schools to use penalties such as fines, probation, community service, suspension, and expulsion rather than relying so heavily on issuing warnings and referring violators to alcohol education programs.

At Chico State University, students convicted of driving under the influence are denied on-campus parking permits, and the school notifies parents of the conviction (DeJong, n.d.). Some schools revoke campus housing for students found guilty of having committed alcohol-related offenses. Schools are urged to use their own judicial systems (such as judicial affairs) to investigate charges and impose school penalties against perpetrators of alcohol-related offenses, even if criminal justice charges are not filed (Finn, n.d.).

Research indicates that alcohol price and campus policies are very important to the development of drinking behavior among students. One study found that students who faced a higher price for alcohol are less likely to make the transition from abstainer to moderate drinker and moderate drinker to heavy drinker. Campus bans on the use of alcohol are a deterrent to moving from abstainer to moderate drinker and to a lesser extent from moderate drinker to heavy drinker (Williams et al., 2002).

A recent study indicates that increasing drink prices and requiring more morning classes or other academic obligations may be useful in preventing heavy drinking among college students (Skidmore and Murphy 2011).

Parental Notification

Parental notification of student alcohol violations on and off campus has emerged as a promising environmental management strategy that has been anecdotally effective in reducing alcohol-related infractions. The University of Delaware was the first institution of higher education to adopt this policy strategy in 1997. In 1998, the University sent letters to the parents of

1,414 students who had violated the school's disciplinary rules. As a result of parental notification and a "three-strikes" policy providing clear sanctions for violations, such as suspension and loss of tuition and housing support, the school experienced reductions in dorm vandalism, fraternity disciplinary cases, and student hospitalizations for alcohol overdoses (Wechsler and Wuethrich, 2002). The University of Delaware example preceded a Federal law signed in 1999, an exception to the Educational Rights and Privacy Act of 1974 known as the Buckley Amendment, that permits schools to disclose to parents violations of not only local, State, and Federal laws, but also school policies and rules governing the use or possession of alcohol or controlled substances.

In 2003, the University of New Hampshire modified its parental notification policy to include alcohol and other drug offenses cited by residence hall directors and other internal sources, in addition to citations or arrests made by Durham Police or University police (Join Together Online, 2003). Reportedly, parents have been supportive of the parental notification policy. An evaluation to ascertain the effectiveness and impact of this judicial measure is underway.

Campuses across the United States are adopting parental notification policies to curb underage and hazardous alcohol consumption by students. Anecdotal evidence suggests that this strategy is promising; however, formal evaluation is needed to substantiate its level of effectiveness.

Provision of Alcohol-Free Alternative Activities

Providing places on campus for alcohol-free leisure activities for students is another way for schools to take the focus off alcohol as a central activity at colleges and change campus alcohol norms and expectations. These activities may include "dry" pubs, coffeehouses, cafes, and arcades. Schools also can ensure that sport and recreational facilities, such as gyms and bowling alleys, are open at times when students report they often drink because there is nothing else to do. At Stanford University, the Stanford after Midnight (SAM) program allows students to have extended hours of access to commonly used facilities including the coffeehouse, selected dining

facilities, student center meeting rooms, gym, and fitness center, all of which are open until 2 a.m. Sections of the library and computer center also are open 24 hours a day, 7 days a week (Higher Education Center, n.d.).

Several schools have tried replacing alcohol-involved social traditions with new events. At the University of North Carolina at Chapel Hill, the Sunday before classes began in the fall had become a traditional occasion for thousands of students to gather and drink heavily in the on-campus fraternity courtyard and at off-campus bars and parties. In 1997, the University organized its first Fall Fest, an alcohol-free street festival with free drinks and food, sports activities, carnival games, music, and prizes, as an alternative way for students to meet and begin the new academic year. The success of the first Fall Fest was measured not only in terms of high student participation, but also in decreases compared to the same time the previous year in alcohol-related urgent care visits to University student health services (8 vs. 0), the number of alcohol-related events held both on and off campus (30 vs. 19), and reported attendance and volume of business at off-campus bars (Higher Education Center, n.d.).

In 1997, the "Five College Alcohol and Other Drug Committee," composed of Smith College, Amherst, Mt. Holyoke, Hampshire College, and University of Massachusetts, launched an alternative programming website headed by Smith College. Students and staff members submit events to be posted through a simple questionnaire found on the site, which is then reviewed by the Web page manager for appropriate posting as an alcohol-free event. All events are substance-free and provide up-to-date listings of stress busters, movies, cultural events, outdoor fun, dances, and parties that appeal to a wide range of students. Monthly contests for giveaway items donated by community businesses entice students to check out the site. The Web site receives between 300 and 500 hits a week. By providing easy access to alcohol-free options, the partners of this project are dispelling the belief that there is nothing else to do but drink, and thereby helping to re-shape the environment in a positive and healthy way (Higher Education Center, n.d.).

Initial reports indicate that starting new alcohol-free traditions can effectively reduce alcohol-related problems. However, organizers must solicit input from and involve students in the planning of events to ensure that they will appeal to their intended audience.

Responsible Beverage Service (RBS) Programs

RBS programs provide training to managers and alcohol servers in commercial establishments to reduce the risks attendant with the way alcohol is promoted and served. Programs often have three objectives: (1) to prevent the service of alcohol to persons under 21, (2) to reduce the likelihood that drinkers will become intoxicated, and (3) to prevent those who are impaired by alcohol from driving. Training for alcohol servers focuses on increasing their awareness of the social and legal responsibilities associated with serving alcohol and teaching them service intervention techniques, such as how to recognize fake IDs and signs of intoxication, how to slow or refuse service to patrons, and how to find alternative transportation for impaired patrons. Training for managers focuses on ways of providing an environment in which excessive alcohol use is not encouraged (through restrictions on alcohol price reductions and other promotions) and on supporting the interventions of alcohol servers.

RBS programs are catching on at colleges and universities. A variety of management policies, such as pricing strategies, can be instituted at on campus outlets (such as pubs) to eliminate inducements for students to drink heavily. One policy approach is to prohibit discount promotions for alcoholic beverages (e.g., happy hours, two-for-one specials, pitcher sales, "ladies night," and "all-you-can-drink for a fixed price"). Another approach is to "price up" alcohol—that is, make sure that alcoholic beverages are at least as expensive, if not more expensive, than non-alcoholic drinks. One method for keeping alcoholic drink prices higher than non-alcoholic ones is to tax alcohol sold on campus by assessing a surcharge. The Campus Alcohol Policies and Education program (Hart, McCready, Simpson, and Solomon, 1986) recommends a number of pricing policies; for example:

- price non-alcoholic beverages lower than the least expensive alcoholic beverage;
- price drinks according to alcohol content (i.e., charge less for low alcohol beverages); and
- ensure that complete price lists are available to allow patrons to clearly understand price differentials between types of beverages (non-alcoholic, low-alcohol, regular alcohol).

Other management policies may include serving alcohol in smaller-sized containers, limiting the number of drinks or servings per alcohol sale, eliminating announcements of "last call," providing alcohol-free drinks and

food, and hiring staff aged 21 or older. In addition to management policies, many schools that have on campus alcohol outlets require RBS training for servers to include refresher courses as one way to try to reduce their liability as alcohol vendors. RBS training may be provided by State liquor authorities, local enforcement, or private vendors approved by the institution such as the TIPS (Training in Intervention Procedures by Servers of Alcohol) program that has been offered at more than 300 colleges and universities nationwide.

Colleges and universities also are adopting RBS programs for social hosts—faculty, students, and social organizations—holding events where alcohol will be served. Many schools require that social events involving alcohol that are hosted by students be registered with a designated school office. In addition, DeJong and Langenbahn (1997) identified several rules or requirements that can be applied to social hosts, some of which are:

- pre-event planning (e.g., developing an invitation list that identifies each expected guest, designating an explicit beginning and ending time, and requiring promotions for the event to include a statement regarding the minimum legal drinking age and the organizers' intent to enforce it);
- entrance to the event (e.g., limiting admission to the guest list, not admitting anyone who is intoxicated, and requiring proof of age to attend the event and to be served alcohol);
- alcohol access (e.g. using bartenders and prohibiting self-service by guests, limiting the amount of alcohol at events as well as the number of drinks guests can be served at one time, using wristbands to identify guests aged 21 and older, and banning alcohol as a prize for any contest or party game);
- personal conduct (e.g., prohibiting the misrepresentation of alcoholic beverages as being non-alcoholic and banning drinking games or other potentially dangerous drinking activities); and
- event ending (e.g., stopping the service of alcohol one hour before the event ends and not allowing guests to leave with alcoholic beverages).

Additional rules or requirements by institutions of higher education may include approved security personnel or "party monitors" who may be faculty at the institution, alcohol permits (if applicable), designated areas for alcohol consumption, and availability of food and non-alcoholic beverages. The University of Arizona designed policies to reduce alcohol consumption at homecoming events by: requiring organizations serving alcohol in their tents to hire bartenders; restricting alcohol service to certain areas

within each tent; banning open kegs; limiting purchases to two drinks at a time; conducting ID checks to eliminate underage drinking; requiring each organization with a tent to have liability insurance for the pre-game event; instructing "tailgaters" not to display large quantities of alcohol or to have open bar tables; and prohibiting the display or consumption of alcohol on parade floats. Since implementation of these policies, the Tucson Police Department reports fewer neighborhood calls for service during homecoming events and fewer reported incidents of alcohol-related problems (Higher Education Center, n.d.).

At Stanford University, trained peer educators, called "The Party Pro's," consult with students who are planning a party on issues such as budgeting, fundraising, and event promotion. The RBS component includes training for student bartenders; enlisting "sober monitors" (student volunteers whose job is to watch over the guests and party activities); and providing "escort coordinators" (who help ensure that guests are using designated drivers or have other safe transportation home). In addition to assisting students holding parties, the Stanford project also helps student groups, including fraternities and sororities, develop policies for their social events. According to DeJong (n.d.), an evaluation of the project indicated that its student training workshops are having a positive effect on the drinking environment at school parties, including smaller and fewer "open" parties, more frequent ID checks, presence of sober monitors, more parties with bartenders, more parties with food served, and a posted alcohol policy.

Restrictions on Industry Marketing

For years, the alcohol industry has spent millions of dollars each year aggressively marketing alcohol to college students along with the image that drinking is fun and an important part of achieving economic, social, athletic, and even sexual success. The Center on Alcohol Marketing and Youth (CAMY) analyzed 10,455 magazine alcohol ads costing almost $1 billion between 2001 and 2003 and found that 56 percent of the ad spending was placed in magazines with a disproportionate readership of youth, aged 12 to 20 (CAMY, 2005). Magazine and television advertisements in which young people dance on tables, make out in clubs, partake in "body shots," and start impromptu parties in laundromats are all examples of how drinking is glamorized to appeal to youth, especially college-aged youth.

Another CAMY study focusing on television advertisements found that 90,000 more alcohol ads had been aired on television in 2003 than two years earlier, with much of that growth spurred by a surge in distilled spirits ads on cable television. College sports games showed 4,747 commercials for alcohol

in 2003, which represents four times the number of alcohol commercials that aired during the 2002 telecasts of the Super Bowl, the World Series, college football bowl games, and the National Football League's Monday Night Football broadcasts (CAMY, 2003).

Ryan and Mosher (1991) cited the following methods used by national brand producers, distributors, and local retailers to send pro-drinking messages to students:

- Paid advertising in print or broadcast media (e.g., advertising inserts in college student newspapers such as Miller's "Beachin' Times" and fliers on campus kiosks advertising local bars)
- Promotions (such as merchandise giveaways—T-shirts, caps, and posters bearing brand names and logos; free product samples at group-sponsored events; entertainment by mascots, such as the Budweiser Clydesdales or Bud Light Daredevils during pre-game and halftime shows at sports events)
- Direct product marketing by paid student-campus representatives of various brewers and distributors
- Sponsorship of educational, cultural, and sports programs and events

As part of their efforts to reduce binge drinking, many institutions of higher education have established policies to limit the amount and types of pro-drinking messages to which their students are exposed on campus. Erenberg and Hacker (1997) reported that among the 330 four-year colleges and universities tracked by the College Alcohol Survey, 34 percent reported banning alcohol industry advertising (e.g., brand preference ads), 34 percent banned industry promotions, and 30 percent banned industry official sponsorship.

Campuses such as Fresno State University, the University of Minnesota, the University of Kentucky, and the University of North Carolina at Chapel Hill have successfully diminished their dependence on alcohol advertising for intercollegiate athletics by either removing promotional displays from arenas or shifting to other corporate sponsors for television and radio broadcasts. In 2004, Ohio State University began taking measures to distance itself from its reliance on the alcohol industry by prohibiting alcohol advertisements on local radio broadcasts of its games and in its publications. The University cannot ban alcohol advertisements on its nationally televised games because of its membership in the Big Ten Conference, the association that negotiates television advertising rights for Big Ten games (Underage Drinking Enforcement Training Center, 2004a).

Other policies that restrict the marketing activities of alcohol producers and distributors include prohibiting on campus sales or promotional representatives; industry co-sponsorship of fraternity, sorority, or other student organization events; the use of schools' logos, insignias, or mascots by the alcohol industry; and the sale of alcohol-related products such as shot glasses and beer mugs in campus locations such as student bookstores. The University of Montana in Missoula, for example, prohibits the use of beer, liquor, or tobacco products, trademarks, or logos in advertisements and promotions, as well as the use of any University logo, trademark, or name in conjunction with alcoholic beverages or tobacco products (Wechsler and Wuethrich, 2002). The University of Florida took a major step in 2005 to curb student alcohol abuse by announcing that groups or shows performing at the school's O'Connell Center could no longer have alcohol (or tobacco) sponsors. The University threatened to cancel a February concert, featuring the country music group Rascal Flatts, because Coors Light was sponsoring the group's concert tour. Coors Light insignia appeared on all of the concert tour's advertising. The University convinced the concert promoter to remove Coors Light from all print, radio, and television advertisements, tickets, the stage curtain logo, and banners in exchange for waiving the Center's rental fee (Sikes, 2005).

In addition to bans on advertising and promotions by national brand producers and distributors, many schools also restrict advertising on campus by local bars and taverns. Instead of complete advertising bans, schools can place controls on the content of ads (e.g., refusing to allow bars to advertise drink specials or other promotions that encourage excessive drinking, such as bar crawls, and rejecting ads with degrading or sexist images) and on locations where ads and fliers may be placed on campus (e.g., no posting on campus bulletin boards, no distributing fliers in dining areas).

Spring Break Advertisements Revamped

One example of irresponsible on campus spring break advertisements occurred during the winter of 2002 with a 12-page advertisement in the student newspaper at the University of Nebraska in Lincoln. The advertisement invited students to a weeklong spring break "sex-and-sand drinking fling" in Panama City Beach, Florida. The insert promised "beer parties up the wazoo," and "the world's largest and longest keg party" with free beer all day long. It also implied that underage drinking would be winked at, which grabbed the attention of the local police chief who also served as Co-Chair of NU Directions, the local campus-community coalition to prevent illegal and problem drinking by University students. The Lincoln Police Chief personally contacted the Panama City Police Chief in Florida to express his concerns. He gained commitment from the Panama City Chief that enforcement would not turn a blind eye to spring break activities and that underage drinking laws would be consistently enforced. Members of NU Directions also worked with the Panama City Beach visitor's bureau to revamp spring break promotions the following year to ensure responsible advertising (Wechsler and Weuthrich, 2002).

Caffeinated Alcoholic Beverages: A Dangerous Combination

Newly developed and marketed alcoholic beverages with added caffeine became controversial when observations and research implicated them in alcohol poisonings and other dangerous behaviors. For example, one study found that bar patrons who consumed these beverages had a three-fold risk of leaving the bar highly intoxicated compared to those who consumed alcohol without caffeine (Thombs et al, 2010), and a fourfold risk of intending to drive after leaving the bar. Another study found that students who consumed CABs, relative to those who consumed alcohol without caffeine, were more likely to experience a variety of drinking-related negative consequences, including approximately double the risk of experiencing or committing sexual assault, riding with an intoxicated driver, having an alcohol-related accident, or requiring medical treatment (O'Brien et al., 2008). Responding to concerns about these beverages, the Food and Drug Administration issued a warning letter to manufacturers in November 2010. In response, these beverages were withdrawn from the market. Of course, the mixing of alcohol and energy drinks containing caffeine can still occur.

One area in which school restrictions on industry marketing can be difficult is the student-run newspaper. As Erenberg and Hacker (1997) pointed out, student newspapers often function autonomously and, thus, are not subject to regulation by the University. Additionally, journalists may oppose advertising restrictions on both financial and free-speech grounds. Other conflicts may arise when students and faculty perceive advertising bans as censorship that runs counter to principles of academic freedom. Aside from formal policies, some administrations have tried less contentious means of exerting influence, such as having editorial boards meet periodically with officials (e.g., the dean of students), who can encourage more restrictive advertising policies. Many editorial boards have dealt with the issue explicitly by developing a variety of policies to balance the papers' financial interests with their campuses' interests in creating a safe and healthy environment for students. These accommodations include requiring ads to carry a statement urging students to drink responsibly and not accepting ads that promote excessive or irresponsible consumption.

Despite the challenges noted above, colleges have increasingly turned their attention to prevention of aggressive alcohol advertisement practices with a special focus on spring-break advertisements. Ads that tout heavy drinking and sex reach college students via e-mail, direct mail, and campus-based advertising. A 2002 poll conducted on behalf of the American Medical Association's A Matter of Degree program showed that 9 of 10 college students' parents were outraged by ads touting spring-break drinking locations. The poll also found that college students see the most compelling promotions for spring break in on-campus advertisements (Penn, Schoen, and Berland Associates, 2002).

Social Norms Interventions

Typically, policies and other environmental strategies serve two purposes: they create changes in areas they were designed to address specifically, such as limiting advertising (primary effects), and as a result of their primary effects, they foster shifts in social norms and attitudes that are supportive of abstinence and responsible use (secondary effects). As part of their efforts to combat binge drinking and overcome reputations as party schools, several institutions have taken actions that have as their sole purpose the establishment of a new social normative environment on campus. These normative interventions fall into three general categories: (1) direct communications of administrators, faculty, and law enforcement; (2) messages from student-run media; and (3) social marketing strategies.

Faculty, administrators, and enforcement can help establish positive social norms and expectations on campus regarding student alcohol use in many ways. One method is to use college recruiting and student orientation materials to communicate to prospective students that the school promotes a healthy social and academic environment not denigrated by alcohol misuse. Colleges and universities that closely monitor the academic calendar and adjust schedules accordingly can help avoid large periods of unstructured free time that may unwittingly foster opportunities for student activities involving alcohol. For example, the University of Vermont modified its academic calendar to avoid beginning the year with two consecutive three-day weekends. With this important and symbolic step, the University clearly showed that academic rigor, not partying, is central to being a student at the University of Vermont (Higher Education Center, 2000a).

Another strategy is to have college officials speak out about alcohol issues and explicitly state their expectations for prospective and incoming students. As part of his effort to give alcohol problems a high priority and set a new tone at Penn State University, its President has gone so far as to say in some settings that if students think they're coming to Penn State to drink, they should go somewhere else. Despite initial skepticism, the University has seen applications for admissions go up significantly. According to the University's President, his stance on the issue has enhanced the University's reputation (Higher Education Center, 2000b).

Law enforcement intolerance of alcohol misuse can be communicated during orientation sessions, welcome-back addresses, during presentations in residential life settings, and through ongoing awareness building and media efforts to provide clear communication of alcohol laws and policies and the associated consequences for violations of those laws and policies on and off campus. Law enforcement officials also can send strong zero tolerance messages by increasing their presence in residential life settings and at

Taming Thirsty Thursday

Students without Friday classes reported drinking an average of 3.38 drinks the day before, roughly four times more than those with a Friday class before 10 a.m, a recent study at Loyola University found.

Additionally, all students drank more on Thursday, Friday and Saturday than on the other four days of the week. These trends were consistent for respondents across the board, regardless of gender, class year or individual propensity to drink.

The data confirm the notion that students who are free to sleep in on Fridays tend to treat Thursday as if it were a weekend day, instead of a mid-weekday, In light of the survey, campus administrators have begun discussing various strategies to "reclaim Fridays." One idea is to assign more homework due that day. Another idea is to schedule more Friday morning classes, particularly before 10 a.m. (Inside Higher Education 2009).

student events. Campus enforcement at St. Louis University recently piloted the L.E.A.D. (Leadership, Education, Assistance, and Direction) Officer Program to better provide alcohol prevention and enforcement services in dormitory settings of freshmen and sophomore students that positively affect student behaviors, reduce alcohol-related incidences, and change expectations and institutional memory of dormitory life of underclassmen. Incidences by underclassmen currently account for a significant number of alcohol-related infractions at the University (Department of Public Safety, Saint Louis University, 2005).

Faculty intolerance of alcohol misuse also can be communicated by not accepting drinking as an excuse for late assignments and by refusing to schedule classes and exams around student's drinking. One effort to stop student drinking from expanding beyond the weekend to traditional study nights, such as Thursdays, involves scheduling tests on Fridays. This strategy is being encouraged at the University of North Carolina along with more early morning classes. A study at Loyola University found that students with classes early on Friday drank much less than students who did not have such classes (Inside Higher Education 2009). This policy is further supported by research indicating that students with later class start times consumed more alcohol and reported more binge drinking . Students who tended to stay up later and sleep later also had poorer academic performance (Thacher et al., 2011).

Another way to promote responsible norms on campus is through student-run media (e.g., school newspapers and radio stations). Coverage of stories on alcohol-related problems and events on campus, as well as editorials, can be used to highlight the intolerance of impairment and the harm it produces as normative. These mass media outlets also can participate in providing warning messages and counter advertising campaigns designed to change norms and behavior.

Perhaps the most concerted efforts to change campus alcohol norms have been through social marketing strategies. Social marketing borrows the principles and processes from commercial advertising (e.g., market research,

campaigns targeted to specific segments of the population, skillful use of mass media) and uses them for the purpose of encouraging health-promoting values, attitudes, and behaviors (Zimmerman, 1997).

A social norms mass media campaign that uses social marketing strategies has been conducted at Northern Illinois University (NIU) since 1990, and it was among the earliest to be evaluated (Haines, 1996). After an initial effort in 1989 to reduce binge drinking through traditional prevention interventions (including posters and fliers with themes supporting abstinence and encouraging responsible drinking), which was associated with a slight increase in the percentage of binge drinkers, a different approach was implemented in 1990. The NIU social norms intervention focused on changing students' perceptions of campus drinking norms with messages that highlight positive and moderate drinking norms.

This approach is based on research conducted by Perkins, Berkowitz, and others showing that college students tend to overestimate the alcohol (and other drug) use of other students and that these misperceived norms exert a powerful negative influence on student drinking behavior (Graham, Marks, and Hansen, 1991; Perkins and Berkowitz, 1986; Prentice and Miller, 1993). The more students believe binge drinking is occurring, the more it occurs (Perkins, 1995; Perkins and Wechsler, 1996). Furthermore, experiments conducted by Hansen and Graham (1991) demonstrated that reducing perceptions of alcohol and other drug use was an effective strategy for reducing actual use among youth.

In addition to developing a print media campaign featuring normative drinking practices (e.g., most NIU students drink five or fewer drinks when they party), the effort included student incentives to pay attention to the campaign. Trend data across 10 years indicate that the social norms campaign was associated with an overall 44 percent reduction in binge drinking, (otherwise referred to as heavy episodic consumption of alcohol); a 44 percent reduction in alcohol-related injuries to self; and a 76 percent reduction in alcohol-related injuries to others (Haines and Barker, 2003).

Evaluation data from other social norms campaigns report reductions in episodic heavy drinking at the University of Arizona (Johannessen and Glider, 2003), Western Washington University (Fabiano, 2003), and Hobart and William Smith Colleges (Perkins and Craig, 2003), with reductions ranging from 20 to 40 percent over a three to five year period.

Although program evaluation data suggest that social norms marketing campaigns have contributed to reductions in heavy episodic consumption of alcohol, the first controlled study of a social norms campaign found that the campaign successfully corrected students' misperceptions about drinking only, but failed to produce effects on drinking behaviors (Clapp, Lange,

Russell, Shillington, and Voas, 2003). A more recent study by Russell, Clapp, and DeJong (2005) also failed to find positive effects for a campaign conducted at a large urban University. In both instances, researchers speculated that the campaign duration or design might have contributed to the disappointing findings.

In large study of 37 colleges nationwide, no decreases were noted in any of seven measures of alcohol use at schools with social norms programs, even when student exposure and length of program existence were considered. In fact, increases in measures of monthly alcohol use and total volume consumed were observed at schools employing social norms programs. This study does not provide evidence to support the effectiveness of social norms marketing programs, as currently utilized, in reducing alcohol use among college students (Wechsler et al., 2003).

Findings of another study suggest that the campus alcohol environment moderates the effect of social norms marketing interventions. Social norms marketing intervention may be less effective on campuses with higher densities of on-sale alcohol outlets (Scribner et al. 2011)..

Despite the mixed results, evaluation research suggests that social norms marketing can be an important support mechanism for success when properly implemented and incorporated into a comprehensive approach using multiple environmental strategies. It is evident from the limited research that currently exists that further controlled studies are needed to determine the effectiveness of social norms campaign interventions.

A possible variation on social marketing campaigns may be possible with respect to implementing tougher alcohol policies. One study found disparities between what students thought about more stringent policies and what they thought their peers would think. In some cases, the disparity was sizeable. For example, 72.6 percent of the students favored the current prohibition against kegs in residence halls, yet only 34.0 percent stated that they thought other students supported this policy. Likewise, a majority of 54.3 percent supported using stricter disciplinary sanctions for repeated violations of campus alcohol policies, yet only 25.7 percent indicated other students would support this policy (DeJong 2001). The authors posit that implementing new policies can go more smoothly if administrators correct the myth that most students drink heavily, reinforce the student majority's positive values, and demonstrate strong student support for certain reforms.

Substance-Free Housing

As part of their overall strategy to reduce student substance abuse and change campus norms, an increasing number of colleges and universities are

designating some portion of on campus housing as substance-free. A variety of arrangements have been used, from setting aside a few dorm rooms, a wing, or section of a hallway to making entire floors or buildings substance-free.

Most often, school programs have started out with a relatively small amount of space set aside and a core group of students who are committed to the concept, and then the program has been expanded over time as demand increased. Student utilization of substance-free housing has increased since it was first introduced. According to Wechsler and Weuthrich (2002), 17 percent of students lived in alcohol-free housing in 1993 with usage steadily increasing to 29 percent by 2001. By 2002, 81 percent of colleges participating in the College Alcohol Study offered at least some alcohol-free housing, either as entire dormitories or as specified floors within dormitories (Wechsler, Seibring, Liu, and Ahl, 2004).

Substance-free typically means that alcohol, illicit drugs, and cigarettes are prohibited; however, some schools have floors or halls where illicit drugs and smoking are banned, but drinking is allowed; whereas, a few others permit smoking, but not drinking. Colleges and universities generally do not prohibit students in alcohol-free halls from drinking elsewhere, although several prohibit students from returning to substance-free housing after drinking elsewhere if their return creates a disturbance for other students (Finn, n.d.).

Reasons for providing substance-free living options include:

- responsiveness to the demands of students who do not want to be exposed to secondary effects of other students' drinking and who want a quiet place to study;
- provision of a safe haven for students who may be "at risk" or susceptible to peer pressure to drink and use other drugs;
- the ability to send a message to the campus community that substantial numbers of students do not drink or use other substances and thus help change perceived norms;
- reduction of vandalism-related repair costs in dormitories; and
- increased school attractiveness and favorable effects on enrollment (Finn, n.d.).

Wechsler, Lee, Nelson, and Lee's (2001) study was the first to examine nationally the relationship between substance-free housing and alcohol effects on college and found that residence in substance-free housing was associated with a lower likelihood of heavy episodic drinking among college students

who were not heavy episodic drinkers in high school. They also found that residents of substance-free housing experienced fewer secondhand effects of alcohol use than residents of unrestricted housing. In addition, students living in substance-free housing were less likely to experience alcohol-related problems, such as lagging behind in schoolwork, doing something they later regretted, or arguing with friends. Lastly, they found that students in substance-free housing were less likely to ride with a drunk driver.

Currently, evidence of potential benefits for substance-free housing is based on cost data and on growing popularity demonstrated by increased student demand. In 1989, the first year of its program, 500 students at the University of Michigan signed up for substance-free housing; two years later, more than 2,000 students signed up for 1,462 slots. By the 2004-2005 academic year, 30 percent of the undergraduate population lived in substance-free housing, representing 28 percent of student rooms.

Substance-free housing at some institutions has expanded to include "recovery housing" for students with substance addictions. Rutgers University in New Jersey was the first institution to pioneer such a program. The University offers recovery housing and does not disclose the location of this facility to the broader campus community to protect residents from being stigmatized.

Interventions with Campus Greek-Letter Organizations

According to researchers, the single strongest predictor of binge drinking for college students is fraternity or sorority residence or membership. The 2001 College Alcohol Survey showed that three-quarters of fraternity or sorority house residents are binge drinkers, which represents 80 percent and 69 percent, respectively. Greek members reported slightly lower results with 73 percent of male and 57 percent of female respondents falling into the binge drinking category. Over three-fourths of fraternity residents who had not binged in high school became binge drinkers in college, as did three of four sorority house residents (Wechsler and Wuethrich, 2002). Because fraternity and sorority members report high levels of binge drinking and their parties have frequently been linked with alcohol-related problems on campus, Greek-letter organizations have been the target of special prevention efforts. Many interventions to reform their alcohol practices have predominately focused on education and personal development of members. Increasingly, these traditional approaches are being used in conjunction with strategies to create environmental change.

Among the environmental approaches used with fraternities and sororities, some are adaptations of more generally applied strategies already discussed, such as substance-free housing, RBS practices, and alcohol-free events. Spurred by skyrocketing liability insurance costs, shrinking memberships, and alcohol-related deaths on a number of campuses, numerous Greek chapters all over the country have become substance free. To date, 12 national fraternity organizations have adopted alcohol-free housing policies (Alcohol-Free Housing Alliance, 2005).

Social norms interventions also have been used in efforts to reduce binge drinking among fraternity and sorority members. For example, prevention specialists at Washington State University (WSU) developed and piloted a small group norms-challenging intervention based on the social norms theory. Their goal was to correct misperceptions of student alcohol-use norms among students living in fraternities and sororities. Trained facilitators used a prepared script and a series of overheads to present social norms data to their respective living groups. The effort at WSU resulted in the following: the number of students having 5 or more drinks per drinking occasion decreased from 58.7 percent in 1991 to 34.8 percent in 1999. Moderate drinking increased from 29.7 percent in 1991 to 48.5 percent in 1999. Students choosing to abstain from alcohol use increased from 11.6 percent in 1991 to 17.4 percent in 1995, and remained constant in 1999 (Higher Education Center, n.d.).

In addition to these more generally applied strategies, those specific to Greek organizations have included risk management policies and interventions to reduce heavy drinking by partiers. Several organizations, including the governing bodies of the sorority and fraternity systems and groups that ensure fraternities, have developed risk management policies designed to reduce potential liability related to the use of alcohol by fraternity and sorority members. These policies often outline RBS practices, policies on purchasing alcohol, prohibitions against sponsorship of events by alcohol vendors, and requirements that all rush activities be dry functions or, in some cases, delayed a semester or even a year so that freshmen have a chance to settle into college life.

Fraternity parties pose many liability risks, and they have come under heavy scrutiny by institutions of higher education, fraternal orders, and communities-at-large. Colleges and universities in collaboration with campus police, local enforcement, campus and community coalitions, and fraternity leaders have established policies and guidelines for members of fraternities and sororities to follow when hosting social events. Such policies/guidelines may include the requirement that hosts submit a "guest list" of invitees older than age 21 for review and approval by the institution. The key to success for the "guest list" requirement is strict enforcement of admittance into

the event by security personnel, fraternity leaders/hosts, and/or University representatives that is reinforced by enforcement checks for compliance with campus, local, and State alcohol laws. For example, California State University-Fullerton (CSUF) implemented new party standards during the 2004-2005 school year to address alcohol-related issues and general safety. The new rules required fraternities to hire a minimum of two security guards to monitor the event, chapters were prohibited from hosting parties on the same night, and hosts were to supply a guest list of party invitees to be strictly enforced by CSUF, campus security, and the Interfraternity Council (Bellendir, 2005). Strict enforcement of approved "guest lists" helps limit the access of alcohol to underage students and ensures a degree of safety for event attendees from unforeseen harm that can result from actions of unknown "party crashers."

Other policies/guidelines adopted by institutions of higher education include requirements for hosts to hire party monitors, to hire servers with RBS training by an approved vendor, to use a ticket system for those older than 21, to register parties with campus police, and to limit the amount of alcohol served to individuals.

In an ongoing effort to address alcohol–related issues with fraternities and sororities at Oregon State University in Corvallis, the local police department established an Officer Liaison Program to help create an environment in which fraternity and sorority members could develop a better understanding of their responsibilities as citizens and of available services and resources. The program builds strong student-enforcement relationships by assigning officers as liaisons to Greek fraternities and sororities. The officers provide information on alcohol laws and consequences, crime prevention, problem solving, and educational programs. They also attend events such as house functions, educational programs, dinners, and celebrations, and establish themselves as the point of contact for questions and answers by house members. Enforcement statistics show that members of Greek houses who have worked with the police while planning special events typically experienced fewer problems. In fact, the number of incident reports within the community decreased by slightly more than half of what it had been previously after implementation of the program, and the community has been riot free (Underage Drinking Enforcement Training Center, 2005d). Another intervention to change the drinking environment at fraternity parties and reduce the risk for impaired driving has been to substitute low-alcohol beer without partiers' knowledge. In a series of controlled experiments, Geller, Kalsher, and Clarke (1991) found that partiers given low alcohol beer did not compensate by consuming more drinks than those given regular beer in order to achieve the same effect. Thus, they evidenced significantly less impairment based on average BAC on leaving a party.

Campus-Community Collaborative Strategies

Although schools can establish a variety of environmental interventions on campus, the potential of their prevention efforts will be only partially realized if they fail to address factors in the surrounding community that also contribute to student substance abuse. Colleges and universities do not exist in isolation from the larger communities where they are located. Their students are influenced by a myriad of environmental factors from outside the campus, such as the alcohol service and advertising practices of local bars and taverns, the price of alcohol off campus, and the extent to which State and local laws and policies are enforced. Thus, collaboration between campus and community officials is necessary to rework the physical, legal, and economic environment beyond the institution. Coalitions can be used to create partnerships among campus officials and local community groups, including the police, hospitality industry, liquor control board, community prevention leaders, and government officials. In Ohio, the organization Ohio Parents for Drug Free Youth has been instrumental in developing collaborative relationships among colleges, State government, and national agencies to mount a statewide binge drinking prevention initiative. The support and commitment garnered from Ohio's leaders has resulted in the award of mini-grants to more than 40 four-year public and private colleges and universities across the State. The purpose of these grants is to address binge drinking by building a coalition that engages representatives from the surrounding local community and developing an action plan to change their campus and community cultures from promoting high-risk and excessive drinking to fostering a safe and healthy environment (Ohio Parents for Drug-Free Youth, 2005).

Unfortunately, as indicated in the follow up study of NIAAA recommendations regarding alcohol use by college students discussed above, very few colleges have taken steps to collaborate with local authorities or advocacy groups to make appropriate changes in communities surrounding college campuses (Nelson 2010). This despite the fact that The best available scientific evidence indicates that colleges can effectively address student drinking by working with authorities in their surrounding communities to

implement efforts to reduce access to alcohol, including compliance checks, reducing alcohol outlet density, mandatory responsible beverage service training, and increasing the price of alcohol (Malloy et al., 2002). Most administrators surveyed reported that they had not implemented, planned, or discussed efforts to restrict the number of retail alcohol outlets, increase the price of alcohol or institute mandatory responsible beverage service training,

Key areas of collaboration that appear to be most conducive to changing college student behaviors include, but are not limited to: working on laws that restrict access, such as days and hours of sale; working for zoning reform to reduce the concentration of alcohol outlets near campus; leveraging conditional use permits; eliminating drink specials; and supporting efforts of local enforcement agencies to enforce drinking-age laws. Many college communities also have worked to restrict access through keg registration laws, social host liability laws, increased penalties for commercial and social providers, responsible hospitality councils to increase adherence to responsible beverage service practices; elimination of irresponsible advertising and promotions; alcohol restrictions at community events; and strengthening of existing laws such as impaired driving and noise abatement. Several examples of successful campus-community collaborations are detailed below.

Limitations on Commercial Availability

Simply stated, the greater the number of outlets selling or serving alcoholic beverages in a community, the greater the potential for underage youth to illegally purchase and consume alcoholic beverages and for students 21 and older to over-imbibe. Kuo, Wechsler, Greenberg, and Lee (2003) found a strong association between frequent alcohol promotions, including large volume alcohol sales (e.g., kegs) and low sale prices, at bars, liquor stores, and other retail outlets surrounding college campuses and higher rates of heavy drinking on college campuses. Researchers went on to surmise that regulation of marketing practices such as sale prices, promotions, and advertisements at retail outlets in the surrounding community could significantly reduce binge drinking and other alcohol on and off college campuses.

A recent study found that higher densities of on-premise alcohol outlets, such as bars, were strongly related to student drinking. Students in campus communities with a high density of outlets drank more often and drank more when they were drinking, Thus, the density of bars near college campuses is strongly associated with frequent and heavy drinking (Scribner et al., 2008). A study of alcohol outlet density found that underage drinkers riding

with a drinking driver, making an alcohol purchase attempt, and making a successful alcohol purchase attempt were more likely to occur within census tracts with the highest density of stores that sell alcohol for off-premise consumption while frequent drinking by underage drinkers was more likely in census tracts with the greatest density of bars and restaurants that serve alcohol (Reboussin et al., 2011).

Cooperation between the University of Nebraska at Lincoln and the Responsible Hospitality Council of Lincoln/Lancaster County resulted in alcohol licensees' voluntarily stopping the birthday bar crawl, a tradition where bars gave free alcoholic beverages to customers on their 21st birthdays (Peters, 1997). In response to complaints from Iowa City business owners regarding vandalism and vomit associated with student tavern-goers, the city passed an ordinance banning unlimited drinks at a fixed price and free on-premises consumption. The ordinance also gave the City Council greater power to suspend and revoke liquor licenses. The measure was supported by the University of Iowa's "Stepping Up Program" (Silver Gate Group, 2003).

In Towson, Maryland, the community and university worked together to address alcohol related problems. As students returned from local bars to off-campus housing near the university, neighbors complained about noise, illegal parking, destruction of property, and public urination. Cooperative efforts of the town and the campus resulted in formation of a two-man special alcohol enforcement unit to monitor student behavior off-campus. Officers regularly patrolled the area on weekends and college party nights. Towson University supported enforcement activities by instituting a new policy addressing students' disorderly and disruptive behavior off-campus and informed students that the university would take judicial action for inappropriate off-campus behavior. This clear expression of community norms by the academic community sent a critical message to students about what the university expected regarding both on- and off-campus behavior. The DUI (driving-underthe-influence) unit of the Towson Precinct began notifying Towson University when their students were involved in alcohol-related incidents. Students cited by police for alcohol-related crimes also received penalties from Towson University. Students caught hosting underage drinking parties are visited by a team consisting of a County police officer and a staff member from the university. The university increased fines for repeat infractions and notifies parents when students are dangerously intoxicated and require transport to the hospital. Parents are also notified for recurring minor alcohol violations.

Alcohol outlets were invited to participate by signing an agreement to implement responsible server practices. Community associations in the area encouraged residents to frequent only establishments displaying signs indicating their participation. The Liquor Board increased penalties tenfold

for licensees who repeatedly violated the liquor laws. Further, they revoked the delivery privileges of an establishment known to deliver alcohol to underage students. The Liquor Board also refused to issue a license for a new nightclub in the center of the Towson Community.

In the city of DeKalb, Illinois, home to Northeastern Illinois University, strong campus-community collaborations focused on education about and enforcement of minimum purchase age laws. The coalition of campus and community representatives secured media coverage of announcements regarding purchase age laws, penalties for noncompliance, upcoming retailer trainings, and future enforcement efforts. This coverage was instrumental in gaining community support and retailer cooperation. When the DeKalb Police Department began conducting compliance check operations with the assistance of trained operatives, many of which were underage college students from Northern Illinois University, the results were impressive. Noncompliance rates dropped from 54 percent to 25 percent over an 11-month period. Due to the project's success, the enforcement agency committed to maintaining enforcement efforts with future funding secured through fines levied against noncompliant establishments (Underage Drinking Enforcement Training Center, 2004c).

The age of computer technology has sophisticated the world of false and fraudulent identifications and has made it a profitable business for entrepreneurs, many of whom are college students themselves. Law enforcement agencies, alcohol establishments, and college administrators have taken heed and are beginning to work together to get the "fakes" off the street. In Newport, Rhode Island, police implemented an innovative program in 2001 called "Identification Seizure," whereby alcohol establishments in the downtown area worked with enforcement to collect and turn in identifications suspected of being false or fraudulent.

Patrons often "abandoned" these cards when alcohol establishment employees called enforcement for assistance. The local college, Salve Regina University, supported these efforts by clearly stating to students that use of "fake" IDs would not be tolerated and that further disciplinary action at the campus level would occur if students were caught using false or fraudulent IDs in the community (Underage Drinking Enforcement Training Center, 2005c).

Limitations on Social Availability

Social availability of alcohol is the most common means for most underage college students to gain access to alcoholic beverages (Wechsler, Lee, Kuo, and Dowdall, 2000a). In college communities, social availability of alcohol is common in residential neighborhoods where students reside off campus. The University at Albany established a permanent committee that was open to all interested community members to deal both proactively and reactively with problems created between students living off campus and local neighborhoods (Higher Education Center, 1997). Among the steps taken to deal with alcohol-related problems stemming from off campus living was a program to inform students of the laws and ordinances, as well as behavioral expectations, applicable to hosts of house parties. With safety being a concern to both students and their neighbors, the committee also developed a number of personal, property, and fire safety initiatives. The committee also maintains a hotline to report problems, and it participates in the Adopt-A-Block program that organizes work area cleanup days. Through extensive "town-and-gown" cooperation, the University and its neighbors have developed a strong base of support for prevention efforts that create a safer and healthier environment for all.

Other strategies for addressing off-campus parties include holding property owners (landlords, both present and absentee) accountable for parties that occur on their properties (rental properties, private homes, empty lots, or properties where unauthorized tailgating occur) and strategies to shift costs of repeat "calls to service" for community disturbances from enforcement agencies to the violator. San Diego, home of several colleges/ universities, uses an innovative cost recovery program called "Community Assisted Party Program" (CAPP) that shifts the cost of additional service required by enforcement to respond to community disturbances from enforcement to that of the violator. Implementation of the program has resulted in significant reductions in calls to law enforcement for service at nuisance locations, as well as reductions in associated costs to the police department.

In an effort to address third-party transactions, the Twin Cities area of Minneapolis and Saint Paul, Minnesota (home of many institutions of higher education), implemented an innovative coalition called the Zero Adult Provider (ZAP) coalition. Police often were called to respond to off campus parties throughout the area where they found excessive noise, property damage, or rowdiness, but their efforts to discover the source of alcohol were often stymied. ZAP helped change this by focusing on building community and student awareness around alcohol issues, including laws and consequences, and garnering the support of college campuses. Targeted law

enforcement operations followed during fall of 2000 during the University of Minnesota homecoming season.

The coordinated efforts proved successful, and many adult providers were charged with violations, including furnishing to minors. Since that time, there has been a decrease in the number of off campus parties resulting in police calls for service and decreases in alcohol violations within community neighborhoods (Underage Drinking Enforcement Training Center, 2002).

In Bloomsburg, Pennsylvania, home of Bloomsburg University, approximately 66 percent of all calls to service were University-related in 2001, and the majority had to do with hazardous and/or underage drinking. Collaboration between campus officials, community members, and the local law enforcement agency responded by establishing a specialized task force called the Bloomsburg Initiative. The initiative worked to implement several new public policies and increase enforcement with a zero tolerance approach to adjudication. Police attend forums, workshops, and dormitory meetings on campus to discuss problems with student alcohol use and other safety issues. The municipal government revised or developed local ordinances regarding open containers of alcohol, excessive noise and disruptive conduct, disorderly gatherings, large outdoor social gatherings, liquor license transfers, and building code enhancements. With these tools in place, enforcement has been equipped to enforce all alcohol laws effectively, including laws prohibiting public drunkenness, selling or furnishing to minors, and DUI (Underage Drinking Enforcement Training Center, 2005a).

In addition to working to reduce alcohol availability to students, campus community coalitions can cooperate to reduce the likelihood of alcohol-related problems, such as impaired driving. Reductions in impaired driving can be accomplished through policy efforts such as zero tolerance laws, dram shop and social host liability laws, and increased penalties for drinking and driving violations; establishing carefully planned and administered safe rides programs in the community to reduce consequences of high-risk drinking; and enforcing minimum drinking age and impaired-driving laws. Communities that wish to pursue safe rides programs should take precautions before implementation to avoid potential pitfalls, such as sending mixed messages to youth under the legal drinking age of 21, and are strongly advised to seek legal council to properly address liability issues. Although the exact nature of the collaboration will depend on their jurisdictional authority, campus security forces can collaborate with local police in deterrence efforts, including conducting sobriety checkpoints in conjunction with source investigations, and undercover buying operations on and near campus (DeJong, n.d.).

State-Level Public Policy

College campuses (both public and private) also exist within the context of State laws and policies. Legal loopholes or a lack of commitment to enforcement statewide can make alcohol prevention on college campuses more difficult. Thus, ideally, the States should provide an appropriate legal framework and strong leadership for responsible alcohol sales and use that supports the efforts of prevention professionals, college administrators, enforcement agencies, and concerned citizens.

Administrators and faculty often hold significant prestige within the larger community beyond the school and, thus, are in a position to lend considerable weight to the public discourse on alcohol control policies. As private citizens, school officials can participate in the policy debate by writing editorials; being interviewed for television, radio, or newspapers; providing testimony to State legislatures on alcohol problems and experiences with problem reduction strategies on campus; and participating in State, regional, and national associations to present an academic viewpoint on policy proposals. Engaging in these types of advocacy activities is not the sole purview of college and University officials; community leaders and mobilized citizens often participate in such efforts as well. The input of college officials to the policy-making process, however, can be especially valuable.

The U.S. Department of Education's Higher Education Center for Alcohol and Other Drug Abuse and Violence Prevention in recent years has fostered the development of statewide prevention initiatives, engaging networks of colleges and universities within States. These initiatives often reach out to State leaders to educate them about problems associated with underage and hazardous drinking on college campuses and about effective public policy to address these problems (Higher Education Center, 2004).

Alcohol Policy Group Urges States to Ban Supersized Alcopops

Marin Institute, an organization dedicated to implementing alcohol policies that protect public health has developed model state legislation to restrict the size and alcohol content of the newly reformulated products and other youth-friendly alcopops. These beverages are sold in 23.5 oz, single serving cans, with up to 12% alcohol content—the equivalent of 4.7 standard drinks of alcohol. The drinks are flavored malt beverages known as "alcopops," sweet, bubbly and fruity beers known to appeal to underage youth. The Institute stated: "*As the primary regulators of alcoholic beverages, the states have full legal authority to ban dangerous alcoholic products like supersized alcopops. Our model bill offers states an important tool to help mitigate this devastating public health problem while ensuring that stimulant-laced products do not return to the market.*" (Marin Institute 2011)

The model legislation can be found at http://www.marininstitute.org/site/images/stories/FINALModelSuperSized.pdf

Summary

Relying primarily on education of students about alcohol's effects and then intervening individually with the small number who seek assessment and treatment has not led to reductions in alcohol problems on campuses. In fact, several evaluations of education and awareness programs have found no effect on either alcohol use or alcohol-related problems. Increasingly, colleges and universities have begun to realize that while education and specialized services for individuals are necessary, they are not sufficient by themselves.

Environmental management is an approach to prevention that seeks to alter the social, economic, and legal processes of communities that contribute to substance abuse and related problems. Prevention directed at the environment generally relies on public policies (e.g., laws, rules, and regulations) and other community level interventions, both to limit access to substances and to change the culture and context within which decisions about substance use are made. Because environmental management affects whole populations and creates changes in the fundamental communitywide processes underlying substance abuse, it has the potential to bring about relatively quick, dramatic, and enduring reductions in substance-abuse problems. In fact, prevention efforts conducted in communities and college campuses have incorporated an increasing number of environmental strategies. A body of research has accumulated showing that these strategies can be effective in reducing heavy drinking, alcohol-related crashes and crash fatalities, injuries, and violent crimes.

Based on this body of evidence, institutions of higher education have begun incorporating environmental strategies in their prevention efforts. Observational and controlled studies have shown that these strategies can have a significant effect on the drinking behavior and problems of students.

Environmental prevention strategies have been used most extensively by colleges and universities to reduce student misuse of alcohol and its consequences for heavy drinkers, as well as secondary effects on other

students. To mount comprehensive environmental change efforts, schools have been encouraged to take action in three spheres where they have influence: the institution, the local community, and State-level public policy.

Among the strategies for influencing campus or institutional factors, schools are encouraged to develop comprehensive substance-abuse policies that cover unlawful alcohol- and drug-related behavior and regulate the conditions of lawful alcohol use and sales.

Although each school must carefully develop its own set of policies based multiple considerations, there is consensus on the need to enforce policies firmly and consistently. Other promising strategies for altering campus environments include:

- notifying parents of alcohol-related violations committed by students under the legal drinking age of 21;
- providing alcohol-free leisure activities by establishing "dry" cafes and coffeehouses, keeping recreational facilities open during times when students say there is nothing to do, and replacing alcohol-involved social traditions with new ones that are alcohol-free;
- promoting RBS practices at on campus alcohol outlets, such as campus pubs, and by social hosts to reduce underage drinking and problems, such as DUI;
- restricting marketing activities of the alcohol industry on campus, including paid advertising, promotions, paid student-campus representatives, and sponsorship of educational, cultural, and sports programs;
- creating shifts in social norms through the communications of faculty and administrators, mass media messages, and the application of social marketing techniques;
- providing substance-free housing options; and
- fostering positive changes in campus Greek organizations, including changes in the ways alcohol is purchased and served at fraternity parties.

Alcohol use by students at colleges and universities is influenced by a variety of factors from the surrounding community. Chief among these factors is the cheap and easy availability of alcohol at outlets that surround campuses in close proximity to each other. In order to address these environmental factors as well as other alcohol related problems, comprehensive prevention efforts necessitate campus-community partnerships. Campus-community

coalitions can be used to create broad support for efforts to curtail student access to alcohol; reduce alcohol-related problems, such as impaired driving; and enhance relations between schools and their neighbors.

Campus environments also are affected by State level laws and policies. Those interested in fostering prevention on campuses also should attend to these environmental aspects. College officials can use their expertise and prestige in the broader community to work for policy changes at the State level. As private citizens, they can participate in the public discourse on alcohol control policies and advocate for measures that will benefit not only their campuses, but also the entire State.

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College Drinking Resources

A Matter of Degree: The National Effort to Reduce High-Risk Drinking Among College Students
http://www.rwjf.org/pr/product.jsp?id=29791
The Robert Wood Johnson Foundation has funded 10 University-community coalitions to create long-lasting changes in the environment that support healthy lifestyle choices and discourage excessive alcohol consumption.

Bacchus and Gamma Peer Education Network
http://www.bacchusgamma.org
The BACCHUS Network is an international association of college and University-based peer education programs focusing on alcohol abuse prevention and other related student health and safety issues. It is the mission of the association to actively promote peer education as a useful element of campus health education and wellness efforts.

Campaign for Alcohol-Free Sports TV
http://cspinet.org/booze/CAFST/ *Journal of Preventative Medicine, 16*:76-80. Organized through the Center for Science in the Public Interest, the Campaign for Alcohol-Free Sports TV seeks to reduce the amount of alcoholic-beverage advertising to underage children and young adults who tune into televised sports for fun

College Alcohol Study
http://www.hsph.harvard.edu/cas/
This Web site provides findings from Harvard School of Public Health's College Alcohol Study. This national study of more than 14,000 college students gauges the prevalence of binge drinking and alcohol-related problems. The Web site provides full access to the 1998 and 1995 reports and lists other published findings from the survey, including the prevalence of gun possession among college-age drinkers.

Core Institute
http://www.siu.edu/~coreinst/
The Core Institute assists colleges and universities in implementing drug and alcohol surveys. Sample copies and descriptions of the student survey, survey of norms, and faculty and staff environment survey are available on the Web site. Core Survey reports and press releases also are available.

Facts on Tap
http://www.factsontap.org/
Facts on Tap is a joint effort of the Children of Alcoholics Foundation and the American Council on Drug Education to provide educational resources on alcohol for college students. Information is included on the effects of alcohol, including the relationship between sex and alcohol, and secondhand effects of alcohol.

Higher Education Center for Alcohol and Other Drug Prevention
http://www.edc.org/hec/
This comprehensive Web site funded by the U.S. Department of Education includes documents, resources, and links on preventing alcohol and drug abuse on college campuses. Programmatic information such as setting policies, assessing the campus environment and extent of the problem, and program evaluation are included. In addition, information is provided on specific prevention strategies, such as social marketing, normative education, and environmental strategies.

The Inter-Association Task Force on Alcohol and Other Substance Abuse Issues
http://iatf.org/
The Inter-Association Task Force (IATF) is an offshoot of Bacchus dedicated to eliminating alcohol and other drug abuse among college students. The organization is perhaps best known as the driving force behind National Collegiate Alcohol Awareness Week. IATF sponsors other events as well, including a National Symposium on College Alcohol Practices in 1998. This Web page presents the report from that conference. The Web site includes a "model alcohol policy" for campuses and guidelines for beverage alcohol marketing on campuses.

The National Institute on Alcohol Abuse and Alcoholism's Task Force on College Drinking
http://www.collegedrinkingprevention.gov
The National Institute on Alcohol Abuse and Alcoholism's Task Force on College Drinking was established to (1) provide research-based information about the nature and extent of dangerous drinking to high-school and college administrators, students, parents, community leaders, policymakers, researchers, and members of the retail beverage industry; (2) offer recommendations to college and University Presidents on the potential effectiveness of current strategies to reverse the culture of drinking on campus; and (3) offer recommendations to the research community, including NIAAA, for future research on preventing hazardous college student drinking. Its Web site provides a wealth of information for college administrators, parents, students, and others who are concerned about college drinking.

National Interfraternity Conference
http://www.nicindy.org
The National Interfraternity Council (NIC) is a federation of national and international fraternities that seeks to provide education and support to member organizations. Among the items available on its Web site are: "Our Chapter/ Our Choice", a guide for looking at individual and chapter norms around alcohol and drugs; theme party kits to help chapters sponsor substance-free parties; and "BYOB Resource Guide" and "BYOB2"(tools to help implement alcohol control practices at parties).

Promising Practices: Campus Alcohol Strategies
http://www.promprac.gmu.edu
This Web site contains information developed by George Mason's Promising Practices program. The site houses the online version of the Promising Practices program binder, which includes descriptions of hundreds of alcohol misuse prevention programs at work in colleges nationwide. All descriptions include contact information, the program's objectives, and a descriptive narrative that may include examples of the program's effectiveness. In addition, the Campus Task Force Planner is available. It lists prevention strategies by type of group (faculty, student government, etc.) and provides case examples for each.

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OJJDP Underage Drinking Enforcement Training Center

The Underage Drinking Enforcement Training Center

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