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STRATEGIC MARKETING COMMUNICATIONS

High-Risk Drinking on College Campuses

College Life and Alcohol:

Challenges and Solutions, a Resource Guide

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The over-consumption of alcohol among college students is a complex problem that must be addressed.

Across the United States, college presidents, administrators, and stakeholders (identified campus offices and personnel, and a range of community representatives) agree high-risk drinking by college students is a critical public health issue with significant social, educational and psychological consequences. The over-consumption of alcohol among college students is a problem with multiple causes that requires solutions with multiple components to address individual student risk factors, and alter the environments on campus and in their surrounding communities. This online *Resource Guide* provides a useful background for those approaching the problem and its solutions from multiple levels and perspectives, using a question-and-answer format that provides background on the problems with links to information on effective and promising solutions for reducing the rates and harms of high-risk drinking. Available resources and tools are highlighted, with embedded links that make them easy to locate. The report concludes with a proposal for creating a vibrant online community that would combine rapidly expanding research- and practice-based evidence about effective tools combined with first-hand advice from campus and community leaders and students across the country about ways to adopt and adapt programs, policy and environmental changes that work on diverse college and university campuses.

Laufer Green Isaac developed this *Resource Guide* to be useful and user-friendly for a variety of audiences., including: college presidents, administrators, deans, faculty, student-affairs/residential-life personnel, athletic directors and coaches, health services staff, campus security staff and a range of community representatives – from chamber of commerce representatives to local bar and liquor outlet owners, local elected officials, police, and emergency room and hospital staff.

For purposes of this guide, the term “college high-risk drinking” is used. We intend the term “college” to apply to a variety of public and private institutions of higher education – from junior and community colleges, to commuter campuses, to four-year residential college and university campuses. We use the term “high-risk drinking” as defined by the National Institute on Alcohol Abuse and Alcoholism (NIAAA) – “*a pattern of drinking alcohol that brings blood alcohol concentration (BAC) to 0.08 gram percent or above. For the typical adult, this pattern corresponds to consuming five or more drinks (male), or four or more drinks (female), in about two hours.*” While we have discovered that there are pockets of scientific controversy surrounding whether the best term is “binge drinking,” “risky drinking,” or “overdrinking,” the terminology does little to lessen the immediate and/or long-lasting results for students affected by alcohol on college campuses each year.

It is essential that college health personnel, faculty, staff, presidents, and all surrounding community members stay abreast of the latest public health/health promotion approaches to the reduction of harmful drinking on college campuses. Yet those on the “front lines” often feel inadequately prepared to deal with problem or at-risk students. They may be stretched too thin to have the time to follow up on a red flag from a student’s history and choose to bring it up “next time.” Some college presidents see high-risk drinking as

There *are* solutions that save lives.

The focus is saving lives, not eliminating underage drinking, and the trick is to engage students without alienating them – while planting seeds of caution in their minds that one hopes will make a difference when it counts.

Jonathan Gibraltar,
President, Frostburg State University

an insurmountable problem and choose to focus instead on winning initiatives. Some individuals may perceive high-risk drinking as a rite of passage—an inherent part of college life— that will take care of itself once a student graduates. But none of these beliefs is acceptable. Others argue that environmental and policy factors are what allow the underage high-risk drinking culture to take hold and flourish. No matter the genesis of the problem, reliable research has provided a stable evidence base proving that there *are* strategies that work. There *are* solutions that save lives. It is no longer a viable option for any college health personnel, faculty, staff, presidents or communities to ignore these strategies.

College Presidents and Leadership

Presidents set the standard in higher education for what a leader can do to establish priorities and programs that help prepare students for lives of personal and civic responsibility. Many presidents gain the full trust and support of their boards, which allows them to establish and carry out a high-risk -drinking policy vision for the institution. They also help to foster and depend upon strong leadership from deans, faculty, student-affairs/residential-life personnel, student leaders and resident advisors, athletic directors and coaches, health services staff, campus security staff and a range of community representatives—the construction of this vision for an institution by the president is critical because it tells the story of where an institution has been and provides direction for where the institution is headed. This vision, if believed in by the faculty, administrators, staff and students, has the potential to transform an institution. In short, a president’s attitude makes a big difference in a campus’ campaign to curb high-risk drinking.

Serving as a catalyst, college presidents and their senior administrators can provide the necessary resources, support and commitment to initiate a wide variety of prevention and/or alcohol-free activities on their campuses. Presidents can also provide national leadership to promote the importance of stopping high-risk drinking in higher education.

Faculty Members

Faculty members know their students and the campus culture well, based on their many contacts with students both inside and outside the classroom. They play vital roles as teacher, mentors, confidants and leaders to a variety of student and on-campus activities and explorations. We hope that they will use this resource guide to:

- Better understand the factors on college and university campuses and surrounding, communities that serve to promote or encourage risky drinking, fueling creative thinking about ways to reverse these factors and forces.

- Identify ways to empower, challenge, activate and involve students, student leaders and student-led organizations to find creative solutions.
- Be well-versed enough in college high-risk drinking to see warning signs, and know whom to refer students to for prevention and/or treatment.

Campus Stakeholders

We define “stakeholders” as deans, faculty, student-affairs/residential-life personnel, athletic directors and coaches, health services staff, campus security staff, funders, and a range of community representatives—from chamber of commerce representatives to local bar and liquor outlet owners, local elected officials, police, and emergency room and hospital staff. Together, they form dynamic communities whose members create and share norms, values, ideals, a sense of civic commitment, and larger vision for education. Leaders and members of each of the following “sectors”, as well as others mentioned throughout this text, need to be engaged in changing campus environments, policies and norms that support high-risk drinking and its reduction.

- Administrators and deans
- Residential affairs and residential life personnel
- Students and student leaders
- Student resident advisors
- Faculty
- Student health services staff
- Athletic directors, coaches
- Student-led groups and organizations
- Campus security
- Facilities personnel and managers (library, dining hall, gyms)

Laufer Green Isaac investigated the magnitude of high-risk drinking on college campuses and its associated harms, as well as the latest evidence-based interventions that have had success in reducing high-risk drinking on U.S. college campuses. We have found that, to achieve successful outcomes, goals must be defined in ways that inspire institutional missions and help measure and evaluate success.

Yes, There Are Strategies That Work

Many campus leaders wonder whether there are ANY strategies that colleges or universities can implement to help reverse high-risk drinking trends and the tolls they take on student learning, overall development, community life, and health. As this guide outlines, the answer is: YES, THERE ARE.

This guide seeks to go beyond defining the problem. We outline solutions.

We cover three key sections:

1. High-risk drinking and the college campus: defining the problem
2. High-risk drinking and the role of campus and community environments
3. Multi-component interventions: the 3-In-1 framework for implementing programs and policies that work

Additionally, we provide expert contact information, Web resources, and practical tools both at the conclusion of each section, and again at the end of the guide for easy access to pertinent information.

We define strategies that effectively reduce the prevalence and effects of college high-risk drinking. These methods are supported both by broad-based research and policy interventions and by examining and addressing each individual campus environment.

Proven strategies that work include:

- Implement screening and brief motivational counseling interventions, which can be integrated into student health services, targeted toward those students who have been mandated to treatment, or offered as web-based prevention programs for all students.
- Support maintaining the minimum legal drinking age (MLDA). This is a low-cost, evidence-based intervention that works best when combined with strict enforcement.
- Heighten enforcement of effective alcohol control policies at campus, local, state and federal levels:
 - Minimum legal drinking age
 - Zero tolerance laws (young drivers who are found to have a blood alcohol content higher than 0.02 percent can have their license immediately seized and revoked and be subject to significant fines)
 - Use/lose for drivers above age 21
 - 0.08 percent blood alcohol concentration (BAC) laws
 - Administrative license revocation laws
 - Publicized sobriety checkpoints
 - Policies that increase the price of alcohol and prevent increases in outlet density (the number of bars, liquor stores and restaurants serving alcohol around campuses)
 - Parental notification
 - Mandated brief motivational trainings for students who violate alcohol policy

- Red Watch Band program (a movement designed to end alcohol overdose deaths by teaching students how to handle alcohol emergencies and summon professional help: www.redwatchband.org)
- Resident assistant training
- Overall prevention planning; distribution of state and federal funds to combat underage drinking, substance abuse, and impaired driving
- Allocation of funding specific to college alcohol and other drug abuse prevention
- State legislation to control access to alcohol
- Allocation of services to county or community treatment agencies and recovery organizations
- Formation and ongoing work of a campus and community coalition that addresses alcohol problems in the town or city surrounding the campus
- Working with other campuses for policy change at the state level
- Definition of a lead agency from each state to coordinate and spearhead its activities and programs to reduce and prevent underage drinking
- Develop campus-community partnerships involving multiple sectors of each: health services, campus and local police departments, alcohol beverage control, faculty, staff, students, administrators, residential life staff, resident assistants (RAs), parents, and alumni, with multi-faceted interventions

Our hope is that college administrators, health care officials, faculty members, and a wide range of other campus and community stakeholders will find this guide and its many Web sites practical resources for exploring, finding or implementing solutions on their individual campuses. There is no single path to change that will work on every campus, but the essential elements of those paths have become much more clear over the past 4-5 years of research and practice.

Major sections of this guide cover areas where much progress is required and where specific steps can be taken. While these recommendations need to be adapted to specific contexts, they provide a starting point for crucial, college/community agenda setting. These priorities by no means constitute an exhaustive list of potential solutions. However, they should inform college presidents, college health organizations, faculty and stakeholders of where gains can be made.

As students streamed afresh onto college campuses across the country last fall, media attention focused on a campaign to enlist the support of college presidents for lowering the legal drinking age from 21 to 18 as a strategy to reduce high-risk drinking on college campuses -- and on the substantial differences of opinion that exist about whether this approach would be effective.

The more important news in this area, however, was the increasing emergence of empirical evidence that there are already many effective and promising strategies that can reduce the harms and preventable deaths caused by high-risk and binge drinking on college and university campuses. Unfortunately it was equally clear that most campus leaders -- whether presidents and faculty, campus health service personnel, residence life or security staff, or students themselves -- were neither aware of this evidence nor linked into scientific or national college and university community networks that could provide them continuing timely information.

This need to disseminate and update the empirical evidence about preventing and combating risky drinking on campus, and to provide a way for campus administrators to communicate with each other about their own experiences, led the Robert Wood Johnson Foundation (RWJF) to engage Laufer Green Isaac to develop and disseminate this *Resource Guide*. In doing so, RWJF built on two decades of relevant, cutting-edge work, beginning in the early 1990's with a seminal survey of alcohol use and abuse on college campuses, and continuing by funding a series of research, action and advocacy initiatives aimed at reducing drinking among youth of all ages.

Mirroring its similar investments in youth-focused tobacco control, RWJF supported a three-part portfolio of grants and programs to prevent the harms of alcohol use, especially among youth. This portfolio included: (1) research initiatives to clarify the determinants of youth drinking and identify promising and effective interventions; (2) demonstration programs to apply and evaluate promising solutions in states, communities and colleges and universities across the country; and (3) strategic advocacy and communication efforts to make youth drinking visible as a serious problem to the public and policymakers, and to disseminate emerging findings about its causes and solutions.

RWJF's flagship programs included:

- *The College Alcohol Study*, which surveyed nationally representative samples of college and university students across the country over a period of 14 years from 1992-2006;
- *The Substance Abuse Policy Research Program* which has funded and synthesized scores of studies examining national state, community and campus policy and environmental factors affecting youth and college alcohol use (e.g., changes in minimum age drinking laws, alcohol outlet density);

- *Reducing Underage Drinking Through Coalitions*, a national program supporting and evaluating state-based coalitions to work with youth leadership programs, public awareness campaigns and innovative uses of public policy to reduce underage drinking among high school students;
- *Leadership to Keep Children Alcohol-Free*, a program co-funded by the National Institute on Alcohol Abuse and Alcoholism (NIAAA) and led by a coalition of 34 governors' spouses and 30 public and private organizations to curb drinking among children aged 9-15; and
- *A Matter of Degree*, which funded ten universities to develop programs that would make the environment on campus and in surrounding communities less conducive to underage and high-risk drinking.

During the same period, the National Institute on Alcohol Abuse and Alcoholism (NIAAA), the Centers for Disease Control and Prevention (CDC), the American Medical Association (AMA), and Mothers Against Drunk Driving (MADD), worked tirelessly to fund research in this area, translate the findings into practice and policy, and develop “best practices,” with the sole objective of reducing the harm caused by underage drinking and risky drinking on college campuses.

This *Resource Guide* has been created to connect you with tools, interventions and leaders to help you address the problem of binge and high-risk drinking on your campus and reduce the serious tolls that it takes. The Foundation is deeply grateful for the skilled and creative efforts of Laufer Green Isaac and the many Expert Consultant Advisors who shaped this guide, all of whom share a commitment to continued progress in finding and applying science-based solutions on campuses across the country.

C. Tracy Orleans, PhD
Robert Wood Johnson Foundation

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1. High-Risk Drinking:

An Overview

Alcohol use is a normative social behavior in our society, but when indulged in excess it can have serious consequences for both those who are drinking, and also other individuals, families and communities. In fact, in the United States there are an average of 79,000 deaths and 2.3 million years of potential life lost due to excessive alcohol use each year (source: Centers for Disease Control and Prevention). While college students are involved in only a portion of these tragic consequences, college high-risk drinking is a significant public health problem. The reduction of high-risk drinking is a leading public health goal in the United States (source: U.S. Department of Health and Human Services).

“Rarely will a single action solve complex problems.”

C. Everett Koop,
former Surgeon General of the United States

College students who do and do not drink, as well as surrounding college communities, are affected by college-level drinking. Additionally, the effects of alcohol consumption on those who do drink persist into later life resulting in negative health, social and economic consequences. The younger the age of first intoxication, the greater the likelihood of those college students to experience alcohol dependence, drive under the influence of alcohol, ride with drinking drivers, be injured under the influence of alcohol and have unplanned and unprotected sex after drinking (source: Hingson et al., 2003a; Hingson et al., 2003b).

A comprehensive, multi-strategy population-based public health approach is needed to best address this complex, multi-faceted problem. But first it is important to define the construct and nomenclature surrounding college level drinking.

Defining The Problem

Why is it called high-risk drinking?

High-risk drinking. Heavy drinking. Heavy-episodic drinking. Binge drinking. Researchers, colleges and universities, students, health care clinical professionals and parents all use slightly different terminology and definitions regarding college level drinking. Students often define it through anecdotal stories on the traditions of excess drinking, such as drinking 21 shots of hard liquor on their 21st birthday or guzzling beer through a funnel. Researchers define it by a defined amount of consumption. Health care professionals consider the clinical symptoms associated with excess consumption of alcohol. Parents and university leaders look at the risk factors involved—physically, financially and academically.

For the purposes of this guide, we will refer to the behavior as “college high-risk drinking.”

What is high-risk drinking, really?

There are three very common research definitions of the term “binge” drinking, which some researchers use in place of “high-risk” drinking. These are:

- University of Michigan-Monitoring the Future Study defines “binge” drinking as five

College Alcohol Survey (CAS)

Between 1992 and 2001, Harvard University School of Public Health, conducted four national surveys among 140 randomly selected four-year colleges. At the completion of the study, more than 50,000 students had been surveyed. The CAS also surveyed college and university administrators and presidents to get an overview of the alcohol prevention strategies being used on U.S. campuses and conducted several environmental studies to determine the relationship of binge-drinking levels to the surrounding environment. The results of this landmark study have provided a better understanding of not only the magnitude and persistence of alcohol use and its related consequences among college students, but also the social and environmental factors involved in binge drinking. CAS data over the course of the study estimated the overall rates of college binge drinking at around 44 percent—remaining fairly stable over the decade study (source: Wechsler and Nelson, 2008).

consecutive drinks for men and women (source: Johnston et al., 2008).

- Harvard University College Alcohol Study (CAS) developed a gender-specific definition for “binge” drinking as five consecutive drinks for male and four consecutive drinks for female students (source: Wechsler et al., 1995a).
- National Institute on Alcohol Abuse and Alcoholism (NIAAA) formed a task force to develop a recommended definition of binge drinking. In 2004, the council approved the following definition: *A “binge” is a pattern of drinking alcohol that brings blood alcohol concentration (BAC) to 0.08 gram percent or above. For the typical adult, this pattern corresponds to consuming five or more drinks (male), or four or more drinks (female), in about 2 hours. Binge drinking is clearly dangerous for the drinker and for society (NIAAA, 2004).* Similar to Harvard’s CAS measure, for a typical adult this pattern fits the gender-specific measure of five drinks for a male and four for a female. However, adding to the CAS measure, NIAAA estimates a two-hour period for consumption (source: National Institute on Alcohol Abuse and Alcoholism, 2004).

Do most college students binge drink?

No. According to CAS estimates from 1993 to 2001, the overall rates of college high-risk drinking remained stable—around 44 percent (source: Wechsler and Nelson, 2008). However, even though estimates of national drinking rates remained consistent year-to-year, estimated rates of high-risk drinking among specific college campuses varied greatly, from 1-76 percent (source: Wechsler and Nelson, 2008). A more recent report published in 2009 by the National Institute on Alcohol Abuse and Alcoholism (NIAAA), estimated that 44.7 percent of college students ages 18-24 reported binge drinking at least once in the month prior to their survey participation, a seven percent proportional increase since 1999 (source: Hingson, Zha and Weitzman, 2009). While this is clearly a critical issue, still a majority of college students either abstain completely from alcohol consumption, or drink at low and moderate levels (sources: Johnston et al., 2008; Wechsler and Nelson, 2008). According to the prevention paradox, while as individuals, the heaviest drinkers are at the greatest risk for negative harms associated with excess alcohol consumption; the low and moderate drinkers comprise such a large proportion of the college student population that as a whole, they experience the most negative consequences (sources: Kreitman, 1986; Weitzman and Nelson, 2004a).

Which college students are most likely to participate in high-risk drinking behaviors?

Students most likely to drink are those with the greatest access to alcohol and exposure to social norms encouraging or condoning high-risk drinking; see bottom of Page 44.

Are any groups on campus less likely to partake in high-risk drinking than others?

Some student demographic characteristics are associated with lower rates of high-risk drinking, including, African American and Asian American students, women, married students, religiously active students and students who volunteer or participate in community and campus organizations (source: Wechsler and Nelson, 2008). Additionally, among white,

male, undergraduate students attending colleges in which the student body was comprised of more minority, female and older students, the high-risk drinking rates of the white, male students was lower (source: Wechsler and Kuo, 2003).

Do college men engage in high-risk drinking behaviors more than college women do?

Yes. According to several data sources, college men drink more than college women (source: O'Malley and Johnston, 2002). However, according to a 2009 review of alcohol use trends that stratified data, while there are variations based on legal drinking status and gender, the college environment continues to correlate to higher rates of binge drinking among both women and men under and above the legal drinking age (source: Grucza, Norberg and Bierut, 2009).

Additionally, the gap between high-risk drinking levels of college men and women is narrowing as college women's high-risk drinking levels are increasing more rapidly than their male counter parts (source: Grucza, Norberg and Bierut, 2009). This narrowing gap is especially significant because women are at higher risk than are men for serious medical conditions associated with alcohol use. Women absorb and metabolize alcohol differently than men. Because they have less body water and achieve higher concentrations of alcohol in their blood after drinking the same amount as men, women are more likely to develop liver damage and to die from cirrhosis, and are more vulnerable to alcohol-induced brain damage and heart damage. In addition, research studies show that moderate to heavy alcohol consumption increases the risk for breast cancer (source: Gordis, 1999).

What are the factors associated with high-risk drinking behaviors on college and university campuses?

A range of personal and social factors influences high-risk drinking. Perceived notions of what other students are doing, group pressure, the desire to appear 'grown-up,' and positive expectations of alcohol use also play a role. According to the Core Institute's 2006 Alcohol and Drug Survey of more than 70,000 undergraduate students across the United States, 75.9 percent of students believe that alcohol enhances social activity, 63.4 percent of students believe alcohol allows people to have more fun and 53.7 percent of students believe alcohol facilitates sexual opportunities (source: Core Institute, 2006). These perceptions play an important role in why and how much college students drink. More than 70 percent of college students over-estimate how many of their student peers drink alcohol and how much alcohol they drink (source: Perkins, Haines and Rice, 2005).

Are college students the only young adults involved in high-risk drinking?

College students are not the only young adults drinking alcohol. For every 18-24 year old college student there are two 18-24 year olds not in college who account for a more substantial number of those affected by high-risk drinking (source: Centers for Disease Control and Prevention, 2007).

Compared to their non-enrolled peers, college students demonstrate rates of high-risk drinking at higher levels. Some of this can be attributed to the transition from the teen years to adulthood, and the diverse life choices available to individuals during this time in their lives. In the years from high school to college, massive changes occur in almost every domain, and self-direction in everyday life increases. During this period, adolescents can establish patterns of drinking which set them on a trajectory of life-long alcohol misuse.

Results from the 2007 longitudinal *Monitoring the Future* study reported that 34 percent of 18-24 year olds not enrolled in college drank at high-risk levels significantly less frequently than the 41 percent of their peers enrolled in college (source: Johnston et al., 2008). However, because there are far greater numbers of 18-24 year-olds not in college than those in college (source: Hingson, Zha and Weitzman, 2009), it is critical to implement a comprehensive approach that involves communities surrounding college campuses as well as college students in particular.

The Consequences Of High-Risk Drinking

What are some of the public health effects of primary and secondary college high-risk drinking?

The effects of college high-risk drinking behaviors are as diverse as those who partake in the behavior. Consequences vary from chronic conditions and impairments to deadly accidents and unintentional harms. Alcohol lowers inhibitions, which can lead to illegal, reckless behavior, and/or unsafe sex (source: U.S. Department of Health and Human Services, 2007). Alcohol-related factors remain the leading influence in the top three causes of death (automobile crashes, suicide and homicide) among youth 15-24 years old (source: U.S. Department of Health and Human Services, 2007).

According to 2005 data, more than 1,825 college students aged 18-24 die each year from alcohol-related injuries, a proportional increase of three percent since 1998 (source: Hingson, Zha and Weitzman, 2009). Alcohol intoxication is often implicated for alcohol-related harms in terms of traffic fatalities and injuries, violence, sexual assault, rape, having unprotected sex, unintentional injury, vandalizing property, mental impairment and falling behind in school among college students (source: U.S. Department of Health and Human Services, 2007).

Individuals who binge drink and especially those who frequently drink at high-risk levels are more likely to experience alcohol abuse and/or dependence (source: Bingham, Shope and Tang, 2005). High-risk drinking behaviors in college are also associated with consequences later in life regarding alcohol use, alcohol abuse, and financial, social and career success (source: American Medical Association, 2004). Additionally, high-risk drinking has increased among adults throughout the United States. Between 1995 and 2001, high-risk drinking episodes per person increased 35 percent per year and those who binge drink are 14 times more likely to drink and drive compared to those individuals not binge drinking (source: Naimi et al., 2003).

High-Risk Drinking: **An Overview**

The many people in surrounding communities harmed by the actions of intoxicated students (in car crashes, etc.) underscores the responsibility of colleges – and society at large – to address the issue of underage high-risk drinking.

How many students fit alcohol abuse and/or dependence diagnostic criteria?

While a majority of students do not engage in high-risk drinking behaviors, more than 31 percent of all students fit the American Psychiatric Association's Diagnostic and Statistical Manual-IV (DSM-IV) definition of alcohol abuse and about six percent meet the DSM-IV diagnostic criteria for alcohol dependence (source: Knight et al., 2002). However, very few students who fit the diagnostic criteria for alcohol abuse or dependence seek treatment, and a majority of students with alcohol abuse or dependence problems do not believe that they need treatment (source: Knight et al., 2002). Reaching this population through early identification, screening and treatment is important because absent early intervention, alcohol dependence issues continue throughout an individual's life and negatively impact a person's chances of marrying, completing their educational and career goals, and becoming financially independent (source: American Medical Association, 2004).

What role does college high-risk drinking play in alcohol-related car crashes each year?

A majority of the deaths among college-related students 18-24 years old were the result of traffic-related deaths (source: Hingson, Zha and Weitzman, 2009). Nearly half of the people who die in crashes involving drinking drivers ages 18-24 are persons other than the drinking driver (source: Hingson, Zha and Weitzman, 2009). From 2001 to 2005 the rate of alcohol-related traffic deaths among college students decreased seven percent from 15.2 to 14.1 percent (source: Hingson, Zha and Weitzman, 2009). Laws aimed at reducing alcohol consumption of youth and drinking and driving of all ages have had significant impacts on alcohol consumption and drinking and driving accidents (source: Fell et al., 2009). The Federal Minimum Legal Drinking Age (MLDA) law and the Zero Tolerance Laws enacted in all 50 states alone are estimated to save 732 lives per year (source: Fell et al., 2009). Few colleges and universities have specifically implemented alcohol prevention programs that target and enforce drinking and driving among college students.

A Drinking and Driving Enforcement Program in a College-Campus Community

A community drinking and driving enforcement program was implemented by the West Virginia Governor's Highway and Safety Program to research the effectiveness of an enforcement program. Two communities in West Virginia were compared. Huntington, West Virginia, where Marshall University is located, implemented a college-community program that strongly enforced existing minimum drinking age laws (MLDA). In comparison, Morgantown, West Virginia where West Virginia University is located, served as the control community. Researchers found statistically significant reductions in BAC levels among youth in Huntington where the program was implemented in comparison to Morgantown. In fact, individuals reporting that they drank and drove during the past three months was 72 percent less likely in underage youth 16-20 years old and 30 percent less likely for drivers 21-24 years old in the program group relative to the comparison group.

What are some of the negative primary physical effects of high-risk drinking?

The human brain continues to develop through an individual's mid-20s, and excessive alcohol use can result in brain deterioration, including impaired memory and decision-making functions as late regions of the brain are developing (source: American Medical Association, 2004). A 2009 study on binge drinkers found that binge drinkers tend to expend more effort to complete a given task, and have a deficiency in differentiating between relevant and irrelevant information (source: Crego et al., 2009). Moreover, the pattern of binge drinking and then abstinence until the next binge episode has significant negative neuro-cognitive effects. Other physical effects include weight gain and high blood pressure. Consider the fact that a student drinking five regular 12-ounce beers during a binge episode consumes 700-800 calories, nearly half of the daily caloric intake needed each day.

Alcohol Poisoning & Other Fatalities:

Every year, tens of thousands of college students wind up in emergency rooms suffering from the life-threatening effects of alcohol intoxication. Moreover, every year, about a dozen students, including some of the best and brightest and most athletically talented, die from acute alcohol poisoning. Overconsumption of alcohol can kill, or it could lead to irreversible brain damage. Alcohol can depress nerve cells that control breathing and the gag reflex, which can be fatal. Alcohol poisoning can also cause hypothermia and severe dehydration, which also can be fatal.

High-risk drinking is not good for a person's body—and a body responds with highly unpleasant after-effects:

- ✓ Hangovers
- ✓ Vomiting
- ✓ Dry Mouth

Are college students who engage in high-risk drinking behaviors more likely to engage in other risky behaviors?

Students who engage in high-risk drinking behaviors are more likely to practice unsafe sex, and drink and drive. Additionally, researchers have found that high school students who engage in high-risk drinking will more than likely also use drugs and drink, use drugs on school property, have lower grade point averages, carry guns and other weapons, and be injured in fights and suicide attempts (source: Hingson and Kenkel, 2004).

Does high-risk drinking affect college students who are not binge drinking themselves?

Yes. Not only are the students who participate in high-risk drinking affected by their alcohol consumption, their fellow students and neighbors in the surrounding community are affected as well. Those who live geographically closer to college campuses with high drinking rates are more likely to experience such negative secondhand effects as litter, noise disturbances, violence, study and sleep disruptions and vandalism than both those individuals not near a college campus and those not near a college campus with high binge-drinking levels. In fact,

High-Risk Drinking: **An Overview**

non- high-risk drinking students are twice as likely to be affected by such secondhand effects if they live on or near campuses in which over 50 percent of the students drink at high-risk levels (source: Wechsler et al., 1995b.) The 1999 College Alcohol Study (CAS) survey results estimated the following secondhand consequences due to binge drinkers:

- 23 percent had experienced an unwanted sexual advance
- 11 percent had been pushed, hit or assaulted
- 36 percent had been insulted or humiliated
- 16 percent had property damaged
- 71 percent had their sleep or study interrupted (Wechsler et al., 2000)

Is college high-risk drinking associated with increases in sexual violence on campus?

Yes. Sexual victimization, sexual assaults and rape are major issues on college campuses and alcohol is involved in a majority of these incidents. A National Institute of Justice study estimated the extent of a wide-range of sexual victimization among college students including a range of sexual incidents, counting sexual threats, unwanted sexual touch and attempted and completed rape. For every 1,000 women attending a college, it was estimated that there might be 35 rapes during each academic year (source: Fisher, Cullen and Turner, 2000). Additionally, according to estimates from the CAS, one out of 20 college women are raped each year with alcohol involved in over 70 percent of these incidents (source: Kuo et al., 2004.)

What are the statistics on campus sexual assaults as related to college high-risk drinking?

Up to 70 percent of college students report having sex primarily as a result of being under the influence of alcohol, or to having sex they would not have had if they had been sober (http://hcs.calpoly.edu/peerhealth/alcohol/info_students_stats.html).

Alcohol use is involved in more than half of campus rapes, by either the assailant or the victim.

Safe sex practices are frequently abandoned when students are drunk, even if they do protect themselves when they are sober.

One in twelve college males admit that, as a result of high-risk drinking, they have committed acts that meet the legal definition of rape.

60 percent of college women who are infected with STDs, including genital herpes and AIDS, report that they were under the influence of alcohol at the time they had intercourse with the infected person.

The Center for Disease Control reports that 1 in 1500 college students is HIV positive (http://hcs.calpoly.edu/peerhealth/alcohol/info_students_stats.html).

For more information regarding a general overview of high-risk drinking and its consequences, see:

Resources on High-Risk Drinking: An Overview

Defining the Problem

Journal Articles

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2. *Be Vocal. Be Visible. Be Visionary*. Newton: The Higher Education Center for Alcohol and Other Drug Abuse and Violence Prevention Education Development Center, 1997. (No authors credited.)
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9. *What Colleges Need to Know Now: An Update on College Drinking Research*. Washington: National Institute on Alcohol Abuse and Alcoholism (NIAAA), 2007. (No authors credited.)

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<http://www.aap.org/>
2. American Medical Association (AMA)
<http://www.ama-assn.org>
3. Centers for Disease Control and Prevention (CDC)
 - a. Alcohol Team
http://www.cdc.gov/alcohol/alcohol_team.htm
 - b. Guide to Community Preventive Services
<http://www.thecommunityguide.org/alcohol/index.html>
4. College Alcohol Study (Harvard School of Public Health)
<http://www.hsph.harvard.edu/cas/>
5. The Core Institute
<http://www.siu.edu/~coreinst>
6. Dartmouth Center on Addiction Recovery and Education (DCARE)
<http://www.dartmouth.edu/~dcare/>

7. Healthy People 2010
<http://www.health.gov/healthypeople/>
8. Institute of Medicine of the National Academies
<http://www.iom.edu>
9. Laufer Green Isaac
<http://www.LGICommunications.com>
10. National Center on Addiction and Substance Abuse at Columbia University
<http://www.casacolumbia.org>
11. National Institute on Alcohol Abuse and Alcoholism (NIAAA)
<http://www.niaaa.nih.gov>
12. Robert Wood Johnson Foundation
<http://www.rwjf.org>
13. Substance Abuse & Mental Health Services Administration (SAMHSA)
<http://www.samhsa.gov>
 - a. Center for Substance Abuse Prevention (CSAP)
<http://prevention.samhsa.gov/>
 - b. National Clearinghouse on Alcohol and Drug Information
<http://ncadi.samhsa.gov/>
 - c. National Registry of Evidence-based Programs and Practices (NREPP)
<http://www.nrepp.samhsa.gov/>
 - d. Screening, Brief Intervention and Referral to Treatment
<http://sbirt.samhsa.gov>
14. Substance Abuse Policy Research Program (SAPRP)
<http://www.saprp.org>
15. The U.S. Department of Education's Higher Education Center for Alcohol and Other Drug Abuse and Violence Prevention
<http://www.higheredcenter.org/>

Tools

1. Alcohol Screening Tool-Boston University
<http://www.alcoholscreening.org/>

2. The Core Alcohol and Drug Survey (assessing the nature, scope and consequences of alcohol and other drug use on college campuses)
<http://www.siu.edu/~coreinst>
3. Guide to Community Preventive Services
<http://www.thecommunityguide.org/alcohol/index.html>
4. National Institute on Alcohol Abuse and Alcoholism-College Drinking: Changing the Culture
<http://www.collegedrinkingprevention.gov>
5. National Institute on Alcohol Abuse and Alcoholism-Rethinking Drinking: Alcohol and Your Health.
<http://rethinkingdrinking.niaaa.nih.gov>
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Consequences of High-Risk Drinking

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Reports, Presentations and Books

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2. Fisher, BS, Cullen, FT and Turner MG. *The Sexual Victimization of College Women.* Washington: U.S. Department of Justice, 2000.
3. *Harmful Consequence of Alcohol Use on the Brains of Children, Adolescents and College Students.* Chicago: American Medical Association (AMA), 2004.
4. *The Surgeon General's Call to Action to Prevent and Reduce Underage Drinking.* U.S. Department of Health and Human Services. "Washington: U.S. Department of Health and Human Services, Office of the Surgeon General, 2007. (No authors credited.)

Web Sites

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<http://www.aap.org/>
2. American Medical Association (AMA)
<http://www.ama-assn.org>
3. College Alcohol Study (Harvard School of Public Health)
<http://www.hsph.harvard.edu/cas/>
4. The Core Institute
<http://www.siu.edu/~coreinst>
5. Institute of Medicine of the National Academies
<http://www.iom.edu>
6. National Council on Alcoholism and Drug Dependence
<http://www.ncadd.org>
7. National Highway Traffic Safety Administration (NHTSA)
<http://www.nhtsa.gov>
8. National Institute on Alcohol Abuse and Alcoholism (NIAAA)
<http://www.niaaa.nih.gov>
9. Office of the Assistant Secretary for Planning and Evaluation, Health and Human Services
http://aspe.hhs.gov/_/index.cfm
10. Office of the Surgeon General
<http://www.surgeongeneral.gov/>
11. Robert Wood Johnson Foundation
<http://www.rwjf.org>
12. Red Watch Band
<http://www.stonybrook.edu/sb/redwatchband/index.html>
13. Substance Abuse Policy Research Program (SAPRP)
<http://www.saprp.org>
14. World Health Organization (WHO)
http://www.who.int/topics/alcohol_drinking/en/

Tools

1. The Alcohol Cost Calculator
<http://www.alcoholcostcalculator.org/>
2. Alcohol-Related Disease Impact (ARDI)
<https://apps.nccd.cdc.gov/ardi/Homepage.aspx>
3. National Institute on Alcohol Abuse and Alcoholism-College Drinking: Changing the Culture
<http://www.collegedrinkingprevention.gov>
4. The Core Alcohol and Drug Survey (assessing the nature, scope and consequences of alcohol and other drug use on college campuses)
<http://www.siu.edu/~coreinst>

2. High-Risk Drinking and

The College Campus

Any student passing through four years of college will inevitably be faced with social settings centered on alcohol. Most students see alcohol as an inherent part of college life, no matter how much they choose to drink. For some, drinking beer and downing shots can become as much a part of their college experience as writing papers and taking exams. In both cases, high-risk drinking is a significant issue among all ages of undergraduate students.

These problems do not go away when a student reaches the legal drinking age of 21. In fact, a higher percentage of individuals ages 21-24 binge drink as well as drive while under the influence of alcohol than students 18-20 years old (source: Hingson, Zha and Weitzman, 2009).

“Our primary purpose as educators is a student’s intellectual development, so if we do not include faculty as campus partners in preventing the college drinking problem, we miss the opportunity to link high-risk drinking with the intellectual life of the student and why they are in college.”

Amy Campbell, Campus Life Initiatives Director and Alcohol Coalition Committee Co-Chair, Princeton University

There are a certain set of community standards college-aged students generally agree with and abide by. They know, for instance, that stealing money from a roommate is wrong. Cheating on a test is unethical. Causing physical harm to another person is wrong. Students understand when penalties are levied for these infractions, and that laws, structures and standards are essential to living in a civil society. When it comes to high-risk alcohol consumption, however, students may know that it is unlawful to drink when underage; that drinking until a person blacks out is not normal; that the ability to make good rational choices while drunk is unlikely. Yet the behavioral standard does not reflect the law or community standards.

However, when campuses try to address the high-risk drinking issue, they are, by and large, absent a student community standard that supports the law or reasonable health and well-being standards. Therefore, the ways in which colleges work with students, enlist their faculty members, and receive an equal place at the table alongside researchers studying high-risk drinking behaviors are important and complex issues.

The overall prevalence of alcohol consumption and alcohol related problems among college students only partially defines the problem. While alcohol consumption is not unique to the college setting, there are issues such as Greek life, college athletics, and the annual transition of the student population that are specific to the college, its culture and its surrounding community. Understanding which of these factors are more often associated with high-risk drinking and which serve to protect individuals from high-risk drinking behaviors is one way for colleges and universities to design effective population-based prevention programs. Because most college students do not drink, or drink at moderate levels, and are still affected by alcohol-related harms, prevention efforts must consider the entire college and local community population as opposed to only the subgroups of college students with advanced rates of high-risk drinking and consequences.

Alcohol Affects Academics

Completing a higher education is the primary purpose of students enrolled in U.S. colleges and universities. Unfortunately, the consumption of alcohol can derail those academic goals.

In a survey of freshman at the University of Iowa, those students who reported binge drinking more than six times in a two-week period had a 0.28 lower grade point average than those who reported not binge drinking (DeJong, Saltz and Seager).

In a national survey of undergraduate students, those students with an A average reported consuming an average of 3.4 drinks per week, compared with 4.5 drinks among those with a B average, 6.1 drinks among those with a C average and 9.8 drinks among those with a D or F average (Persley, Meilman and Cashin, 1996).

Drinking in college seems to be a rite of passage. Why should colleges and universities intervene?

Providing a quality education to their students is the primary mission of institutions of higher education. Alcohol consumption has direct negative effects on that educational experience as well as related dramatic health and safety consequences that impact education, wellbeing and quality of life for students. Alcohol consumption has been found to have negative impacts on drinkers' learning processes and educational attainment, as well as disrupting the learning experience for fellow students not drinking but surrounded by students who are (source: Crego et al., 2009; Wechsler et al., 2002a).

How relevant is college social life in causing students to take part in high-risk drinking behaviors?

Whether an individual personally drinks or not, it is difficult to escape the pervasive drinking culture of most U.S. college campuses. Indeed, most academic institutions have long-established rites and rituals involving alcohol (homecoming, bonfires, Greek Week, etc.). On many campuses, popular athletic figures and fraternity leaders drink in massive quantities. The underlying perception may be that the drinking makes them cool, or adds to their coolness. CAS data found that campuses emphasizing intercollegiate athletics and fraternity and sorority life have advanced levels of high-risk drinking (source: Wechsler and Nelson, 2008).

In creating effective prevention programs, how do you deal with the fact that approximately 25 percent of the student population graduates each year?

Engaging students in alcohol prevention is an important piece of reducing high-risk drinking on campuses, both because individual student behavior is at stake and because changing group norms and activities can powerfully influence such individual behavior. The challenge is compounded each year when a new group of freshman enters and approximately 25 percent of the student population—often comprised of student leadership—leaves. Prevention and cultural change efforts must therefore be able to reach new students immediately, while also training new student leaders. It is a challenge, however, to create prevention programs involving students that sustain the efforts of individual student leaders who are not permanent fixtures in the campus community. There is no easy answer to this problem. However, implementing prevention endeavors that do not rely on one effort or specific individuals can help address this challenge.

How does high-risk drinking affect colleges economically?

High-risk drinking on college campuses affects health-care costs, police and campus security hours, and property repair from vandalism, to name a few concrete costs. While no precise estimates exist for costs to society associated strictly from college high-risk drinking, estimates are available on the costs related to underage drinking. The economic expenses of underage high-risk drinking are estimated to cost the United States more than \$62 billion annually and even more for all college students. This includes the financial ramifications of death; costs associated with violent crime, traffic crashes, treatment, and

alcohol poisonings; injury; property damage; and lost productivity (source: Temper and Mosher, n.d.). Separately, the United States spends more than \$100 billion each year on alcohol-related problems for all ages (source: United States Department of Justice, 2002). Additionally, colleges and universities must consider the financial costs of students dropping out of school due to alcohol-related problems including alcohol abuse and dependence, healthcare costs, and police and campus safety.

What responsibilities do colleges and universities bear for student high-risk drinking?

Alcohol use and abuse on campus is a major issue for college administrations. Concern has been increasing in recent years because of widespread abuse of alcohol in the college student population and because of alcohol-related tragedies within campus communities. Changes in the legal drinking age in many states and possible institutional liability for alcohol-related incidents now place additional pressure on college administrators.

Until the 1970s, alcohol was viewed legally as the sole responsibility of the individual drinker. However, starting in the 1970s, courts began to hold alcohol establishments, social hosts and institutions liable for alcohol related problems (source: Lake and Epstein, 2000).

While colleges and universities have traditionally been entrusted with the welfare of their students, the issue of legal liability for alcohol consumption and abuse is less clearly defined. Institutions have not generally been held legally liable for injuries resulting from student alcohol consumption. The general counsel for the American Council on Education cautions, however, that several roles commonly played by colleges and universities are potential sources of liability. These include the institution's position as supervisor of student conduct, as a property owner, as seller of alcohol, and as "social host."

By developing campus policies, supporting and enforcing local and state policies and engaging all stakeholders, not just the students, sustainable change can occur.

Do residential policies against drinking help the problem?

Yes. Where students live is related to their probabilities of taking part in high-risk drinking practices. According to CAS estimates, college students living off-campus with their parents were least likely to participate in high-risk drinking (29.9 percent binge drinking) compared to students living in fraternity or sorority houses that were most likely to binge drink (76.0 percent) (source: Wechsler et al., 2002b). A majority of campuses have enacted alcohol policies within the residential environment. Eighty-one percent of campuses provide an alcohol-free living choice to students (source: Wechsler et al., 2004). Students living in residence halls with policies prohibiting alcohol use are less likely to drink than those students living elsewhere (source: Toomey, Lenk and Wagenaar, 2007).

Not surprisingly, students living in substance-free residences (allowing no alcohol use) were less likely than students living in unrestricted residences to drink heavily or to experience alcohol-related effects generated by other student's drinking (source: Toomey, Lenk and

Wagenaar, 2007). In fact, CAS estimates suggest that 35.5 percent of students binge drink when living in these structured substance-free environments (source: Wechsler et al., 2002b).

What role to fraternities and sororities play in high-risk drinking on college campuses?

The Greek, or fraternity-sorority, system is an optimal environment on campuses to examine the role of alcohol use and problems. Students in Greek organizations consistently demonstrate higher levels of alcohol use and problems than nonmembers (source: Lo & Globetti, 1995; Sher, Bartholow, & Nanda, 2001). Specifically, members and leaders exhibit high levels of use and approval of use (source: Cashin, Presley, & Meilman, 1998). In fact, particular houses often have reputations based on their members' alcohol consumption (source: Larimer, Irvine, Kilmer, & Marlatt, 1997). In a review of two decades of research on fraternity drinking, Borsari and Carey (1999) identified five factors contributing to the heavy drinking consistently observed in fraternities: (1) a continuity of heavy alcohol use from high school to college; (2) self-selection into heavy drinking environments; (3) the central role that alcohol plays in fraternity socialization; (4) misperceptions of drinking norms; and (5) the enabling environment of the fraternity house.

What roles can Resident Assistants (RAs) play in preventing college high-risk drinking?

Resident Assistants (RAs) are on the frontline on college campuses. They can be leaders for college students within campus housing.

Effective comprehensive programs like Fordham University's Resident Alcohol Prevention Program limit drinking on college campuses through increased involvement of faculty, parents, students, and Residential Life staff in encouraging students to take personal and social responsibility for drinking choices. Fordham is taking a four-pronged approach to meet this mission:

1. The university is developing a new position, Assistant Director of Residential Life for Alcohol, who will serve as a liaison to parents in efforts to reduce college drinking.
2. New Resident Assistant (RA) training sessions are being introduced, based on character development and ethical decision-making to improve enforcement and effective communication with students about drinking policies in residence halls.
3. Faculty-student dinners are hosted, designed to strengthen students' understanding of the links between personal and social responsibility in their academic and personal lives.
4. An annual Stop College Drinking Fair has been initiated, to be led by students.

It is an important issue to find out how training of RAs can effectively serve to lead other students and even train fellow students on how to safely and responsibly deal with

a student who may be in a harmful situation due to alcohol consumption. The “Red Watchband Program” (<http://www.stonybrook.edu/sb/redwatchband/>) is one example of this kind of leadership and training.

What role does college athletics play in high-risk drinking?

CAS has established that male student-athletes may drink 16 percent more and female athletes may drink in excess of 19 percent more alcohol and experience greater drinking-related consequences than their peers who do not participate in college athletic programs. Due to the unique environment of collegiate athletics, multiple sources of normative influence (e.g., teammates, coaches, typical students on campus) may not only impact drinking behavior (source: Lewis, 2008), but also provide an opportunity to target such behavior, and to make athletics a campus-wide leader in doing so. Also CAS estimates have found that college student sports fans report binge drinking more (53 percent for both males and females) than college students who do not describe themselves as sports fans (41 percent males and 37 percent females)(source: Nelson and Wechsler, 2002). Alcohol companies are directly targeting these fans. In August 2009, Anheuser-Busch released Fan Cans with team colors for 27 different schools. Many school administrators have complained that this campaign encourages high-risk drinking among college students (source: Hechinger, 2009). Also, according to CAS estimates, because sports fans report responding to special promotions by beer companies more often than their non-fan peers, these targeted marketing campaigns can greatly influence binge drinking and its negative consequences among this high-risk population (source: Nelson and Wechsler, 2002). It is thus essential to develop popular and effective “tailgate” and other game related fan situations that limit or de-emphasize use of alcohol.

What is “pre-gaming” and/or “frontloading”?

Pre-gaming or frontloading is the consumption of alcohol before a social event or sporting game. Students may drink before a sporting event in which alcohol is prohibited within the stadium or prior to going to bars, to limit the amount of alcohol they need to buy at the bar. In a study surveying students at one college who had been referred for mandatory alcohol intervention, 31 percent reported “pre-gaming” or “frontloading,” on the night they were caught violating campus alcohol policies (source: Borsari et al., 2007).

Nationally, universities have been shunning alcohol advertising that critics say promotes underage drinking. Ohio State was one of the first schools to end its beer sponsorships in the wake of a student riot following a 2003 football game.

Despite the appeals of the University of Wisconsin’s athletic department, Chancellor Biddy Martin declined to renew advertising contracts in 2009 with the parent companies of MillerCoors and Anheuser-Busch, costing the college approximately a quarter of a million dollars. The university’s new policy prohibits beer ads on its statewide radio network during football, men’s and women’s basketball, and hockey broadcasts. The policy also prohibits beer ads during coaches’ television interview shows and in game programs but allows beer companies to continue hosting tailgating tents before football games.

As someone who has spent over 23 years dealing with college students on this issue I believe unequivocally that while both underage drinking and high risk drinking are real problems, they are not the same, and I assure you that college students certainly do not view them as the same.

Jim Terhune, Vice President for Student Affairs
and Dean of Students, Colby College

How is academic performance affected by college high-risk drinking?

Excessive alcohol consumption by college students can have important negative consequences— academic, social, health and mental health related. Students who report

more frequent heavy drinking also report more frequent alcohol-related academic problems (e.g., performing poorly on a test) and lower grades than students who engage in heavy drinking infrequently or not at all (source: Wechsler et al., 2002c).

Drinking disrupts sleep patterns, which can make it harder to stay awake and concentrate during the day. This can lead to struggles with studying and poor academic performance.

What can athletic departments do to help curb high-risk drinking?

In an effort to educate students about the risks involved with the misuse of alcohol, the National Collegiate Athletic Association (NCAA) has, through the support of the NCAA Foundation and Anheuser-Busch Companies, Inc., developed CHOICES, a grant program for alcohol education. Through the CHOICES program, the NCAA

provides funding for NCAA member institutions and conferences to integrate athletics into campus-wide efforts to reduce alcohol abuse. CHOICES projects must combine athletics with other campus partners in the development and implementation of effective alcohol-education projects on college campuses (source: National Collegiate Athletic Association, 2008). While there have not been independent evaluations of the effectiveness of these programs, it is clear that the unique relationships of coaches and their teams, the leadership potential of team captains and other prominent athletes, and the visibility of athletics on and off campus can all make major contributions to campus wide efforts to define and develop “good” behaviors.

How can we regulate students with varying legal statuses regarding alcohol?

Underage drinking and high-risk drinking among college students over age 21 years old are both problems. However, the solutions can be different. For example, Minimum Legal Drinking Age laws and compliance checks on bars and liquor stores in the local community surrounding campuses can enforce laws regarding underage drinking, but these efforts do not address the issue of those students over age 21 who are drinking at high-risk levels.

Campus-level initiatives such as alcohol-free programming and living arrangements target all ages on campus. However, while many of these strategies are promising, there is little scientific evidence to support many of the campus-level initiatives.

NIAAA College Task Force

The National Institute on Alcohol Abuse and Alcoholism (NIAAA) formed a task force of expert alcohol researchers, college and university presidents, and students to review current research on college drinking and its related harms and consequences.

In 2002, the task force released the landmark comprehensive report on college drinking, *A Call to Action: Changing the Culture of Drinking at U.S. Colleges*. The report concluded with specific evidence-based recommendations for colleges and universities regarding college-level high-risk drinking and was sent to every college and university president in the United States. These specific strategies were classified into four levels of effectiveness:

Tier One: Effective Among College Students

Tier Two: Effective Among the General Population

Tier Three: Promising

Tier Four: Ineffective

The specific strategies can be accessed from the report at: www.collegedrinkingprevention.gov

In response to the 2002 report, many colleges and universities asked for solutions with more immediate action in dealing with college drinking. Between 2004 and 2005, NIAAA implemented the Rapid Response to College Drinking Problems initiative, which matched 15 college and university administrators with expert researchers to implement and evaluate initiatives targeting college drinking. Many of those initiatives added evidence to strategies that work.

NIAAA followed up in 2007 with an update to the 2002 report. The report, *What Colleges Need to Know Now: An Update on College Drinking Research*, provides updated statistics and information on a collection of research conducted around the issue. The NIAAA's 2007 report also was disseminated to all college and university presidents.

“College students are in this protected environment that allows heavy alcohol use to grow and continue. Students are quite insulated from laws and from enforcement of those laws. College administrators to some extent bear some responsibility for that.”

Toben Nelson, Assistant Professor,
University of Minnesota School of Public Health

Is it enough to address the underage students on campus?

No. High-risk drinking negatively affects both underage students and those over the minimum legal drinking age of 21 years old. In fact, higher proportions of 21-24 year olds in college engage in high-risk drinking than 18-20 year olds. Since 1999, the increases in binge drinking have occurred in the 21-24 year age group, not the 18-20 age group (source: Hingson, Zha and Weitzman, 2009). While the issue of underage and college high-risk drinking overlap, the solutions and policies are different for these varying, co-habiting populations.

How does high-risk drinking in college affect a person after they graduate?

Absent early intervention, alcohol dependence issues continue throughout an individual's life and negatively impact a person's chances of marrying, completing their educational and career goals and becoming financially independent (source: American Medical Association, 2004). According to several studies, including a study on twins, results found that early alcohol use is associated with alcohol and other substance abuse and dependence later in life (source: Hingson and Zha, 2009; Grant et al., 2006).

For more information regarding high-risk drinking and the college campuses, see:

High-Risk Drinking and the College Campus Resources

Journal Articles

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4. *Reduce the Proportion of Persons Engaging in Binge Drinking of Alcoholic Beverages.* Washington: U.S. Department of Health and Human Services. Office of Disease Prevention and Health Promotion: Healthy People 2010. (No authors credited.)
5. *The Surgeon General's Call to Action to Prevent and Reduce Underage Drinking.* U.S. Department of Health and Human Services. "Washington: U.S. Department of Health and Human Services, Office of the Surgeon General, 2007. (No authors credited.)
6. *What Colleges Need to Know Now: An Update on College Drinking Research.* Washington: National Institute on Alcohol Abuse and Alcoholism (NIAAA), 2007. (No authors credited.)

Web Sites

1. Alcohol Coalition Committee (Princeton University)
<http://blogs.princeton.edu/acc/>
2. American College Health Association (ACHA)
<http://www.acha.org/>

3. Association of American Colleges and Universities
<http://www.aacu.org>
4. College Alcohol Study (Harvard School of Public Health)
<http://www.hsph.harvard.edu/cas/>
5. The Core Institute
<http://www.siu.edu/~coreinst>
6. Council for Advancement of Standards in Higher Education
<https://www.cas.edu/index.html>
7. National Association of College and University Attorneys
<http://www.nacua.org>
8. National Institute on Alcohol Abuse and Alcoholism (NIAAA)
<http://www.niaaa.nih.gov>
9. National Collegiate Athletic Association: CHOICES Grant Program
<http://www.ncaa.org/wps/ncaa?key=/ncaa/NCAA/Academics+and+Athletes/Personal+Welfare/Health+and+Safety/CHOICES+Grant+Program+Home+Page>
10. Office of Safe and Drug-free Schools
<http://www.ed.gov/osdfs>
11. Office of the Surgeon General
<http://www.surgeongeneral.gov/>
12. Red Watch Band
<http://www.stonybrook.edu/sb/redwatchband/>
13. Robert Wood Johnson Foundation
<http://www.rwjf.org>
14. Office of the Surgeon General
<http://www.surgeongeneral.gov/>
15. U.S. Department of Education
<http://www.ed.gov/>
 - a. U.S. Department of Education: Office of Safe and Drug-Free Schools
<http://www.ed.gov/OSDFS>

16. The U.S. Department of Education's Higher Education Center for Alcohol and Other Drug Abuse and Violence Prevention
<http://www.higheredcenter.org/>

Tools

1. Alcohol Screening Tool-Boston University
<http://www.alcoholscreening.org/>
2. The Core Alcohol and Drug Survey (assessing the nature, scope and consequences of alcohol and other drug use on college campuses)
<http://www.siu.edu/~coreinst>
3. National Institute on Alcohol Abuse and Alcoholism-College Drinking: Changing the Culture
<http://www.collegedrinkingprevention.gov>
4. National Institute on Alcohol Abuse and Alcoholism-Rethinking Drinking: Alcohol and Your Health
<http://rethinkingdrinking.niaaa.nih.gov>

3. High-Risk Drinking and

The Local Community

Alcohol is a regular feature of leisure activities in most communities surrounding college campuses: alcohol ads and billboards with attractive and youthful models promoting alcoholic products are displayed publicly; alcohol companies are allowed to sponsor local fairs, races and sports activities; and underage drinking and sales of alcohol to minors is often ignored. In all these ways, students are socialized by their community to believe that alcohol use is accepted, expected, and even essential to having a good time. To combat these forces, many communities are instead using a variety of strategies to control the visibility and availability of alcohol in college students' environments.

“We must not stop prevention at the borders of our college campuses.”

Bob Brewer, Alcohol Program Leader, Centers for Disease Control and Prevention

How do we engage the local community in preventing college high-risk drinking?

While engaging students is critical, other stakeholders such as bar owners, police officials, property owners, neighborhood residents and local and state legislators must be included when considering the high-risk drinking issue and what can be done to reduce the problem.

What is a “wet” community?

A wet community is one that includes a high-density of restaurants, bars and other alcohol-selling outlets within close proximity to the college campus. Low-priced alcohol, students of legal and non-legal drinking age cohabitating and socializing together, and college attitudes and traditions that encourage excessive drinking are also grouped under the umbrella of the term.

So, proximity of alcohol-selling businesses to campus plays a significant role in college high-risk drinking?

Research suggests that campuses with the most alcohol-selling outlets within a one to two mile radius can be correlated with more students who report drinking frequently and more students with drinking related problems than those whose campuses are located in places with lower density alcohol outlets (source: Weitzman et al., 2003). Indeed, among alcohol-selling outlets surrounding college campuses, the price for a single drink or pitcher were significantly correlated with college high-risk drinking rates. Moreover, the presence of weekend drinking specials is correlated to high college binge drinking rates (source: Kuo et al., 2003).

How does college high-risk drinking affect the local economy?

College students are targeted directly by alcohol companies and surrounding college businesses. A majority of local bars surrounding colleges and universities use low-price specials such as half-price happy hours, ‘girls drink free’ nights, alcohol served in fish-bowl sized glasses, specials such as \$1 pitchers and two-for-one drinks – all of which can be seen as creating an environment conducive to heavy drinking (source: Kuo et al., 2003). In the early 1990s, students were estimated to spend \$5.5 billion per year on alcohol (source: Eigan, 1991). Each year, college students spend about \$900 a year each on alcohol; that adds up to more than they spend on books, soda, coffee, juice, and milk combined (source: Core Institute, 2006).

Does the alcohol industry target the youth market?

Yes. The alcohol industry—sellers, advertisers, distributors, producers—spends billions of dollars each year on advertising, media, college marketing, and sporting and entertainment sponsorships (source: The Center on Alcohol Marketing and Youth, 2006). Concern about how much alcohol advertising reaches underage youth and how that advertising influences their attitudes and decisions about alcohol use has been widespread for many years.

Alcohol ads are broadcast on shows ranging from sports programs—like SportsCenter, NBA events and Stanley Cup playoffs—to drama programs; variety programs like Saturday Night Live to situation comedies and talk shows like The Craig Ferguson Show. In fact, according to an interactive tool designed to compare different age groups' exposure to alcohol advertising, in 2005, 18-20 year olds were exposed to beer advertising at twice the rate of adults 50-54 years old (source: The Center on Alcohol Marketing and Youth, 2005). This is significant because, according to several studies, underage youth drink more alcohol in response to alcohol advertising (source: The Center on Alcohol Marketing and Youth, 2006).

What role does alcohol outlet density play in college high-risk drinking?

Student populations exhibit an elevated degree of high-risk drinking and related problems where alcohol outlet density is high. Conversely, lower rates of high-risk drinking exist on campuses with an absence of alcohol outlets within a one-mile radius of campus (source: Weitzman et. al. 2003). Communities can reduce alcohol outlet density by restricting the times in which alcohol can be sold, mandating alcohol server training, implementing compliance checks, raising the price of alcohol through excise taxes and limiting alcohol sold at special low-prices (source: Toomey, Lenk and Wagenaar, 2007).

Does raising the cost of alcohol in neighboring communities inhibit college high-risk drinking?

Price/tax significantly affects high-risk drinking on and around college campuses. Students are incentivized to reduce their alcohol consumption when prices rise. A meta-analysis of 1,003 estimates from 112 studies found a strong inverse relationship between the price of alcohol and the consumption of alcohol (source: Wagenaar, Salois and Komro, 2009). For college women, increasing the federal beer tax to 64 cents per six-pack from the current 33 cent tax would result in a two percent reduction in binge drinking (source: Chaloupka, 1996). Currently, however, alcohol prices have not been raised. In fact, the price increase has not kept up with inflation (source: U.S. Department of Justice, 2002). The Marin Institute-Alcohol Industry Watchdog has a tool available to check how much revenue would be generated in each state with an increase in alcohol taxes (<http://www.marininstitute.org>, n.d.). Additionally, when the density of retailers selling alcohol is decreased there is a reduction in levels of binge drinking (source: Toomey, Lenk and Wagenaar, 2007).

Do local business compliance checks help curb student access to alcohol?

Compliance checks occur when an individual who appears underage attempts to buy alcohol while law enforcement watches undercover. If the sale is made, then penalties may be applied

to the server, the license holder, or both. Some campuses have engaged students by enlisting them to volunteer as compliance checkers.

Training programs and enforcement strategies combined in compliance checks have been proven successful in reducing binge drinking by reducing student's access to the alcohol. Servers, owners and managers of alcohol-selling establishments need training in all aspects of responsible alcohol service, including how to check and handle false age identification (source: Toomey, Lenk and Wagenaar, 2007).

What are some examples of community policies that have been found to reduce high-risk drinking and its harms when enforced on college campuses?

- Increased DUI enforcement within five miles of the campus
- Zero tolerance enforcement (no alcohol) on Blood Alcohol Checks (BACs) for drivers under age 21
- Sobriety checkpoints close to campus
- Compliance checks at bars and convenience stores near campus
- Party patrols to breaking up underage drinking parties
- "Shoulder Tap" programs to prevent adults from buying alcohol for underage students
- Public intoxication enforcement around campus
- Fake ID checking machines at alcohol outlets surrounding campus

For more information on high-risk drinking and the local community see:

High-Risk Drinking and the Local Community Resources

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High-Risk Drinking and **The Local Community**

Reports, Presentations and Books

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Web Sites

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<http://alcoholpolicy.niaaa.nih.gov/>
2. Alcohol Policies Project: Advocacy for the Prevention of Alcohol Problems
<http://www.cspinet.org/booze/pdbooze.htm>
3. Alcohol and Tobacco, Tax and Trade Bureau
<http://www.ttb.gov/>
4. Campaign for Alcohol-Free Sports TV
<http://www.cspinet.org/booze/CAFST/>
5. Center on Alcohol Marketing and Youth
<http://www.camy.org>
6. Center for Enforcing Underage Drinking Laws
<http://www.udetc.org>
7. Center for Science in the Public Interest (CSPI)
<http://www.cspinet.org//alcohol/>
8. Federal Trade Commission
<http://www.ftc.gov/>
9. Governor's Highway Safety Association
<http://www.ghsa.org>
10. ImpacTeen: A Policy Research Partnership for Healthy Youth Behavior
<http://www.impacteen.org/>
11. International Institute for Alcohol Awareness
<http://www.iaaonline.org/underage.php>

12. Marin Institute: Alcohol Industry Watchdog
<http://www.marininstitute.org>
13. Mothers Against Drunk Driving (MADD)
<http://www.madd.org>
14. National Highway Traffic Safety Administration (NHTSA)
<http://www.nhtsa.gov>
15. National Institute on Alcohol Abuse and Alcoholism (NIAAA)
<http://www.niaaa.nih.gov>
16. National Liquor Law Enforcement Association (NLLEA)
<http://www.nllea.org>
17. National Organizations for Youth Safety
<http://www.noys.org>
18. National Transportation Safety Board
<http://www.nts.gov>
19. Office of Juvenile Justice and Delinquency Prevention in the Department of Justice
<http://ojjdp.ncjrs.org>
20. Pacific Institute of Research and Evaluation (PIRE)
<http://www.pire.org/topiclist1.asp?id=1>
 - b. Prevention Research Center
<http://resources.prev.org>
21. Robert Wood Johnson Foundation
<http://www.rwjf.org>
22. Substance Abuse Policy Research Program (SAPRP)
<http://www.saprp.org>
23. U.S. Department of Defense
<http://www.defenselink.mil/>
24. U.S. Department of Health and Human Services: Administration for Children & Families
<http://www.acf.hhs.gov/>

25. White House Office of National Drug Control Policy
<http://www.whitehousedrugpolicy.gov/>

Tools

1. Guide to Community Preventive Services
<http://www.thecommunityguide.org/alcohol/index.html>
2. Interactive Data Tool: Youth Exposure to Alcohol: Advertising in Magazines
<http://camy.org/magtool>

4. Interventions

(3-in-1-Framework)

Decades of research have convinced researchers and practitioners alike that high-risk college drinking is an ongoing significant public health problem. College- and university-led initiatives have also begun to create a solid body of evidence for effective individual-level, and population based campus- and community-level integrated interventions. Education in schools and improvement of public information is an important

“There’s no single successful intervention silver bullet.”

Ralph Hingson, Director of Division of Epidemiology & Prevention Research, NIAAA

strand of government policy on alcohol harm reduction. The 3-In-1 Framework described below can help students, faculty, college officials, community leaders and legislators think in a broad and comprehensive fashion about the problems of college drinking and their solutions.

Alcohol research clearly indicates that multiple factors interact to produce various drinking patterns. Factors include both pre-existing determinants – students’ genetic and biological characteristics, family and cultural backgrounds and environments, and previous experiences in high school – as well as the powerful environments that exist on college campuses and the communities in which they are based. Even within one college, patterns may be influenced by students’ participation in fraternities/sororities, sports teams or other social groups. Research now has the capacity to bring this expanded perspective to the problem of college drinking and to test models that take into account many of these factors.

In previous decades, alcohol abuse was viewed as an individual weakness, and alcohol-related harm was treated as an unforeseen “accident.” Today, however, numerous research efforts support the current view that alcohol abuse and dependence and high-risk drinking is a complex chronic health condition greatly impacted by environmental conditions. College students’ over-use of alcohol is affected by a wide range of social-environmental factors and the policies that affect them, including easy access to alcohol, social norms that encourage drinking, large-scale targeted marketing by corporations, and individuals’ previous exposure and genetic pre-disposition to alcohol problems. Interventions, therefore, must fit individual campus cultures to have relevancy for each institution’s stakeholders, including students, campus administration and representatives, community members, alcohol proprietors, public agencies and government officials.

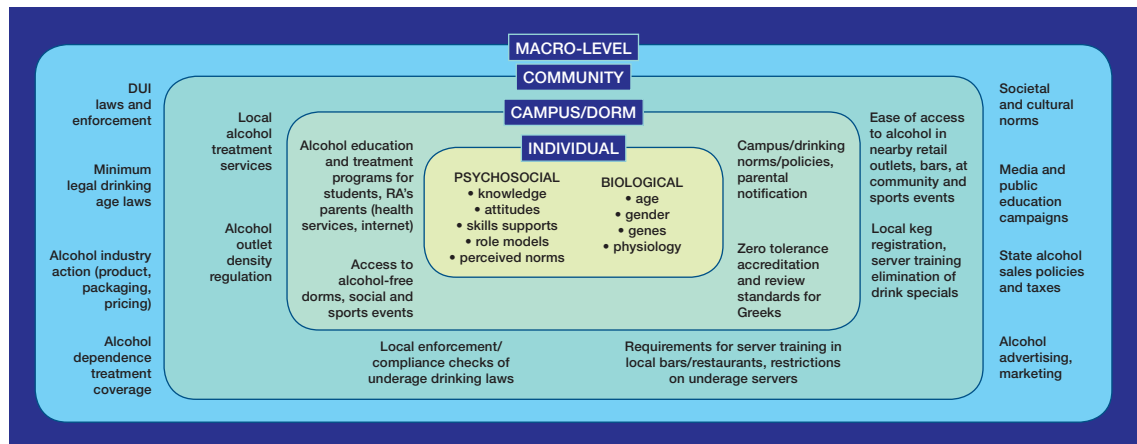
What is the 3-In-1 Framework?

This prevention framework is a series of strong, comprehensive interventions integrating multiple components from three primary audiences:

1. Individuals, including at-risk or alcohol-dependent drinkers
2. The student population as a whole
3. The campus and surrounding community

It is intended to encourage simultaneous action in multiple sectors both on and off campus.

Social Ecological Model



Are there interventions that really work?

Yes, past and present innovation and research are bearing new fruit. Many studies have recently come out with positive results, and there are more in the pipeline. For many decades, we have known that high-risk drinking is a problem, without solutions to address it. Now there are solutions—solutions that appear both effective and feasible for widespread application.

1. Individual-level Interventions

Supporting individuals is critical in preventing or breaking a cycle of alcohol misuse. For optimum success, strategies to reach these individuals—whether provided on or off campus—must be clearly formulated. In the past, most individual interventions were often aimed at those students with alcohol-related problems such as alcohol abuse and dependence. However, in recent years, prevention efforts aimed at individuals have been initiated as well. While individual-level interventions can take significant resources, time and trained professionals, positive results generated from web-based interventions may be an efficient way to reach students more broadly.

What are some successful initiatives aimed at individuals?

There are a variety of initiatives aimed at individual students that have evidence for success both as face-to-face interventions and as web-based interventions. While pure educational interventions have not received positive results (source: NIAAA, 2002), programs to change students' perceptions of drinking norms as well as brief motivational screenings and interventions have been successful in reducing students' levels of binge drinking and the resulting negative consequences (source: Larimer and Cronce, 2007). Recent studies have examined the efficacy of brief motivational interventions with students who have been required to participate due to campus alcohol policy violations; integrated in the university health setting; and as a web-based alcohol-abuse prevention program for incoming freshman and seen positive results (source: Amaro et al., 2009; Schaus et al., 2009; Wall, 2007).

What is the “social norms theory” of college high-risk drinking?

This model is predicated on the theory that peer influences impact individual behavior. At its core, social norm theory predicts that behavior is influenced by perceptions of how other individuals in one’s social environment think and act. Even on campuses that do not have high levels of high-risk drinking, students are rarely accurate in their estimates of the number of drinks that their peers drink. Even at schools where abstaining from alcohol consumption was the norm, 79.4 percent of students overestimated the drinking norms by at least one drink (source: Perkins, Haines and Rice, 2005). The perceived norm is much more influential in determining how much an individual drinks than the actual drinking norm on campus (source: Perkins, Haines and Rice, 2005). Changing students’ perceptions has the potential to change levels of consumption.

What are social norms interventions and can they be effective?

The effectiveness of social norms interventions have been controversial, partly because of the range of types of interventions that fit under this umbrella and the varying quality in research and evaluation. Nearly half of colleges and universities report using social norms marketing campaigns on their campuses (source: Wechsler et al., 2004). However, individual face-to-face interventions differ from web-based outreach, which differ from widespread media campaigns. Social norms interventions attempt to change students’ misperceptions about the high numbers of students who drink in excess in order to reduce the amount of alcohol students desire and consume.

A diverse range of social norms programs have been developed with the aim of changing college students’ perceptions regarding how many of their peers are drinking. These interventions include web-based interventions, social marketing, and individual and group feedback sessions. Social norms interventions—especially those that include personalized normative feedback, either face-to-face or web-based—have the greatest evidence for reducing

A Mandated Brief Alcohol Intervention

Northeastern University received a NIAAA Rapid Response grant to specifically target programs to students who were required to receive alcohol-related programming when they violated campus alcohol policies. The program, based on the Brief Alcohol Screening and Intervention for College Students (BASICS), an alcohol skills training program, incorporated information on alcohol related harms as well as psychological coping skills into several brief intervention sessions.

Twelve percent of those students mandated to participate in the program reported drinking on weekdays during the prior three months—in comparison to 27 percent of those not participating in the program. Additionally, the mandated group showed significant reductions in alcohol-related problems and consequences compared to a control group six months after the intervention (source: Amaro et al., 2009).

Evidence that requiring students to participate in alcohol-skills programs effectively reduced the rate of high-risk drinking and related harms should provide an incentive for colleges and universities to more stringently enforce campus-alcohol policies and provide such mandated interventions.

college binge drinking (source: Larimer and Cronce, 2007). However, it is important to note that while tempting to implement a web-based intervention for all freshmen as an effective solution, the efficacy of such an approach will likely be overpowered by a “wet” environment in which alcohol is highly accessible and available. For success, an integrated multi-pronged approach incorporating social norms interventions is needed.

Do individual-level education programs focusing on reducing students’ demand for alcohol help?

Yes! That said, individual behavior-change strategies alone do not effectively address high-risk drinking. Because high-risk drinking affects more than just individual drinkers, a broader multi-level approach is needed for effective prevention.

Alcohol screening and counseling—brief one-on-one interventions

Screening and counseling has been an effective intervention aimed at the individual level (source: Carey et al., 2007). However, it is often time and resource intensive, requiring skilled staff and often not reaching individuals before alcohol-related problems manifest. The University of Central Florida, a NIAAA Rapid Response grantee, used alcohol screening and counseling to motivate behavior change in alcohol consumption among students by integrating the program into the university’s existing health care system.

The first step was to screen students for high-risk drinking. They used the AUDIT or Alcohol Use Disorders Identification Test, a 10-question screen developed and validated by the World Health Organization. Dr. James Schaus, assistant director for clinical services at the University of Central Florida, and principal investigator in the NIAAA-funded study, recommended a single question screen that includes the 5/4 definition of high-risk drinking. If the student is male, the question is: In the last two weeks, have you had five or more drinks in a row? If the student is female, the figure changes to four or more drinks in a row. Next, if a motivational interview style was used and the subject was approached on his or her terms, without judgment, he or she felt more comfortable talking about his or her experiences. If the student had a positive experience talking about these sensitive topics, it was also more likely he or she would return to the health center if he or she had a problem in the future.

The challenge was to incorporate this into the schedule of a busy student health center. One tactic for doing this was known as the “teachable moment.” If a student presented with a sprained ankle because she fell over when drunk, or if he was being tested for an STD because he had a high-risk sexual encounter while intoxicated, these incidents were used as a starting point to talk about alcohol.

An evaluation of the effectiveness of screening and brief motivational interviews within the existing structure of the University Health Center system showed significant reductions in binge-drinking behaviors three and six months later. Reductions in alcohol related problems six and nine months later were also apparent (source: Schaus et al., 2009).

This is a promising solution given the ease of integrating interventions while using existing practitioners to analyze students at the health center and given the high proportions of students taking advantage of health services each year.

Health Care: U.S. Preventive Services Task Force (USPSTF) recommends screening and behavioral counseling as effective interventions to reduce alcohol misuse.

How have parents been constructively engaged?

One of NIAAA's Rapid Response grants implemented an educational intervention prior to the start of freshman year involving parents as an additional partner in reducing college binge drinking. The program involved distributing a 45-page alcohol-education booklet to all of the parents of incoming freshman at the University of San Diego. The booklet encouraged parent-child communication and provided information and strategies for parents to guide their children in making choices not involving alcohol and avoiding risk. Researchers requested feedback on parents' satisfaction in order to assess the number of parents who read the materials. A majority of parents who received the booklet (72.3 percent) responded as receiving the booklet and of those, 82.5 percent read most of the materials. This great response demonstrates parental interest in this issue and their own personal involvement. The results are promising as well, as the students of the parents who received the booklet drank less per week than the control group and those students who did not drink in high school were less likely to initiate alcohol consumption once in the college setting (source: Ichiyama et al., 2009).

Rob Turrisi, Professor of Biobehavioral Health at Pennsylvania State University, developed "A Parent Handbook for Talking with College Students About Alcohol." This booklet was sent to the parents of a randomly selected 50 percent of incoming freshman. A follow-up evaluation found that those students whose parents received the booklet achieved significantly better alcohol-related outcomes during their freshman year than those whose parents did not. See the reference contact list at the back of this report to see how your campus can use this tool.

2. Environmental and Policy Interventions

Mutually reinforcing interventions focused on both the college and the surrounding communities can change the broader environment and reduce alcohol abuse and alcohol-related problems. When college drinking is reframed as a community issue as well as a college problem, campus and community leaders are more likely to come together to address it comprehensively. The joint activities that typically result help produce policy and enforcement reforms that, in turn, affect the total drinking environment. Campus and community alliances also improve relationships overall and enable key groups such as student affairs offices, residential life directors, local police, retail alcohol outlets, and the court system to work cooperatively in resolving issues involving students (sources: Hingson and Howland, 2002; Holder et al., 1997a, 2000; Perry and Kelder, 1992).

“Minimum Legal Drinking Age 21 saves 900-1,000 lives a year in reductions in youthful traffic deaths alone. Can you imagine how many lives would be saved if we enforced the laws?”

Jim Fell, Senior Program Director, Pacific Institute for Research and Evaluation (PIRE)

Interventions (3-in-1-Framework)

Government Policies Affecting College Policies on Alcohol Use

Drug Free Schools and Campuses Regulations (EDGAR Part 86)

Colleges and universities receiving any federal funding must provide Alcohol and Other Drug (AOD) programs aimed at preventing underage students from using alcohol (source: DeRicco, 1997).

The Drug Free School and Campus Act in Higher Education Amendment, section 120.

This act mandated that U.S. colleges create and enforce policies aimed at reducing the misuse of alcohol (source: Lake and Epstein, 2000).

The Family Educational Rights and Privacy Act (FERPA).

This allowed U.S. colleges and universities to notify parents of students under 21 years old of violations of alcohol related incidents (source: Palmer et al., 2001).

These legislations represent an important change in the view of alcohol problems as an issue not only for the students drinking, but also as part of the responsibility of the college and university.

What are some examples of environmental interventions?

Environmental interventions are those that effect change at the broader environmental level. These include public policies such as the Minimum Legal Drinking Age, raising the price of alcohol through excise taxes, and limiting bars' and restaurants' specials.

Are community/state/federal policies effective in curbing college high-risk drinking?

Yes. The larger environment is known to be an important predictor of college high-risk drinking. There is a growing body of scientific evidence that says policy is an important factor in determining the drinking behaviors and alcohol-related problems for both college students and the general public. According to a study that examined overall state-level binge drinking rates with adult high-risk-drinking rates and college binge-drinking rates, the three were highly correlated. This suggests that state-level policies affect not only overall drinking rates, but also those of college students (source: Nelson et al., 2005).

Has the Minimum Legal Drinking Age (MLDA) legislation been effective in reducing high-risk drinking?

Yes. The bulk of evidence suggests that the national MLDA of 21 has resulted in reduced drinking and driving and other alcohol-related harms, including fatal car crashes, crime involvement and suicide among individuals 18-21 years old (source: Hingson, 2009). Preventing underage drinking has significant consequences. The younger the age of first intoxication, the greater the likelihood that college students will experience alcohol dependence, drive under the influence of alcohol, ride with drinking drivers, be injured under the influence of alcohol, and have unplanned and unprotected sex after drinking (source: Hingson et al., 2003a; Hingson et al., 2003b). Additionally, research on the long-term consequences of the MLDA laws show that those who came of age under more permissive laws (MLDA of 18, 19 or 20 years old) are at higher risk of DSM-IV alcohol abuse and dependence, even as older adults. Individuals with more opportunities to drink at early ages have higher levels of alcohol problems as adults (source: Norberg, Bierut and Gruza, 2009). So, even if we have not seen the sharp declines of high-risk drinking in the college student population in response to the MLDA laws, it has been effective and important legislation.

Does the price of alcohol affect student consumption?

Price/tax significantly affects high-risk drinking on and around college campuses. Students are incentivized to reduce their alcohol consumption when prices rise. A meta-analysis of 1,003 estimates from 112 studies found a strong inverse relationship between the price of alcohol and the consumption of alcohol (source: Wagenaar, Salois and Komro, 2009). Additionally, when the density of retailers selling alcohol is decreased, there is a reduction in levels of binge drinking (source: Toomey, Lenk and Wagenaar, 2007).

3. Campus-Level Initiatives

Identifying the factors that allow/encourage student drinking is an important component of campus interventions. They include:

- Widespread availability of alcoholic beverages to underage and intoxicated students
- Aggressive social and commercial promotion of alcohol
- Large amounts of unstructured student time—including many universities' informal institution of three-day weekends
- Inconsistent publicity and enforcement of laws and campus policies
- Student perceptions of heavy alcohol use as the norm

What are some examples of college-level policy and environmental change strategies that are effective?

There are a variety of college-level initiatives aimed at both individual high-risk students—such as requiring stricter accreditation for fraternities and sororities—as well as prevention efforts aimed at all students, such as online educational and screening interventions for all incoming freshman. Additionally, campus-level policies such as offering alcohol-free living arrangements and instituting a parental notification policy to inform parents when students violate campus alcohol policies are all examples of college-level initiatives.

An essential and effective ingredient in prevention and culture-change is the availability of alcohol-free weekend night activities on or near campus. For example, Princeton has an annual “dodge-ball” event that has become immensely popular. In addition, student-run athletic events can be scheduled on a Saturday evening rather than a Saturday afternoon. Of course, communities and schools vary greatly in what they offer and have the resources to offer, but trying to provide such alternatives can be a vehicle to enlist student energy and student ownership, which becomes invaluable.

What are examples of interventions that are not effective?

With so many strategies that have evidence for success as best practices and so many more promising strategies to address high-risk drinking among college students, it is important to avoid strategies that have been found ineffective. Purely educational, knowledge-based interventions, when not combined with other strategies, have been found to be ineffective in changing alcohol consumption behaviors (source: Larimer and Cronce, 2007).

Immediate Blood Alcohol Concentration (BAC) feedback through breathalyzer tests has proven effective in curbing some high-risk drinking, giving students immediate feedback on how their drinking affects their BAC. However, some reports suggest that the opposite effect can occur and the feedback can encourage excess drinking by turning the feedback into a contest of who can drink the most (source: NIAAA, 2002).

How do we engage students?

Engaging students in forming policies and campus programs is essential. Too often, well-meaning policies do not consider the reality of student behavior and result in ineffective “top-down” policies that are established and mandated by administrators, but seem irrelevant or

Interventions **(3-in-1-Framework)**

are not respected by the student body. Involving students in the decision-making process not only provides “real” information for college and university administrators about the attitudes and behaviors among student drinkers, but also encourages students’ essential ownership of the problem and their participation in solving it. Increasing numbers of academic institutions are actively and successfully engaging students in developing the policies that shape their college experience.

How can we have continuity in our prevention strategies when a quarter of the student population changes each year?

Sustained and committed leadership by individual student leaders is key to successfully changing student attitudes and behaviors, particularly in influencing attitudes of new students and in defining for them a “good” campus culture about alcohol. Student government, athletics, “Greeks,” and other organized social structures should be used to develop student leaders continuously so there is a constant replenishment of student leadership.

Princeton’s Alcohol Coalition Committee (ACC)

Princeton University has embraced involving students, administrators, faculty, health service professionals and other stakeholders in tackling the issue of college high-risk drinking through a multi-strategy approach. In 2007, the University founded the Alcohol Coalition Committee (ACC), a group run jointly by students, faculty and administrative staff throughout campus, including public safety, residential college administrators and the athletic department. The group aimed to open up the discussion of high-risk drinking on campus. Instead of simply holding a one-time only educational session for freshman and declaring high-risk drinking education complete, ACC took a broader approach to incorporate education, campus policies and alternative programming.

Though the standard NIAAA “binge drinking” definition makes for a standard measure, the ACC believes that the complex social and psychological elements at play must be taken into consideration as well. The ACC defines high-risk drinking as: any time the health, well-being, or safety of the individual drinking—or others—is compromised, or when community standards are compromised.

Through several working groups, including one dedicated to party registration, education and non-alcoholic activities, ACC has implemented programs and policies, including establishing pre-orientation programs for freshman students. The coalition also implemented a party registration system for students over age 21, to hold both the University and students responsible for ensuring safe drinking environments.

Who needs to be involved and engaged in strong campus-community strategies?

Effective multi-pronged interventions require a broad coalition. Involving all stakeholders in the process leads to stronger buy-in from communities for effective solutions, including educational components targeting high-risk populations as well as the broader based community and by enacting and enforcing campus, local, state and federal policies (source: National Institute on Alcohol Abuse and Alcoholism, 2007). General strengths of the coalition approach include innovative strategies resulting from the involvement of a range

of stakeholders in solutions to the problem, the power afforded by widespread community engagement, and the development of new community capacities through effective use of available social capital. Too often colleges and universities take a top-down approach that students do not respect, understand or follow. Additionally, local communities should be involved because it is not just college students who are affected. Both the secondhand effects on local community members caused by college high-risk drinkers as well as the numerous high-risk drinkers in the community impact the entire community.

NU Directions-A Matter of Degree Program (AMOD) at the University of Nebraska-Lincoln (UNL)

The University of Nebraska-Lincoln (UNL) was one of ten campuses to receive funding from the Robert Wood Johnson Foundation “A Matter of Degree” national program to reduce high-risk drinking on their respective campuses. Campuses were selected based on student high-risk drinking levels exceeding the national average by as much as 30 percent. Each coalition implemented varying program components and activities, but all ten participating schools aimed to change the alcohol environment by reducing the availability of alcohol on college campuses. NU Directions developed a coalition that engaged students along with other stakeholders such as bar owners, police officials, local legislators and campus leaders, implementing evidence-based interventions at the individual and environmental level to reduce college high-risk drinking. NU Directions, like many of the AMOD programs, aimed to change the alcohol environment by restricting the number of liquor licenses, thus decreasing the alcohol density close to campus, training alcohol servers about restricting alcohol service to customers under age 21, and educating servers on the consequences of illegally serving to minors.

NU Directions provides an example of the positive effects of multi-level interventions that involve all stakeholders in the process. NU Directions was one of the most successful of the AMOD initiatives. In 1997, before NU Directions began, student self-reported high-risk drinking rates were 62 percent. However, by 2003, that rate had dropped to 47 percent, a significant decrease of 15 percent (source: Newman et al., 2006).

Should colleges and universities focus prevention efforts only on the heaviest high-risk drinkers?

No. As individuals, the heaviest drinkers are at the greatest risk for negative harms. However, the low and moderate drinkers comprise such a large proportion of the college student population that as a whole, they experience the most negative consequences. This is known as the prevention paradox. A public health population-based approach is necessary to address this complex problem and only reaching the heaviest, highest risk population would leave out a majority of affected college students.

Is it better to try a little bit of everything, or focus on several evidence-based strategies?

It does not necessarily matter which strategies you choose, it is that you follow through. Task forces are an important first step, but without a focused evidence-based effort that can result in beginning small successes, people will get burned out without progress.

Interventions (**3-in-1-Framework**)

Multi-Strategy Intervention

Western Washington University implemented Neighborhoods Engaging with Students (NEST), a multi-strategy intervention combining enforcement and education. Enforcement included increased strictness of existing alcohol-control measures, such as increased party patrols and compliance checks at bars and other institutions in, and in close proximity to, the campus. Enforcement was combined with student education of relevant laws regarding alcohol consumption and strategies for responsible host parties. The result of these interventions was a decrease in off-campus partying along with students' increased investment in their community as well as a greater decrease of high-risk drinking overall among students. Additionally, students at Western Washington University were 25 percent less likely to binge drink than students at a comparison school (source: Saltz et al., 2009).

Important Tips on Implementing a Multi-Strategy Intervention on Your Campus

- Use campus data to drive the planning and implementation of an intervention that best fits your campus community. If most students do not drive, do not start with a drinking and driving enforcement program.
- Each campus and surrounding local community has unique assets and needs. Embrace them.
- Start small. Choose several focused strategies that can be planned, implemented and followed through effectively, resulting in early successes.
- Involve all of the stakeholders including those in the local community.
- Do not rely simply on a taskforce on the issue. People will get burned out without action-oriented solutions.
- Remember: there are solutions that work.

What other resources exist to help college and university leaders find up-to-date information on effective individual, campus, community and macro-level prevention strategies?

There are few at present, but they include:

- NIAAA Website (<http://www.niaaa.nih.gov/>)
- SAMHSA Web site (<http://www.samhsa.gov/>)
- U.S. Department of Justice Compendium of Resources (<http://www.ncjrs.gov/pdffiles1/eudlcomp.pdf>)
- Journal of Pediatrics (http://pediatrics.aappublications.org/cgi/content/full/121/Supplement_4/S311)
- Alcohol.Edu (<http://www.outsidetheClassroom.com>)
- Rethinking Drinking (www.rethinkingdrinking.niaaa.nih.gov)
- For more information on interventions for high-risk drinking on college campuses, see: **Interventions: 3-In-1 Framework Resources**

Please see resources at the end of this guide for more suggestions.

For more information on interventions for high-risk drinking on college campuses, see:
Interventions: 3-In-1 Framework Resources

Individual/Campus Level Interventions

Journal Articles

1. Amaro, H, Ahl, M, Matsumoto, A, et al. "Trial of the University Assistance Program for Alcohol Use Among Mandated Students." *Journal on Studies of Alcohol and Drugs*, Suppl 16: 45-56, 2009.
2. Carey, KB, Scott-Sheldon, LAJ, Carey, MP, et al. "Individual-Level Interventions to Reduce College Student Drinking: A Meta-Analytic Review." *Addictive Behaviors*, 32(11): 2469-2494, 2007.
3. Ichiyama, MA, Fairlie, AM, Wood, MD, et al. "A Randomized Trial of a Parent-Based Intervention on Drinking Behavior Among Incoming College Freshman." *Journal of Studies on Alcohol and Drugs*, Suppl 16: 67-76, 2009.
4. Larimer, ME and Cronce, JM. "Identification, Prevention, and Treatment Revisited: Individual-Focused College Drinking Prevention Strategies 1999-2006." *Addictive Behaviors*, 32, 2439-2468, 2007.
5. Moreira, MT, Smith, LA and Foxcroft, D. "Social Norms Interventions to Reduce Alcohol Misuse in University or College Students (Review)." *The Cochrane Collaboration*, 3: 1-99, 2009.
6. Palmer, CJ, Lohman, G, Gehring, DD, et al. (2001). "Parental Notification: A New Strategy to Reduce Alcohol Abuse on Campus." *NASPA Journal*, 38(3): 372-385, 2001.
7. Schaus, J, Sole, ML, McCoy, TP, et al. (2009). "Alcohol Screening and Brief Intervention in a College Student Health Center: A Randomized Controlled Trial." *Journal of Studies on Alcohol and Drugs*, Suppl 16: 131-141, 2009.
8. Wall, AF. "Evaluating a Health Education Website: The Case of AlcoholEdu." *NASPA Journal*, 44(4): Art 4, 2007.

Reports, Presentations and Books

1. *What College Need to Know Now: An Update on College Drinking Research*. Washington: National Institute on Alcohol Abuse and Alcoholism (NIAAA), 2007. (No authors credited.)

Interventions (**3-in-1-Framework**)

Web Sites

1. College Parents of America
<http://www.collegeparents.org>
2. Connecticut Community for Addiction Recovery (CCAR)
<http://ccar.us/>
3. Dartmouth Center on Addiction Recovery and Education (DCARE)
<http://www.dartmouth.edu/~dcare/>
4. Face Project-Resources, Training and Action on Alcohol Issues
<https://www.faceproject.org/index.html>
5. National Organizations for Youth Safety
<http://www.noys.org>
6. Network Addressing Collegiate Alcohol and Other Drug Issues
<http://www.thenetwork.ws/>
7. Office of Safe and Drug-free Schools
<http://www.ed.gov/osdfs>
8. Outside the Classroom
<http://www.outsidetheclassroom.com>
9. Robert Wood Johnson Foundation
<http://www.rwjf.org>
10. Students Against Destructive Decisions
<http://www.sadd.org>
11. Underage Drinking Enforcement Training Center
<http://www.udetc.org>
12. The U.S. Department of Education's Higher Education Center for Alcohol and Other Drug Abuse and Violence Prevention
<http://www.higheredcenter.org/>

Tools

1. Alcohol Screening Tool-Boston University
<http://www.alcoholscreening.org/>

2. DeRicco, B. *Complying With The Drug-Free School and Campus Regulations*. Washington: U.S. Department of Education, Office of Safe and Drug-Free Schools, Higher Education Center for Alcohol and Other Drug Abuse and Violence Prevention, 2006.
3. National Institute on Alcohol Abuse and Alcoholism-College Drinking: Changing the Culture
<http://www.collegedrinkingprevention.gov>
4. National Institute on Alcohol Abuse and Alcoholism-Rethinking Drinking: Alcohol and Your Health
<http://rethinkingdrinking.niaaa.nih.gov>
5. Outside the Classroom
<http://www.outsidetheclassroom.com>

Environmental Level Interventions

Journal Articles

1. Fell, JC, Fisher, DA, Voas, RB, et al. "The Impact of Underage Drinking Laws on Alcohol-Related Crashes of Young Drivers." *Alcoholism: Clinical and Experimental Research*, 33(7): 1-12, 2009.
2. Fell, JC. *An Examination of the Criticisms of the Minimum Legal Drinking Age 21 Laws in the United States from a Traffic-Safety Perspective*. Washington: National Highway Traffic Safety Administration, 2008.
3. Mosher, JF, Toomey, TL, Good, C, Harwood, E and Wagenaar, AC. "State Laws Mandating or Promoting Training Programs for Alcohol Servers and Establishment Managers: An Assessment of Statutory and Administrative Procedures." *Journal of Public Health Policy*, 23(1): 90-113, 2002.
4. Nelson, TF, Naimi, TS, Brewer RD and Wechsler, H. "The State Sets the Rate: The Relationship Among State-Specific College Binge Drinking, State Binge Drinking Rates, and Selected State Alcohol Control Policies." *American Journal of Public Health*, 95(3): 441-446, 2005.
5. Scribner, RA, Cohen, DA and Fisher, W. "Evidence of a Structural Effect for Alcohol Outlet Density: A Multilevel Analysis." *Alcoholism: Clinical & Experimental Research*, 24(2): 188-195, 2000.
6. Toomey, T, Lenk, KM and Wagenaar, AC. "Environmental Policies to Reduce College Drinking: An Update of Research Findings." *Journal of Studies on Alcohol and Drugs*, 68: 208-219, 2007.

7. Wagenaar, AC, Salois, MJ and Komro, KA. "Effects of Beverage Alcohol Price and Tax Levels on Drinking: A Meta-Analysis of 1003 Estimates from 112 Studies." *Addiction*, 104(2): 179-190, 2009.

Reports, Presentations and Books

1. Babor, TF, Caetano, R, Casswell, S, et al. *Alcohol: No Ordinary Commodity-Research and Public Policy*. Oxford: Oxford University Press, 2003.
2. *Fifth Annual Dartmouth Symposium on Substance Use: An Exploration of the U.S. Minimum Drinking Age*. 8-hour program. Dartmouth Center on Addiction, Recovery and Education (DCARE), Alumni Hall, Hopkins Center, Dartmouth College, 2009.
3. Hemenway, D. *While We Were Sleeping: Success Stories in Injury and Violence Prevention*. Berkeley: University of California Press, 2009.
4. *Research Findings on College Drinking and the Minimum Legal Drinking Age*. Washington: National Institute on Alcohol Abuse and Alcoholism (NIAAA), n.d. (No authors credited.)
5. *What College Need to Know Now: An Update on College Drinking Research*. Washington: National Institute on Alcohol Abuse and Alcoholism (NIAAA), 2007. (No authors credited.)

Web Sites

1. Alcohol Epidemiology Program-University of Minnesota
<http://www.epi.umn.edu/alcohol/>
2. Alcohol Policies Project: Advocacy for the Prevention of Alcohol Problems
<http://www.cspinet.org/booze/pdbooze.htm>
3. Center for Science in the Public Interest (CSPI)
<http://www.cspinet.org//alcohol/>
4. Ensuring Solutions to Alcohol Problems: The George Washington University Medical Center
<http://www.ensuringsolutions.org>
5. Faces and Voices of Recovery
<http://www.facesandvoicesofrecovery.org>

6. Join Together
<http://www.jointogether.org>
7. Marin Institute: Alcohol Industry Watchdog
<http://www.marininstitute.org>
8. Mothers Against Drunk Driving (MADD)
<http://www.madd.org>
9. National Organizations for Youth Safety
<http://www.noys.org>
10. National Safety Council
<http://www.nsc.org>
11. National Transportation Safety Board
<http://www.nts.gov>
12. Pacific Institute of Research and Evaluation (PIRE)
<http://www.pire.org/topiclist1.asp?id=1>
 - a. Prevention Research Center
<http://resources.prev.org/>
13. Robert Wood Johnson Foundation
<http://www.rwjf.org>
14. Underage Drinking Enforcement Training Center
<http://www.udetc.org>

Tools

1. *A Community's Call to Action: Underage Drinking and Impaired Driving*. Alexandria: Community Anti-Drug Coalitions of America (CADCA), In Partnership with Mothers Against Drunk Driving and the National Highway Traffic Safety Administration, n.d. (No authors credited.)
2. Current Legislative Activity-Marin Institute-Alcohol Industry Watchdog
http://www.marininstitute.org/site/index.php?option=com_content&view=category&id=54:state-activity&layout=blog&Itemid=277

3. National Institute on Alcohol Abuse and Alcoholism-College Drinking: Changing the Culture
<http://www.collegedrinkingprevention.gov>
4. Tax/Fee Revenue Calculator-Marin Institute-Alcohol Industry Watchdog
http://www.marininstitute.org/site/index.php?option=com_alcoholtax&view=alcoholtax&Itemid=281

Campus-Community Level Interventions

Journal Articles

1. Beirness, DJ, Foss, RD and Vogel-Sprott, M. "Drinking on Campus: Self-Reports and Breath Tests." *Journal of Studies on Alcohol*, 65(5): 600-604, 2004.
2. DeJong, W, Larimer, ME, Wood, MD, et al. "NIAAA's Rapid Response to College Drinking Problems Initiative: Reinforcing the Use of Evidence-Based Approaches in College Alcohol Prevention." *Journal of Studies on Alcohol and Drugs*, Suppl 16: 5-11, 2009.
3. Faden, V, Corey K and Baskin M. "An Evaluation of College Online Alcohol-Policy Information: 2007 Compared with 2002." *Journal of Studies on Alcohol and Drugs*, Suppl 16: 28-33, 2009.
4. Newman, M, Shell, DF, Major LJ and Workman, TA. "Use of Policy, education and enforcement to reduce binge drinking among university students: The NU Directions Project." *The International Journal of Drug Policy*, 578, 1-11, 2006.
5. Saltz, RF, Welker, LR, Paschall, MJ, et al. "Evaluating a Comprehensive Campus-Community Prevention Intervention to Reduce Alcohol-Related Problems in a College Population." *Journal of Studies on Alcohol and Drugs*, Suppl 16: 21-27, 2009.
6. Weitzman, ER, Nelson, TF, Lee, H and Wechsler, H. "Reducing Drinking and Related Harms in College Evaluation of the "A Matter of Degree" Program." *American Journal of Preventive Medicine*, 27(3): 187-196, 2004b.
7. Weitzman, ER, Nelson, TF and Wechsler, H. "Assessing Success in a Coalition-Based Environmental Prevention Programme Targeting Alcohol Abuse and Harms: Process Measures from the Harvard School of Public Health "A Matter of Degree" Programme Evaluation." *Nordisk Alkohol & Narkotikatidskrift English Supplement*, 20: 1-9, 2003a.
8. Yoast, RA. "Community Alcohol Policy Coalitions in 10 College Communities: The 'A Matter Of Degree' National Program to Reduce High Risk Drinking Among College Students." *The Forum on Public Policy: A Journal of the Oxford Round Table*, 1-17, 2008.

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1. *Best of Choices: Alcohol Education 1998-2008*. Indianapolis: National Collegiate Athletic Association (NCAA), n.d. (No authors credited.)
2. Bickel, RD and Lake PF. *The Rights and Responsibilities of the Modern University: Who Assumes the Risks of College Life?* Durham, NC: Carolina Academic Press, 1999.
3. DeJong, W, Saltz, R and Seager, J. *Alcohol, Tobacco and Other Drugs Prevention File*. San Diego: Silver Gate Group. 2007.
4. DeJong, W, Vince-Whitman, C, Colthurst, T, et al. *Environmental Management: A Comprehensive Strategy for Reducing Alcohol and Other Drug Use on College Campuses*. Newton: The Higher Education Center for Alcohol and Other Drug Prevention, 1998a.
5. Eigan, L. "Alcohol Practices, Policies and Potentials of American Colleges and Universities." *U.S. Department of Health and Human Services: Office for Substance Abuse Prevention*. 1-83, 1991.
6. *A Matter of Degree Initiative to Reduce Binge Drinking at Colleges and Universities: Lessons Learned*. Princeton: Robert Wood Johnson Foundation, 2008.
7. McCartt, AT, Hellinga, LA and Wells, JK. "Effects of a College Community Campaign on Drinking and Driving with a Strong Enforcement Component." *Insurance Institute for Highway Safety*, 1-16, 2008.
8. Parker, SG. "Reducing Youth Drinking: The "A Matter of Degree" and "Reducing Underage Drinking Through Coalitions" Programs." In *The Robert Wood Johnson Foundation Anthology: To Improve Health and Health Care Volume III*, Isaacs, SL and Knickman, JR. (eds.), Princeton: Robert Wood Johnson Foundation, 2005.
9. *What College Need to Know Now: An Update on College Drinking Research*. Washington: National Institute on Alcohol Abuse and Alcoholism (NIAAA), 2007. (No authors credited.)

Web Sites

1. Alcohol Epidemiology Program-University of Minnesota
<http://www.epi.umn.edu/alcohol/>
2. Campaign for Alcohol-Free Sports TV
<http://www.cspinet.org/booze/CAFST/>

Interventions **(3-in-1-Framework)**

3. Community Anti-Drug Coalitions of America (CADCA)
<http://www.cadca.org>
4. Face Project-Resources, Training and Action on Alcohol Issues
<https://www.faceproject.org/index.html>
5. Join Together
<http://www.jointogether.org>
6. Marin Institute: Alcohol Industry Watchdog
<http://www.marininstitute.org>
7. Mothers Against Drunk Driving (MADD)
<http://www.madd.org>
8. Network Addressing Collegiate Alcohol and Other Drug Issues
<http://www.thenetwork.ws/>
9. NU Directions
<http://www.nudirections.org>
10. Reclaiming Futures
<http://www.reclaimingfutures.org>
11. Robert Wood Johnson Foundation
<http://www.rwjf.org>

Tools

1. Campaign for Alcohol Free Sports-College Commitment Form
<http://www.cspinet.org/booze/CAFST/collcomm.pdf>
2. The Community Alcohol Personality Survey: Learn How to Establish the Size and Shape of Alcohol Problems in Your Community and Where to Focus Your Efforts for the Most Impact
<https://www.faceproject.org/Resources/PDF/caps-survey.pdf>
3. DeJong, W, Anderson J, Colthurst T et al. *Experiences In Effective Prevention*. Newton: The Higher Education Center for Alcohol and Other Drug Prevention, 1998b.
4. DeRicco, B. *Complying With The Drug-Free School and Campus Regulations*. Washington: U.S. Department of Education, Office of Safe and Drug-Free Schools, Higher Education Center for Alcohol and Other Drug Abuse and Violence Prevention, 2006.

5. National Institute on Alcohol Abuse and Alcoholism-College Drinking: Changing the Culture
<http://www.collegedrinkingprevention.gov>

5. The Challenges

What are the challenges for colleges when implementing effective interventions? While there are interventions that work to address the issue of college high-risk drinking, challenges remain. Limited resources are available to dedicate to this issue. Despite a widespread understanding of the importance of this issue, many college presidents and campus leaders (administrators, faculty, students and others) working on reducing high-risk drinking also believe that the problem of high-risk drinking is insurmountable; taking it on will only bring negative public attention to the issue. Additionally, while campuses are being encouraged to engage students, students are fairly disengaged, especially on larger campuses, where they are often reduced to a college I.D. number among thousands of college I.D. numbers.

How does the college drinking culture challenge actionable prevention?

A myriad of factors compound to create a college culture that encourages high-risk drinking, including:

- The alcohol industry itself - local bar and restaurant owners whose businesses rely on the economics of college student partying.
- The colleges and universities themselves - whose informal institution of three-day weekends creates an inviting space for high-risk drinking.

If enforcement policies work, why aren't they working on college campuses?

This is not a simple answer. Partly, despite the fact that all 50 states have enacted Minimum Legal Drinking Age (MLDA) and Zero Tolerance laws, enforcement of these laws has not been strictly followed.

Additionally, MLDA laws only impact those students under age 21, and there are still significant challenges in encouraging or requiring of-age students to drink responsibly. The very culture and environment of the college plays a significant role in the steady high rates of high-risk drinking. Even at the campus level, many colleges have not effectively communicated their policies to students and faculty.

How challenging is involving all of the college stakeholders in preventing high-risk drinking?

Involving stakeholders is essential for long-term success. Getting various stakeholders (community and campus leaders, donors, faculty, parents, etc.) around the same table is a good start. But, it isn't enough. Varying viewpoints may equate to difficulty when deciding on an approach across all agendas. Therefore, drawing up a feasible action plan with committee leaders' buy-in is highly recommended. Be ready to take action from the moment you engage them with clear process objectives that lead to goals with impact.

Many campuses do not have, or do not utilize, personnel that are experienced in community organizing; yet having someone with this experience can effectively bring the right people together and get them moving forward.

Finally, everyone involved, from the top down, must be held accountable for preventions and/or interventions to work.

Are there unanswered research questions?

Absolutely. Despite the great amount of research, there are still many research questions that have been unanswered and need research to support them. Some of these include:

- Many college schedules include what amounts to an institutional three-day weekend; how does that impact high-risk drinking at those campuses?
- Does student volunteerism discourage high-risk drinking?
- Do college-sponsored alcohol-free programming and social gatherings prevent high-risk drinking?
- Should ongoing college prevention efforts be different for sophomores, juniors and seniors than for freshman?
- Would student surveys and focus groups on individual campuses better guide prevention efforts?
- Do academic consequences for students deter high-risk drinking on campus?
- How do parent's attitudes towards campus alcohol policies affect a student's binge drinking?

Though high-risk drinking research has provided a strong body of evidence, there is much left to learn. This, however, should not cause any college president, faculty-member, health professional or other stakeholder to wait for all of the answers before enacting evidence-based changes that work on their campuses. Real transformation can only occur when facilitated by action.

6. Moving Forward

Since 1993, the Robert Wood Johnson Foundation (RWJF) has dedicated millions of dollars to research and interventions aimed at reducing the rates of high-risk drinking on college campuses—with great success. Still, significant challenges and barriers remain in place.

Everyone is accountable

The college drinking culture is pervasive. Certainly, colleges cannot stop the high-risk drinking problem alone. Everyone must be held accountable. That includes students, the alcohol industry, bar owners, parents, community members, college faculty, administration and health services professionals. Colleges and universities have unique issues. Yet, for every enrolled 18-24 year old college student, there are two other 18-24 year-old individuals who are not enrolled, yet still engaging in the practice of high-risk drinking. The ethos of this entire age group must therefore be engaged to change practice.

Using this expert resource guide effectively

There are countless journal articles, government reports, websites, and other media dedicated to the issue of college high-risk drinking. Wading through these resources can feel overwhelming. Therefore, we have compiled a comprehensive list at the end of this document categorizing relevant resources by overarching topic, as well as alphabetically.

Each campus is distinct. Understanding the assets and point of view of your campus will help you successfully navigate the resources included here. See *College High-risk Drinking Expert Contact Information* for information on contacting an expert guide in your area.

What should be the first step?

There is no single answer to this question, but an ongoing dialogue between college leadership and experts in the high-risk drinking field is necessary to find the right solution for your campus.

As this Expert Resource Guide exemplifies, current high-risk drinking research is building a body of evidence which suggests that comprehensive, multi-strategy approaches reduce the behavior on college campuses. These approaches encourage a 3-in-1 approach combining prevention aimed at individual, institutional and environmental prevention, in addition to integrated campus-community interventions.

A first step for some campuses is educating their leadership about the need to engage, and developing an action-oriented task force. Other campuses have implemented prevention and/or intervention programs, but may need to focus their efforts on evidence-based best practices to experience real success.

No matter the situation on your campus, here is what you can do today:

1. Don't search for a single solution. Complex problems require multi-layered solutions.

2. Familiarize yourself or update yourself with the background of high-risk drinking.
3. Review where your campus is currently in terms of high-risk drinking prevention efforts. Who is involved? What interventions or programs exist? What have been the barriers for past efforts? What are considered barriers for future efforts?
4. Think about your role in campus high-risk drinking. Are you a president who can make leadership decisions on policies? Are you a health care provider who can enact change in the student healthcare delivery system? Are you a community member who wants to reduce the negative second-hand effects of high-risk drinking in your local neighborhood by engaging local businesses? Are you a parent or alum who can vocalize your concern to campus leadership about high-risk drinking?
5. Use the statistics of the consequences of high-risk drinking and issues specific to the college community as ammunition for the need for action on this issue. Arm administrative staff with the most current information available. If you think your college president will respond to academic information, and then utilize that. If your student health medical director will best respond to public health ramifications, use that evidence to guide your efforts. Speak to your core audience.
6. Read the evidence-based success stories. There are many strategies that have worked for U.S. colleges and universities from which you can take inspiration and, in many cases, use the tools they have developed—whether it is a parent education brochure, an online brief motivational screening tool, or a coalition-building strategy.
7. Bring the most important players on your campus and in the community together to implement prevention programs at the individual, campus and community level.
8. Develop feasible, clear objectives and a plan for implementation. This could entail implementing a new program, expanding an existing brief motivational intervention program, or adding a campus-community policy enforcement program to an already existing brief motivational intervention.

9. Use the resources, tools and contacts provided here to develop the best program for your campus—today.

Strategies that work:

The following suggestions are the result of copious research pointing to their effective evidence-base:

- Implement screening and motivational brief counseling interventions, which can be integrated within student health services, targeted toward mandated students, or offered as Web-based prevention programs for all students.
- Support maintaining the Minimum Legal Drinking Age (MLDA). This is a low-cost, evidence-based intervention that works best when combined with strict enforcement.
- Heighten enforcement of alcohol policies at campus, local, state and federal levels:
 - MLDA's
 - Zero Tolerance Laws
 - Use/lose for drivers over age 21
 - 0.08% Blood Alcohol Concentration (BAC) laws
 - Administrative license revocation laws
 - Publicized sobriety checkpoints
 - Policies that increase the price of alcohol and prevent increases in outlet density (the number of bars, liquor stores and restaurants serving alcohol surround campuses)
 - Parental notification
 - Mandated brief motivational trainings for students who violate alcohol policy
- Develop campus-community partnerships involving multiple sectors of each: health services, campus and local police departments, alcohol beverage control, faculty, staff, students, administrators, residential life staff, resident assistants (RAs), parents, and alumni—with multi-faceted interventions.
- Keep the conversation going.

7. College High-Risk Drinking Expert

Contact Information

“It is a privilege to have assembled this magnitude of experts to explore the resources that are available, the findings that are out there, and the opportunities that really make a difference in what we know about addressing the problems of binge drinking on college campuses.”

C. Tracy Orleans, Distinguished Fellow /Senior Scientist,
Robert Wood Johnson Foundation

The following people have worked extensively in this field, both in researching the problem and developing possible solutions, and toward implementing interventions. Please feel free to contact these individuals for further information on their work and to discuss your campus’ plans for addressing this important issue. There has never been a time in which we know so much. Now, the focus must be on translating these successes into widespread action. The individuals listed below can be invaluable resources for colleges and universities wanting to take action to tackle high-risk drinking. Whether you are a college president concerned with liabilities or developing a coalition with community organizing expertise, or an alcohol and other drug coordinator interested in evidence-based treatment interventions, these individuals can help guide you or direct you to the best person.

College and University Administrators

1. Amy Campbell
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2. Linda Major
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4. Jeffrey H. Orleans, J.D.
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College High-Risk Drinking Expert Contact Information

5. Jim Terhune, M.A.
Vice President for Student Affairs and Dean of Students, Colby College
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Researchers

1. C. Raymond Bingham, Ph.D.
Research Professor, Social and Behavioral Analysis Division of the University of Michigan Transportation Research Institute, Department of Psychiatry of the University of Michigan School of Medicine, and Department of Health Behavior and Health Education of the University of Michigan School of Public Health
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2. Bob Brewer, M.D., M.S.P.H.
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4. William DeJong, Ph.D.
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5. James Fell, M.S.
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6. Richard Gruzza, Ph.D.
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7. Ralph Hingson Sc.D., M.P.H.
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8. Lloyd Johnston, Ph.D.
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College High-Risk Drinking Expert Contact Information

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10. Tracy Orleans, Ph.D.
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11. Prabhu Ponkshe, M.A., L.L.B.
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12. Robert Saltz, Ph.D.
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13. Jean T. Shope, M.S.P.H., Ph.D.
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Research Institute and Research Professor, Department of Health Behavior and Health
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14. Traci Toomey, M.P.H., Ph.D.
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15. Henry Wechsler, Ph.D.
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16. Elissa Weitzman, Sc.D., M.Sc.
Assistant Professor and Research Faculty, Children's Hospital Informatics Program
Boston,
Society, Human Development and Health Department, Harvard School of Public Health
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Treatment Providers

1. Phil Valentine
Executive Director, Connecticut Community for Addiction Recovery
phillip@ccar.us

8. Resources

Categorized

High-Risk Drinking: An Overview

Defining the Problem

Journal Articles

1. Bingham, CR, Shope, JT and Tang, X. "Drinking Behavior from High School to Young Adulthood: Differences by College Education." *Alcohol Clinical and Experimental Research*, 29(12): 2170-2180, 2005.
2. Grucza, RA, Norberg, KE and Bierut, LAJ. "Binge Drinking Among Youths and Young Adults in the United States: 1979-2006." *American Academy of Child and Adolescent Psychiatry*, 48(7): 692-702, 2009.
3. Hingson, R, Zha, W and Weitzman, ER. "Magnitude of and Trends in Alcohol-Related Mortality and Morbidity Among U.S. College Students Ages 18-14, 1998-2005." *Journal of Studies on Alcohol and Drugs*, Suppl 16: 12-20, 2009.
4. Johnston, LD, O'Malley, PM, Bachman, JG, et al. "Monitoring the Future: National Survey Results on Drug Use 1975-2007." *U.S. Department of Health and Human Services: National Institute of Health*, 2: 1-342, 2008.
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6. Masten, AS, Faden, VB, Zucker, RA, et al. "Underage Drinking: A Developmental Framework." *Pediatrics*. 121 Suppl, 235-251, 2008.
7. Naimi, TS, Brewer RD, Mokdad, A, et al. "Binge Drinking Among US Adults." *Journal of American Medical Association*, 289(1): 70-75, 2003.
8. Nelson DE, Naimi, TS, Brewer, RD, et al. "State Alcohol-Use Estimates Among Youth and Adults, 1993-2005." *American Journal of Preventive Medicine*, 36(3): 218-224, 2009.
9. O'Malley, PM and Johnston LD. "Epidemiology of Alcohol and Other Drug Use Among American College Students." *Journal of Studies on Alcohol Supplement*, 14: 23-29, 2002.
10. Paulozzi, LJ and Xi, Y. "Recent Changes in Drug Poisoning Mortality in the United States by Urban-Rural Status and by Drug Type." *Pharmacoepidemiology and Drug Safety*, 17(10): 997-1005, 2008.
11. Slutske, WS. "Alcohol Use Disorders Among U.S. College Students and Their Non-College Attending Peers." *Archives of General Psychiatry*, 62: 321-327, 2005.

12. Timberlake, DS, Hopfer, CJ, Rhee, SH, et al. "College Attendance and its Effect on Drinking Behaviors in a Longitudinal Study of Adolescents." *Alcoholism, Clinical and Experimental Research*, 31(6): 1020-1030, 2007.
13. Wechsler, H and Nelson, TF. "What We Have Learned from the Harvard School of Public Health College Alcohol Study: Focusing Attention on College Student Alcohol Consumption and the Environmental Conditions That Promote It." *Journal of Studies on Alcohol and Drugs*, 69: 481-490, 2008.
14. Wechsler H, Lee JE, Kuo M, et al. "Trends in College Binge Drinking During a Period of Increased Prevention Efforts: Findings From Four Harvard School of Public Health Study Surveys, 1993-2001." *Journal of American College Health* 50(5): 203-217, 2002c.
15. Wechsler, H, Dowdall, GW, Davenport, A, et al. "A Gender-Specific Measure of Binge Drinking Among College Students." *American Journal of Public Health*, 85: 982-985, 1995a.
16. Weitzman ER. "Social Developmental Overview of Heavy Episodic or Binge Drinking Among U.S. College Students." *Psychiatric Times*, 21(2): 1-2, 2004.

Reports, Presentations and Books

1. *18/21: The Drinking Age*, a 13:41-minute televised report. New York: 60 Minutes, CBS, 2009.
2. *Be Vocal. Be Visible.* Be Visionary. Newton: The Higher Education Center for Alcohol and Other Drug Abuse and Violence Prevention Education Development Center, 1997. (No authors credited.)
3. Dowdell, GW. *College Drinking: Reframing a Social Problem.* Westport, CT: Praeger, 2009.
4. Hingson, R. "Magnitude and Prevention of College and Underage Drinking Problems." *Presentation for Interagency Coordinating Committee on the Prevention of Underage Drinking (ICCPUD).* Washington D.C., 2009.
5. National Institute on Alcohol Abuse and Alcoholism. "Alcohol and Development in Youth: A Multi-Disciplinary Overview." *Alcohol Research and Health*, 28(3): 175, 2005.
6. *NIAAA Council Approves Definition of Binge Drinking.* Washington: National Institute on Alcoholism and Alcohol Abuse, 2004. (No authors credited.)
7. *Reduce the Proportion of Persons Engaging in Binge Drinking of Alcoholic Beverages.* Washington: U.S. Department of Health and Human Services. Office of Disease Prevention and Health Promotion: Healthy People 2010. (No authors credited.)

8. *The Surgeon General's Call to Action to Prevent and Reduce Underage Drinking*. U.S. Department of Health and Human Services. "Washington: U.S. Department of Health and Human Services, Office of the Surgeon General, 2007. (No authors credited.)
9. *Underage Drinking in the United States: A Status Report, 2005*. Washington: Center on Alcohol Marketing and Youth, 2006. (No authors credited.)
10. *What College Need to Know Now: An Update on College Drinking Research*. Washington: National Institute on Alcohol Abuse and Alcoholism (NIAAA), 2007. (No authors credited.)

Web Sites

1. American Academy of Pediatrics
<http://www.aap.org/>
2. American Medical Association (AMA)
<http://www.ama-assn.org>
3. Centers for Disease Control and Prevention (CDC)
 - a. Alcohol Team
http://www.cdc.gov/alcohol/alcohol_team.htm
 - b. Guide to Community Preventive Services
<http://www.thecommunityguide.org/alcohol/index.html>
4. College Alcohol Study (Harvard School of Public Health)
<http://www.hsph.harvard.edu/cas/>
5. The Core Institute
<http://www.siu.edu/~coreinst>
6. Dartmouth Center on Addiction Recovery and Education (DCARE)
<http://www.dartmouth.edu/~dcare/>
7. Healthy People 2010
<http://www.health.gov/healthypeople/>
8. Institute of Medicine of the National Academies
<http://www.iom.edu> <http://www.iom.edu>
9. Laufer Green Isaac
<http://www.LGICommunications.com>

10. National Center on Addiction and Substance Abuse at Columbia University
<http://www.casacolumbia.org> www.casacolumbia.org
11. National Institute on Alcohol Abuse and Alcoholism (NIAAA)
<http://www.niaaa.nih.gov>
12. Robert Wood Johnson Foundation
<http://www.rwjf.org>
13. Substance Abuse & Mental Health Services Administration (SAMHSA)
<http://www.samhsa.gov>
 - a. Center for Substance Abuse Prevention (CSAP)
<http://prevention.samhsa.gov/>
 - b. National Clearinghouse on Alcohol and Drug Information
<http://ncadi.samhsa.gov/>
 - c. National Registry of Evidence-based Programs and Practices (NREPP)
<http://www.nrepp.samhsa.gov/>
 - d. Screening, Brief Intervention and Referral to Treatment
<http://sbirt.samhsa.gov>
14. Substance Abuse Policy Research Program (SAPRP)
<http://www.saprp.org>
15. The U.S. Department of Education’s Higher Education Center for Alcohol and Other Drug Abuse and Violence Prevention
<http://www.higheredcenter.org/>

Tools

1. Alcohol Screening Tool-Boston University
<http://www.alcoholscreening.org/>
2. The Core Alcohol and Drug Survey (assessing the nature, scope and consequences of alcohol and other drug use on college campuses)
<http://www.siu.edu/~coreinst>

3. Guide to Community Preventive Services
<http://www.thecommunityguide.org/alcohol/index.html>
4. National Institute on Alcohol Abuse and Alcoholism-College Drinking: Changing the Culture
<http://www.collegedrinkingprevention.gov>
5. National Institute on Alcohol Abuse and Alcoholism-Rethinking Drinking: Alcohol and Your Health.
<http://rethinkingdrinking.niaaa.nih.gov>
6. Wechsler, H, Dowdall, GW, Davenport, A, et al. "A Gender-Specific Measure of Binge Drinking Among College Students." *American Journal of Public Health*, 85: 982-985, 1995a.

Consequences of High-Risk Drinking

Journal Articles

1. Brewer, RD and Swahn, MH. "Binge Drinking and Violence." *Journal of American Medical Association*. 294(5): 616-618, 2005.
2. Crego, A, Holguin, SR, Parada, M et al., "Binge Drinking Affects Attentional and Visual Working Memory Processing in Young University Student." *Alcoholism: Clinical and Experimental Research*, 2009. In press.
3. Gordis, E. *Are Women More Vulnerable to Alcohol's Effects?* Washington: National Institute on Alcohol Abuse and Alcoholism, U.S. Department of Health and Human Services, 1999.
4. Grant, JD, Scherrer, JF, Lynskey, MT, et al. "Adolescent Alcohol Use is a Risk Factor for Adult Alcohol and Drug Dependence: Evidence From a Twin Design." *Psychological Medicine*, 36(1): 109-118, 2006.
5. Hingson, RW and Zha, W. "Age of Drinking Onset, Alcohol Use Disorders, Frequent Heavy Drinking, and Unintentionally Injuring Oneself and Others after Drinking." *Pediatrics*, 123(6): 1477-1484, 2009.
6. Hingson, R, Heeren, T, Zakocs, R, Winter, M and Wechsler, H. "Age of First Intoxication, Heavy Drinking, Driving After Drinking and Risk of Unintentional Injury Among U.S. College Students." *Journal of Studies on Alcohol*, 64(1): 23-31, 2003a.

7. Hingson, R, Heeren, T, Winter, M and Wechsler, H. "Early Age of First Drunkenness as a Factor in College Students' Unplanned and Unprotected Sex Due to Drinking." *Pediatrics*, 111(1): 34-41, 2003b.
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2. Fisher, BS, Cullen, FT and Turner MG. *The Sexual Victimization of College Women.* Washington: U.S. Department of Justice, 2000.
3. *Harmful Consequence of Alcohol Use on the Brains of Children, Adolescents and College Students.* Chicago: American Medical Association (AMA), 2004.
4. *The Surgeon General's Call to Action to Prevent and Reduce Underage Drinking.* U.S. Department of Health and Human Services. "Washington: U.S. Department of Health and Human Services, Office of the Surgeon General, 2007. (No authors credited.)

Web Sites

1. American Academy of Pediatrics
<http://www.aap.org/>
2. American Medical Association (AMA)
<http://www.ama-assn.org>
3. College Alcohol Study (Harvard School of Public Health)
<http://www.hsph.harvard.edu/cas/>
4. The Core Institute
<http://www.siu.edu/~coreinst>
5. Institute of Medicine of the National Academies
<http://www.iom.edu>
6. National Council on Alcoholism and Drug Dependence
<http://www.ncadd.org>
7. National Highway Traffic Safety Administration (NHTSA)
<http://www.nhtsa.gov>
8. National Institute on Alcohol Abuse and Alcoholism (NIAAA)
<http://www.niaaa.nih.gov>
9. Office of the Assistant Secretary for Planning and Evaluation, Health and Human Services
http://aspe.hhs.gov/_/index.cfm
10. Office of the Surgeon General
<http://www.surgeongeneral.gov/>
11. Robert Wood Johnson Foundation
<http://www.rwjf.org>
12. Substance Abuse Policy Research Program (SAPRP)
<http://www.saprp.org>
13. World Health Organization (WHO)
http://www.who.int/topics/alcohol_drinking/en/

Tools

1. The Alcohol Cost Calculator
<http://www.alcoholcostcalculator.org/>
2. Alcohol-Related Disease Impact (ARDI)
<https://apps.nccd.cdc.gov/ardi/Homepage.aspx>
3. National Institute on Alcohol Abuse and Alcoholism-College Drinking: Changing the Culture
<http://www.collegedrinkingprevention.gov>
4. The Core Alcohol and Drug Survey (assessing the nature, scope and consequences of alcohol and other drug use on college campuses)
<http://www.siu.edu/~coreinst>

High-Disk Drinking and the College CampusJournal Articles

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9. Nelson, T and Wechsler, H. "School Spirits: Alcohol and Collegiate Sports Fans." *Addictive Behaviors*, 846, 1-11, 2002.
10. Perkins, HW, Haines, MP and Rice, R. "Misperceiving the College Drinking Norm and Related Problems: A Nationwide Study of Exposure to Prevention Information, Perceived Norms and Student Alcohol Misuse." *Journal on Studies of Alcohol*, 67(3): 482-483, 2005.
11. Presley, CA, Meilman, PW and Cashin JR. *Alcohol and Drugs on American College Campuses: Use, Consequences, and Perceptions of the Campus Environment IV*, 1992-94. Cabondale: Core Institute, 1996.
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13. Timberlake, DS, Hopfer, CJ, Rhee, SH, et al. "College Attendance and its Effect on Drinking Behaviors in a Longitudinal Study of Adolescents." *Alcoholism, Clinical and Experimental Research*, 31(6): 1020-1030, 2007.
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17. Wechsler, H, Lee, JE, Hall, J, Wagenaar, AC and Lee, H. "Secondhand Effects of Student Alcohol Use Reported by Neighbors of Colleges: The Role of Alcohol Outlets." *Social Science & Medicine*, 55: 425-435, 2002a.

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24. Weitzman ER and Nelson, TF. "Talking Up Binge Drinking in College: The Influences of Person, Social Group, and Environment." *Society for Adolescent Medicine*, 32: 26-35, 2003.

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1. *Be Vocal. Be Visible. Be Visionary.* Newton: The Higher Education Center for Alcohol and Other Drug Abuse and Violence Prevention Education Development Center, 1997. (No authors credited.)
2. Hingson, R. "Magnitude and Prevention of College and Underage Drinking Problems." *Presentation for Interagency Coordinating Committee on the Prevention of Underage Drinking (ICCPUD)*. Washington D.C., 2009.
3. *Reduce the Proportion of Persons Engaging in Binge Drinking of Alcoholic Beverages.* Washington: U.S. Department of Health and Human Services. Office of Disease Prevention and Health Promotion: Healthy People 2010. (No authors credited.)
4. *The Surgeon General's Call to Action to Prevent and Reduce Underage Drinking.* U.S. Department of Health and Human Services. "Washington: U.S. Department of Health and Human Services, Office of the Surgeon General, 2007. (No authors credited.)

5. *What College Need to Know Now: An Update on College Drinking Research*. Washington: National Institute on Alcohol Abuse and Alcoholism (NIAAA), 2007. (No authors credited.)

Web Sites

1. American College Health Association (ACHA)
<http://www.acha.org/>
2. Association of American Colleges and Universities
<http://www.aacu.org>
3. College Alcohol Study (Harvard School of Public Health)
<http://www.hsph.harvard.edu/cas/>
4. College Parents of America
<http://www.collegeparents.org>
5. The Core Institute
<http://www.siu.edu/~coreinst>
6. Council for Advancement of Standards in Higher Education
<https://www.cas.edu/index.html>
7. National Association of College and University Attorneys
<http://www.nacua.org>
8. National Institute on Alcohol Abuse and Alcoholism (NIAAA)
<http://www.niaaa.nih.gov>
9. National Collegiate Athletic Association: CHOICES Grant Program
<http://www.ncaa.org/wps/ncaa?key=/ncaa/NCAA/Academics+and+Athletes/Personal+Welfare/Health+and+Safety/CHOICES+Grant+Program+Home+Page>
10. Office of Safe and Drug-free Schools
<http://www.ed.gov/osdfs>
11. Office of the Surgeon General
<http://www.surgeongeneral.gov/>
12. Robert Wood Johnson Foundation
<http://www.rwjf.org>

13. Office of the Surgeon General
<http://www.surgeongeneral.gov/>
14. U.S. Department of Education
<http://www.ed.gov/>
 - a. U.S. Department of Education: Office of Safe and Drug-Free Schools
<http://www.ed.gov/OSDFS>
15. The U.S. Department of Education's Higher Education Center for Alcohol and Other Drug Abuse and Violence Prevention
<http://www.higheredcenter.org/>

Tools

1. Alcohol Screening Tool-Boston University
 - a. <http://www.alcoholscreening.org/>
2. The Core Alcohol and Drug Survey (assessing the nature, scope and consequences of alcohol and other drug use on college campuses)
 - a. <http://www.siu.edu/~coreins>
3. National Institute on Alcohol Abuse and Alcoholism-College Drinking: Changing the Culture
 - a. <http://www.collegedrinkingprevention.gov>
4. National Institute on Alcohol Abuse and Alcoholism-Rethinking Drinking: Alcohol and Your Health
<http://rethinkingdrinking.niaaa.nih.gov>

High-Risk Drinking and the Local Community

Journal Articles

1. Carpenter, CS, Kloska, DD, O'Malley, P, et al. "Alcohol Control Policies and Youth Alcohol Consumption: Evidence from 28 Years of Monitoring the Future." *The Berkeley Education Journal of Economic Analysis and Policy*, 7(1): 1-21, 2007.
2. Chaloupka, FJ and Wechsler, H. "Binge Drinking in College: The Impact of Price, Availability, and Alcohol Control Policies." *Contemporary Economic Policy*, 14: 112-124, 1996.

3. Fell, JC. *Overview of Minimum Legal Drinking Age Policy*. Calverton: Pacific Institute for Research and Evaluation, n.d.
4. Hingson R. "The Legal Drinking Age and Underage Drinking in the United States." *Archives of Pediatrics and Adolescent Medicine*, 163(7): 598-600, 2009.
5. Miron, JA and Tetelbaum, E. "Does the Minimum Legal Drinking Age Save Lives?" *Economic Inquiry*, 47(2): 317-336, 2009.
6. Nelson, TF, Naimi, TS, Brewer RD and Wechsler, H. "The State Sets the Rate: The Relationship Among State-Specific College Binge Drinking, State Binge Drinking Rates, and Selected State Alcohol Control Policies." *American Journal of Public Health*, 95(3): 441-446, 2005.
7. Norberg KE, Bierut LJ, and Gruzca RA. "The Long-Term Impact of Minimum Legal Drinking Age Laws on Alcohol and Drug Use Disorders." *Alcoholism: Clinical and Experimental Research*. In Press.
8. Tremper, C and Mosher JF. *Assessing State Readiness to Act on Alcohol Tax Research Findings*. Calverton: Pacific Institute of Research Evaluation, n.d.
9. Weitzman, ER, Folkman, A, Folkman, KL and Wechsler, H. "The Relationship of Alcohol Outlet Density to Heavy and Frequent Drinking and Drinking-Related Problems Among College Students at Eight Universities." *Health & Place*, 1-6, 2003b.

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1. *Drinking In America: Myths, Realities, and Prevention Policy*. *National Survey on Drug Use and Health*. Washington: U.S. Department of Justice, Office of Justice Programs, Office of Juvenile Justice and Delinquency Prevention. 2002. (No authors credited.)
2. *Underage Drinking in the United States: A Status Report*, 2005. Washington: Center on Alcohol Marketing and Youth, 2006. (No authors credited.)

Web Sites

1. Alcohol Policy Information System (APIS)
<http://alcoholpolicy.niaaa.nih.gov/>
2. Alcohol Policies Project: Advocacy for the Prevention of Alcohol Problems
<http://www.cspinet.org/booze/pdbooze.htm>

3. Alcohol and Tobacco, Tax and Trade Bureau
<http://www.ttb.gov/>
4. Campaign for Alcohol-Free Sports TV
<http://www.cspinet.org/booze/CAFST/>
5. Center on Alcohol Marketing and Youth
<http://www.camy.org>
6. Center for Enforcing Underage Drinking Laws
<http://www.udetc.org>
7. Center for Science in the Public Interest (CSPI)
<http://www.cspinet.org//alcohol/>
8. Federal Trade Commission
<http://www.ftc.gov/>
9. Governor's Highway Safety Association
<http://www.ghsa.org>
10. ImpacTeen: A Policy Research Partnership for Healthy Youth Behavior
<http://www.impactteen.org/>
11. International Institute for Alcohol Awareness
<http://www.iaaonline.org/underage.php>
12. Marin Institute: Alcohol Industry Watchdog
<http://www.marininstitute.org>
13. Mothers Against Drunk Driving (MADD)
<http://www.madd.org>
14. National Highway Traffic Safety Administration (NHTSA)
<http://www.nhtsa.gov>
15. National Institute on Alcohol Abuse and Alcoholism (NIAAA)
<http://www.niaaa.nih.gov>
16. National Liquor Law Enforcement Association (NLLEA)
<http://www.nllea.org>

17. National Organizations for Youth Safety
<http://www.noys.org>
18. National Transportation Safety Board
<http://www.nts.gov>
19. Office of Juvenile Justice and Delinquency Prevention in the Department of Justice
<http://ojjdp.ncjrs.org>
20. Pacific Institute of Research and Evaluation (PIRE)
<http://www.pire.org/topiclist1.asp?id=1>
 - a. Prevention Research Center
<http://resources.prev.org>
21. Robert Wood Johnson Foundation
<http://www.rwjf.org>
22. Substance Abuse Policy Research Program (SAPRP)
<http://www.saprp.org>
23. U.S. Department of Defense
<http://www.defenselink.mil/>
24. U.S. Department of Health and Human Services: Administration for Children & Families
<http://www.acf.hhs.gov/>
25. White House Office of National Drug Control Policy
<http://www.whitehousedrugpolicy.gov/>

Tools

1. Guide to Community Preventive Services
<http://www.thecommunityguide.org/alcohol/index.html>
2. Interactive Data Tool: Youth Exposure to Alcohol: Advertising in Magazines
<http://camy.org/magtool>

High-Risk Drinking Interventions: 3-In-1 Framework

Individual/Campus Level Interventions

Journal Articles

1. Amaro, H, Ahl, M, Matsumoto, A, et al. "Trial of the University Assistance Program for Alcohol Use Among Mandated Students." *Journal on Studies of Alcohol and Drugs*, Suppl 16: 45-56, 2009.
2. Carey, KB, Scott-Sheldon, LAJ, Carey, MP, et al. "Individual-Level Interventions to Reduce College Student Drinking: A Meta-Analytic Review." *Addictive Behaviors*, 32(11): 2469-2494, 2007.
3. Ichiyama, MA, Fairlie, AM, Wood, MD, et al. "A Randomized Trial of a Parent-Based Intervention on Drinking Behavior Among Incoming College Freshman." *Journal of Studies on Alcohol and Drugs*, Suppl 16: 67-76, 2009.
4. Larimer, ME and Cronce, JM. "Identification, Prevention, and Treatment Revisited: Individual-Focused College Drinking Prevention Strategies 1999-2006." *Addictive Behaviors*, 32, 2439-2468, 2007.
5. Moreira, MT, Smith, LA and Foxcroft, D. "Social Norms Interventions to Reduce Alcohol Misuse in University or College Students (Review)." *The Cochrane Collaboration*, 3: 1-99, 2009.
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7. Schaus, J, Sole, ML, McCoy, TP, et al. (2009). Alcohol Screening and Brief Intervention in a College Student Health Center: A Randomized Controlled Trial." *Journal of Studies on Alcohol and Drugs*, Suppl 16: 131-141, 2009.
8. Wall, AF. "Evaluating a Health Education Website: The Case of AlcoholEdu." *NASPA Journal*, 44(4): Art 4, 2007.

Reports, Presentations and Books

1. *What Colleges Need to Know Now: An Update on College Drinking Research*. Washington: National Institute on Alcohol Abuse and Alcoholism (NIAAA), 2007. (No authors credited.)

Web Sites

1. College Parents of America
<http://www.collegeparents.org>
2. Connecticut Community for Addiction Recovery (CCAR)
<http://ccar.us/>
3. Dartmouth Center on Addiction Recovery and Education (DCARE)
<http://www.dartmouth.edu/~dcare/>
4. Face Project-Resources, Training and Action on Alcohol Issues
<https://www.faceproject.org/index.html>
5. National Organizations for Youth Safety
<http://www.noys.org>
6. Network Addressing Collegiate Alcohol and Other Drug Issues
<http://www.thenetwork.ws/>
7. Office of Safe and Drug-free Schools
<http://www.ed.gov/osdfs>
8. Outside the Classroom
<http://www.outsidetheclassroom.com>
9. Red Watch Band
<http://www.stonybrook.edu/sb/redwatchband/>
10. Robert Wood Johnson Foundation
<http://www.rwjf.org>
11. Students Against Destructive Decisions
<http://www.sadd.org>
12. Underage Drinking Enforcement Training Center
<http://www.udetc.org>
13. The U.S. Department of Education's Higher Education Center for Alcohol and Other Drug Abuse and Violence Prevention
<http://www.higheredcenter.org/>

Tools

1. Alcohol Screening Tool-Boston University
<http://www.alcoholscreening.org/>
2. DeRicco, B. *Complying With The Drug-Free School and Campus Regulations*. Washington: U.S. Department of Education, Office of Safe and Drug-Free Schools, Higher Education Center for Alcohol and Other Drug Abuse and Violence Prevention, 2006.
3. National Institute on Alcohol Abuse and Alcoholism-College Drinking: Changing the Culture
<http://www.collegedrinkingprevention.gov>
4. National Institute on Alcohol Abuse and Alcoholism-Rethinking Drinking: Alcohol and Your Health
<http://rethinkingdrinking.niaaa.nih.gov>
5. Outside the Classroom
<http://www.outsidetheclassroom.com>

Environmental Level Interventions

Journal Articles

1. Fell, JC, Fisher, DA, Voas, RB, et al. "The Impact of Underage Drinking Laws on Alcohol-Related Crashes of Young Drivers." *Alcoholism: Clinical and Experimental Research*, 33(7): 1-12, 2009.
2. Fell, JC. *An Examination of the Criticisms of the Minimum Legal Drinking Age 21 Laws in the United States from a Traffic-Safety Perspective*. Washington: National Highway Traffic Safety Administration, 2008.
3. Mosher, JF, Toomey, TL, Good, C, Harwood, E and Wagenaar, AC. "State Laws Mandating or Promoting Training Programs for Alcohol Servers and Establishment Managers: An Assessment of Statutory and Administrative Procedures." *Journal of Public Health Policy*, 23(1): 90-113, 2002.
4. Nelson, TF, Naimi, TS, Brewer RD and Wechsler, H. "The State Sets the Rate: The Relationship Among State-Specific College Binge Drinking, State Binge Drinking Rates, and Selected State Alcohol Control Policies." *American Journal of Public Health*, 95(3): 441-446, 2005.

5. Scribner, RA, Cohen, DA and Fisher, W. "Evidence of a Structural Effect for Alcohol Outlet Density: A Multilevel Analysis." *Alcoholism: Clinical & Experimental Research*, 24(2): 188-195, 2000.
6. Toomey, T, Lenk, KM and Wagenaar, AC. "Environmental Policies to Reduce College Drinking: An Update of Research Findings." *Journal of Studies on Alcohol and Drugs*, 68: 208-219, 2007.
7. Wagenaar, AC, Salois, MJ and Komro, KA. "Effects of Beverage Alcohol Price and Tax Levels on Drinking: A Meta-Analysis of 1003 Estimates from 112 Studies." *Addiction*, 104(2): 179-190, 2009.

Reports, Presentations and Books

1. Babor, TF, Caetano, R, Casswell, S, et al. *Alcohol: No Ordinary Commodity-Research and Public Policy*. Oxford: Oxford University Press, 2003.
2. *Fifth Annual Dartmouth Symposium on Substance Use: An Exploration of the U.S. Minimum Drinking Age*. 8-hour program. Dartmouth Center on Addiction, Recovery and Education (DCARE), Alumni Hall, Hopkins Center, Dartmouth College, 2009.
3. Hemenway, D. *While We Were Sleeping: Success Stories in Injury and Violence Prevention*. Berkeley: University of California Press, 2009.
4. *Research Findings on College Drinking and the Minimum Legal Drinking Age*. Washington: National Institute on Alcohol Abuse and Alcoholism (NIAAA), n.d. (No authors credited).
5. *What College Need to Know Now: An Update on College Drinking Research*. Washington: National Institute on Alcohol Abuse and Alcoholism (NIAAA), 2007. (No authors credited.)

Web Sites

1. Alcohol Epidemiology Program-University of Minnesota
<http://www.epi.umn.edu/alcohol/>
2. Alcohol Policies Project: Advocacy for the Prevention of Alcohol Problems
<http://www.cspinet.org/booze/pdbooze.htm>
3. Center for Science in the Public Interest (CSPI)
<http://www.cspinet.org//alcohol/>

4. Ensuring Solutions to Alcohol Problems: The George Washington University Medical Center
<http://www.ensuringsolutions.org>
5. Faces and Voices of Recovery
<http://www.facesandvoicesofrecovery.org>
6. Join Together
<http://www.jointogether.org>
7. Marin Institute: Alcohol Industry Watchdog
<http://www.marininstitute.org>
8. Mothers Against Drunk Driving (MADD)
<http://www.madd.org>
9. National Organizations for Youth Safety
<http://www.noys.org>
10. National Safety Council
<http://www.nsc.org>
11. National Transportation Safety Board
<http://www.nts.gov>
12. Pacific Institute of Research and Evaluation (PIRE)
<http://www.pire.org/topiclist1.asp?id=1>
 - a. Prevention Research Center
<http://resources.prev.org/>
13. Robert Wood Johnson Foundation
<http://www.rwjf.org>
14. Underage Drinking Enforcement Training Center
<http://www.udetc.org>

Tools

1. *A Community's Call to Action: Underage Drinking and Impaired Driving*. Alexandria: Community Anti-Drug Coalitions of America (CADCA), In Partnership with Mothers Against Drunk Driving and the National Highway Traffic Safety Administration, n.d. (No authors credited.)

2. Current Legislative Activity-Marine Institute-Alcohol Industry Watchdog
http://www.marininstitute.org/site/index.php?option=com_content&view=category&id=54:state-activity&layout=blog&Itemid=277
3. National Institute on Alcohol Abuse and Alcoholism-College Drinking: Changing the Culture
<http://www.collegedrinkingprevention.gov>
4. Tax/Fee Revenue Calculator-Marine Institute-Alcohol Industry Watchdog
http://www.marininstitute.org/site/index.php?option=com_alcoholtax&view=alcoholtax&Itemid=281

Campus-Community Level Interventions

Journal Articles

1. Beirness, DJ, Foss, RD and Vogel-Sprott, M. "Drinking on Campus: Self-Reports and Breath Tests." *Journal of Studies on Alcohol*, 65(5): 600-604, 2004.
2. DeJong, W, Larimer, ME, Wood, MD, et al. "NIAAA's Rapid Response to College Drinking Problems Initiative: Reinforcing the Use of Evidence-Based Approaches in College Alcohol Prevention." *Journal of Studies on Alcohol and Drugs*, Suppl 16: 5-11, 2009.
3. Faden, V, Corey K and Baskin M. "An Evaluation of College Online Alcohol-Policy Information: 2007 Compared with 2002." *Journal of Studies on Alcohol and Drugs*, Suppl 16: 28-33, 2009.
4. Newman, M, Shell, DF, Major LJ and Workman, TA. "Use of Policy, education and enforcement to reduce binge drinking among university students: The NU Directions Project." *The International Journal of Drug Policy*, 578, 1-11, 2006.
5. Saltz, RF, Welker, LR, Paschall, MJ, et al. "Evaluating a Comprehensive Campus-Community Prevention Intervention to Reduce Alcohol-Related Problems in a College Population." *Journal of Studies on Alcohol and Drugs*, Suppl 16: 21-27, 2009.
6. Weitzman, ER, Nelson, TF, Lee, H and Wechsler, H. "Reducing Drinking and Related Harms in College Evaluation of the "A Matter of Degree" Program." *American Journal of Preventive Medicine*, 27(3): 187-196, 2004b.
7. Weitzman, ER, Nelson, TF and Wechsler, H. "Assessing Success in a Coalition-Based Environmental Prevention Programme Targeting Alcohol Abuse and Harms: Process Measures from the Harvard School of Public Health "A Matter of Degree" Programme Evaluation." *Nordisk Alkohol & Narkotikatidskrift English Supplement*, 20: 1-9, 2003a.

8. Yoast, RA. "Community Alcohol Policy Coalitions in 10 College Communities: The 'A Matter Of Degree' National Program to Reduce High Risk Drinking Among College Students." *The Forum on Public Policy: A Journal of the Oxford Round Table*, 1-17, 2008.

Reports, Presentations and Books

1. *Best of Choices: Alcohol Education 1998-2008*. Indianapolis: National Collegiate Athletic Association (NCAA), n.d. (No authors credited.)
2. Bickel, RD and Lake PF. *The Rights and Responsibilities of the Modern University: Who Assumes the Risks of College Life?* Durham, NC: Carolina Academic Press, 1999.
3. DeJong, W, Saltz, R and Seager, J. *Alcohol, Tobacco and Other Drugs Prevention File*. San Diego: Silver Gate Group. 2007.
4. DeJong, W, Vince-Whitman, C, Colthurst, T, et al. *Environmental Management: A Comprehensive Strategy for Reducing Alcohol and Other Drug Use on College Campuses*. Newton: The Higher Education Center for Alcohol and Other Drug Prevention, 1998a.
5. Eigan, L. "Alcohol Practices, Policies and Potentials of American Colleges and Universities." *U.S. Department of Health and Human Services: Office for Substance Abuse Prevention*. 1-83, 1991.
6. *A Matter of Degree Initiative to Reduce Binge Drinking at Colleges and Universities: Lessons Learned*. Princeton: Robert Wood Johnson Foundation, 2008.
7. McCartt, AT, Hellinga, LA and Wells, JK. "Effects of a College Community Campaign on Drinking and Driving with a Strong Enforcement Component." *Insurance Institute for Highway Safety*, 1-16, 2008.
8. Parker, SG. "Reducing Youth Drinking: The "A Matter of Degree" and "Reducing Underage Drinking Through Coalitions" Programs." *In The Robert Wood Johnson Foundation Anthology: To Improve Health and Health Care Volume III*, Isaacs, SL and Knickman, JR. (eds.), Princeton: Robert Wood Johnson Foundation, 2005.
9. *What Colleges Need to Know Now: An Update on College Drinking Research*. Washington: National Institute on Alcohol Abuse and Alcoholism (NIAAA), 2007. (No authors credited.)

Web Sites

1. Alcohol Epidemiology Program-University of Minnesota
<http://www.epi.umn.edu/alcohol/>
2. Campaign for Alcohol-Free Sports TV
<http://www.cspinet.org/booze/CAFST/>
3. Community Anti-Drug Coalitions of America (CADCA)
<http://www.cadca.org>
4. Face Project-Resources, Training and Action on Alcohol Issues
<https://www.faceproject.org/index.html>
5. Join Together
<http://www.jointogether.org>
6. Marin Institute: Alcohol Industry Watchdog
<http://www.marininstitute.org>
7. Mothers Against Drunk Driving (MADD)
<http://www.madd.org>
8. Network Addressing Collegiate Alcohol and Other Drug Issues
<http://www.thenetwork.ws/>
9. NU Directions
<http://www.nudirections.org>
10. Reclaiming Futures
<http://www.reclaimingfutures.org>
11. Robert Wood Johnson Foundation
<http://www.rwjf.org>

Tools

1. Campaign for Alcohol Free Sports-College Commitment Form
<http://www.cspinet.org/booze/CAFST/collcomm.pdf>
2. The Community Alcohol Personality Survey: Learn How to Establish the Size and Shape of Alcohol Problems in Your Community and Where to Focus Your Efforts for the Most Impact
<https://www.faceproject.org/Resources/PDF/caps-survey.pdf>
3. DeJong, W, Anderson J, Colthurst T et al. *Experiences In Effective Prevention*. Newton: The Higher Education Center for Alcohol and Other Drug Prevention, 1998b.
4. *DeRizzo, B. Complying With The Drug-Free School and Campus Regulations*. Washington: U.S. Department of Education, Office of Safe and Drug-Free Schools, Higher Education Center for Alcohol and Other Drug Abuse and Violence Prevention, 2006.
5. National Institute on Alcohol Abuse and Alcoholism-College Drinking: Changing the Culture
<http://www.collegedrinkingprevention.gov>

10. Resources

Alphabetical Order

Resources in Alphabetical Order

1. *18/21: The Drinking Age*, a 13:41-minute televised report. New York: 60 Minutes, CBS, 2009.
2. Amaro, H, Ahl, M, Matsumoto, A, et al. "Trial of the University Assistance Program for Alcohol Use Among Mandated Students." *Journal on Studies of Alcohol and Drugs*, Suppl 16: 45-56, 2009.
3. Babor, TF, Caetano, R, Casswell, S, et al. *Alcohol: No Ordinary Commodity-Research and Public Policy*. Oxford: Oxford University Press, 2003.
4. Beirness, DJ, Foss, RD and Vogel-Sprott, M. "Drinking on Campus: Self-Reports and Breath Tests." *Journal of Studies on Alcohol*, 65(5): 600-604, 2004.
5. *Best of Choices: Alcohol Education 1998-2008*. Indianapolis: National Collegiate Athletic Association (NCAA), n.d. (No authors credited.)
6. *Be Vocal. Be Visible. Be Visionary*. Newton: The Higher Education Center for Alcohol and Other Drug Abuse and Violence Prevention Education Development Center, 1997. (No authors credited.)
7. Bickel, RD and Lake PF. *The Rights and Responsibilities of the Modern University: Who Assumes the Risks of College Life?* Durham, NC: Carolina Academic Press, 1999.
8. Bingham, CR, Shope, JT and Tang, X. "Drinking Behavior from High School to Young Adulthood: Differences by College Education." *Alcohol Clinical and Experimental Research*, 29(12): 2170-2180, 2005.
9. Borsari, B, Boyle, KE, Hustad, JTP, et al. "Drinking Before Drinking: Pre-Gaming and Drinking Games in Mandated Students." *Addictive Behaviors*, 32(11): 2694-2705, 2007.
10. Brewer, RD and Swahn, MH. "Binge Drinking and Violence." *Journal of American Medical Association*. 294(5): 616-618, 2005.
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11. Web Resources

Alphabetical Order

Web Resources **Alphabetical Order**

Alcohol Epidemiology Program-University of Minnesota

<http://www.epi.umn.edu/alcohol/>

Alcohol Policy Information System (APIS)

<http://alcoholpolicy.niaaa.nih.gov/>

Alcohol Policies Project: Advocacy for the Prevention of Alcohol Problems

<http://www.cspinet.org/booze/pdbooze.htm>

Alcohol Screening Tool-Boston University

<http://www.alcoholscreening.org/>

Alcohol and Tobacco, Tax and Trade Bureau

<http://www.ttb.gov/>

American Academy of Pediatrics

<http://www.aap.org/>

American College Health Association (ACHA)

<http://www.acha.org/>

American Medical Association (AMA)

<http://www.ama-assn.org>

Association of American Colleges and Universities

<http://www.aacu.org>

Campaign for Alcohol-Free Sports TV

<http://www.cspinet.org/booze/CAFST/>

Campaign for Alcohol Free Sports-College Commitment Form

<http://www.cspinet.org/booze/CAFST/collcomm.pdf>

Center on Alcohol Marketing and Youth

<http://www.camy.org>

Interactive Data Tool: Youth Exposure to Alcohol: Advertising in Magazines

<http://camy.org/magtool>

Center for Enforcing Underage Drinking Laws

<http://www.udetc.org>

Center for Science in the Public Interest (CSPI)

<http://www.cspinet.org//alcohol/>

Web Resources **Alphabetical Order**

Centers for Disease Control and Prevention (CDC)

Alcohol Team

http://www.cdc.gov/alcohol/alcohol_team.htm

Guide to Community Preventive Services

<http://www.thecommunityguide.org/alcohol/index.html>

Alcohol-Related Disease Impact (ARDI)

<https://apps.nccd.cdc.gov/ardi/Homepage.aspx>

College Alcohol Study (Harvard School of Public Health)

<http://www.hsph.harvard.edu/cas/>

College Parents of America

<http://www.collegeparents.org>

Community Anti-Drug Coalitions of America (CADCA)

<http://www.cadca.org>

Connecticut Community for Addiction Recovery (CCAR)

<http://ccar.us/>

The Core Institute

<http://www.siu.edu/~coreinst>

Council for Advancement of Standards in Higher Education

<https://www.cas.edu/index.html>

Dartmouth Center on Addiction Recovery and Education (DCARE)

<http://www.dartmouth.edu/~dcare/>

Ensuring Solutions to Alcohol Problems: The George Washington University Medical Center

<http://www.ensuringsolutions.org/>

Face Project-Resources, Training and Action on Alcohol Issues

<https://www.faceproject.org/index.html>

The Community Alcohol Personality Survey: Learn How to Establish the Size and Shape of Alcohol Problems in Your Community and Where to Focus Your Efforts for the Most Impact

<https://www.faceproject.org/Resources/PDF/caps-survey.pdf>

Faces and Voices of Recovery

<http://www.facesandvoicesofrecovery.org/>

Federal Trade Commission

<http://www.ftc.gov/>

Governor's Highway Safety Association

<http://www.ghsa.org>

Healthy People 2010

<http://www.health.gov/healthypeople/>

ImpacTeen: A Policy Research Partnership for Healthy Youth Behavior

<http://www.impactteen.org/>

Institute of Medicine of the National Academies

<http://www.iom.edu/>

International Institute for Alcohol Awareness

<http://www.iaaonline.org/underage.php>

Join Together

<http://www.jointogether.org/>

Laufer Green Isaac

<http://www.LGICommunications.com>

Marin Institute: Alcohol Industry Watchdog

<http://www.marininstitute.org/site/>

Tax/Fee Revenue Calculator

http://www.marininstitute.org/site/index.php?option=com_alcoholtax&view=alcoholtax&Itemid=281

Current Legislative Activity

http://www.marininstitute.org/site/index.php?option=com_content&view=category&id=54:state-activity&layout=blog&Itemid=277

Mothers Against Drunk Driving (MADD)

<http://www.madd.org/>

Mothers Against Drunk Driving: The Power of Parents

<http://www.thepowerofparents.org/>

National Association of College and University Attorneys

<http://www.nacua.org>

Web Resources **Alphabetical Order**

National Center on Addiction and Substance Abuse at Columbia University
<http://www.casacolumbia.org>

National Council on Alcoholism and Drug Dependence
<http://www.ncadd.org>

National Highway Traffic Safety Administration (NHTSA)
<http://www.nhtsa.gov>

National Institute on Alcohol Abuse and Alcoholism (NIAAA)
<http://www.niaaa.nih.gov/>

NIAAA's College Drinking: Changing the Culture
<http://www.collegedrinkingprevention.gov/>

Rethinking Drinking: Alcohol and Your Health
<http://rethinkingdrinking.niaaa.nih.gov/>

National Collegiate Athletic Association:
CHOICES Grant Program
<http://www.ncaa.org/wps/ncaa?key=/ncaa/NCAA/Academics+and+Athletes/Personal+Welfare/Health+and+Safety/CHOICES+Grant+Program+Home+Page>

National Liquor Law Enforcement Association (NLLEA)
<http://www.nllea.org/>

National Organizations for Youth Safety
<http://www.noys.org>

National Safety Council
<http://www.nsc.org>

National Transportation Safety Board
<http://www.nts.gov>

Network Addressing Collegiate Alcohol and Other Drug Issues
<http://www.thenetwork.ws/>

NU Directions
<http://www.nudirections.org/>

Office of the Assistant Secretary for Planning and Evaluation, Health and Human Services
http://aspe.hhs.gov/_/index.cfm

Web Resources **Alphabetical Order**

Office of Juvenile Justice and Delinquency Prevention in the Department of Justice
<http://ojjdp.ncjrs.org/>

Office of Safe and Drug-free Schools
<http://www.ed.gov/osdfs>

Office of the Surgeon General
<http://www.surgeongeneral.gov/>

Outside the Classroom
<http://www.outsidetheclassroom.com/>

Pacific Institute of Research and Evaluation (PIRE)
<http://www.pire.org/topiclist1.asp?id=1>

Prevention Research Center
<http://resources.prev.org/>

Princeton University Alcohol Coalition Committee
<http://www.princeton.edu/campuslife/acc/>

Reclaiming Futures
<http://www.reclaimingfutures.org/>

Red Watch Band
<http://www.stonybrook.edu/sb/redwatchband/>

Robert Wood Johnson Foundation
<http://www.rwjf.org>

Students Against Destructive Decisions (SADD)
<http://www.sadd.org>

Substance Abuse & Mental Health Services Administration (SAMHSA)
<http://www.samhsa.gov/>

Center for Substance Abuse Prevention (CSAP)
<http://prevention.samhsa.gov/>

National Clearinghouse on Alcohol and Drug Information
<http://ncadi.samhsa.gov/>

National Registry of Evidence-based Programs and Practices (NREPP)
<http://www.nrepp.samhsa.gov/>

Screening, Brief Intervention and Referral to Treatment
<http://sbirt.samhsa.gov>

Substance Abuse Policy Research Program (SAPRP)
<http://www.saprp.org/>

The Underage Drinking Enforcement Training Center
<http://www.udetc.org>

U.S. Department of Defense
<http://www.defenselink.mil/>

U.S. Department of Education
<http://www.ed.gov/index.jhtml>

U.S. Department of Education: Office of Safe and Drug-Free Schools
<http://www.ed.gov/OSDFS>

The U.S. Department of Education's Higher Education Center for Alcohol and Other Drug Abuse and Violence Prevention
<http://www.higheredcenter.org/>

U.S. Department of Health and Human Services: Administration for Children & Families
<http://www.acf.hhs.gov/>

White House Office of National Drug Control Policy
<http://www.whitehousedrugpolicy.gov/>

World Health Organization (WHO)
http://www.who.int/topics/alcohol_drinking/en/

High-Risk Drinking on College Campuses

College Life and Alcohol:

Challenges and Solutions, a Resource Guide

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www.LGIcommunications.com