

# NIAAA's Rapid Response to College Drinking Problems Initiative: Reinforcing the Use of Evidence-Based Approaches in College Alcohol Prevention\*

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**ABSTRACT. Objective:** The National Institute on Alcohol Abuse and Alcoholism (NIAAA) created the Rapid Response to College Drinking Problems initiative so that senior college administrators facing an alcohol-related crisis could get assistance from well-established alcohol researchers and NIAAA staff. **Method:** Based on a competitive grant process, NIAAA selected five teams of research scientists with expertise in college drinking research. NIAAA then invited college administrators to propose interventions to address a recently experienced alcohol-related problem. Between September 2004 and September 2005, NIAAA selected 15 sites and paired each recipient college with a scientific team. Together, each program development/evaluation team, working closely with NIAAA scientific staff, jointly designed, implemented, and evaluated a Rapid Response project. **Results:** This supplement reports the results of several Rapid Response projects, plus other findings of interest

that emerged from that research. Eight articles present evaluation findings for prevention and treatment interventions, which can be grouped by the individual, group/interpersonal, institutional, and community levels of the social ecological framework. Additional studies provide further insights that can inform prevention and treatment programs designed to reduce alcohol-related problems among college students. This article provides an overview of these findings, placing them in the context of the college drinking intervention literature. **Conclusions:** College drinking remains a daunting problem on many campuses, but evidence-based strategies—such as those described in this supplement—provide hope that more effective solutions can be found. The Rapid Response initiative has helped solidify the necessary link between research and practice in college alcohol prevention and treatment. (*J. Stud. Alcohol Drugs*, Supplement No. 16: 5-11, 2009)

IN 1999, THE NATIONAL INSTITUTE on Alcohol Abuse and Alcoholism (NIAAA) recognized that, although campus-based practitioners were all too familiar with the scope and consequences of alcohol abuse among college students, there was a pressing need for the NIAAA to identify and more broadly disseminate effective prevention interventions to institutions of higher education. Accordingly, NIAAA formed a task force on college drinking to review the literature and to encourage college and university officials to implement evidence-based strategies when designing their alcohol prevention programs. In its 2002 report, *A Call to Action: Changing the Culture of Drinking at U.S. Colleges*, the task force noted that for some administrators this would be a “mindset change—one that looks to validated research for genuine answers rather than quick fixes, which may seem appealing when confronted with a crisis” (Task Force of the

National Advisory Council on Alcohol Abuse and Alcoholism, 2002, p. 12).

To organize its literature review, the task force report organized current programs and policies into four tiers according to the quality of the available research evidence: (1) evidence of effectiveness among college students, (2) evidence of success with general populations, (3) evidence of promise, and (4) evidence of ineffectiveness.

## *Tier 1: Evidence of effectiveness among college students*

The best research evidence was for intervention approaches that help identify and assist problem student drinkers, such as the Alcohol Skills Training Program (Baer et al., 1992; Kivlahan et al., 1990) and the Brief Alcohol Screening and Intervention for College Students (BASICS) program (Baer et al., 2001; Marlatt et al., 1998). These programs involved building motivation to change drinking; changing the drinker's expectancies about alcohol's effects; clarifying norms through feedback on the drinker's alcohol use in comparison with other students; providing cognitive-behavioral skills training, including how to monitor daily alcohol consumption and stress management; and developing a tailored plan for reducing alcohol use. Researchers looked forward to determining how best to bring these intervention programs to scale in a cost-effective way.

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### *Tier 2: Evidence of success with general populations*

This tier included several environmental change strategies for reducing alcohol-related problems that had not yet been tested with college students but had been shown to be effective in studies of the general population. Recommended strategies included increased enforcement of the minimum legal drinking age laws (Wagenaar and Toomey, 2002), implementation and enforcement of other laws to reduce alcohol-impaired driving (DeJong and Hingson, 1998), restrictions on alcohol outlet density (Chaloupka and Wechsler, 1996), increased prices and excise taxes on alcoholic beverages (Cook and Moore, 2002), and responsible beverage service policies (Saltz and Stanghetta, 1997). There was no reason to think that these approaches would not be efficacious in college populations, but the research had not yet been done.

### *Tier 3: Evidence of promise*

The task force listed several additional program and policy ideas that had case study support or seemed theoretically sound but lacked strong empirical support from well-designed studies. Given the dearth of research, the task force recommended that these strategies be implemented and rigorously evaluated to test their viability. Prominent among the program and policy options in this category were adopting campus policies to lessen high-risk drinking (DeJong and Langenbahn, 1996; Toomey and Wagenaar, 2002) and conducting media campaigns to correct student misperceptions about alcohol use (Perkins, 2002). These and other recommendations later set the stage for NIAAA's Rapid Response to College Drinking Problems initiative.

### *Tier 4: Evidence of ineffectiveness*

There were consistent findings that the programs listed in this final category were generally ineffective when used in isolation (Larimer and Cronce, 2002). Basic awareness and education programs, although a major part of prevention work on most college campuses, fell into this tier. Typical among these efforts are orientation sessions for new students; alcohol awareness weeks and other special events; and curriculum infusion, wherein instructors introduce alcohol-related facts and issues into their regular academic courses. Whether they might make an important contribution as part of a more comprehensive prevention program had not yet been demonstrated.

In sum, the task force found that the field's knowledge of "what works" in campus alcohol prevention was relatively slim. Apart from recent research on educational and intervention programs focused on problem student drinkers, there was little empirical evidence to direct campus-based prevention. There was an evident need for more research.

### *NIAAA's Rapid Response to College Drinking Problems initiative*

NIAAA sent a copy of A Call to Action to every college and university president in the United States. In general, they responded well to the report, but some expressed frustration that their problems with college student drinking required immediate action. Yet more research projects taking many years to produce results would not help them meet the urgent challenge of preventing student deaths and riots on their campuses.

In response to this need, NIAAA created the Rapid Response to College Drinking Problems initiative. The thrust of the program was that senior college administrators facing serious and immediate problems with college drinking could get rapid assistance from well-established researchers and NIAAA staff. In December 2002, NIAAA issued a request for applications, "Research Partnership Awards for Rapid Response to College Drinking Problems." Through this request for applications, NIAAA selected five teams of alcohol research scientists who had expertise in college drinking research and could serve as resources for college administrators.

In June 2003, NIAAA issued a companion program announcement, "Rapid Response to College Drinking Problems." NIAAA called for college administrators to propose a set of interventions to address a recently experienced alcohol-related problem, ideally within 6 weeks of a triggering event or situation, thus allowing for a more immediate response by NIAAA. Unlike the normal grant review procedure followed by the National Institutes of Health, in which all applications are reviewed together following the expiration of the solicitation, the program announcement applications were reviewed as they were received to expedite the award process.

NIAAA established 15 Rapid Response projects between September 2004 and September 2005. The host institutions are distributed across the United States and vary in size, location (urban, suburban, rural), governance (private, public), and other characteristics. An important and unique feature of the program was that each college and university receiving a grant under the program announcement was required to be partnered with one of the five teams of alcohol research scientists. Together, working closely with NIAAA scientific staff, each program development/evaluation team jointly designed, implemented, and evaluated a Rapid Response project.

### *Overview of the supplement*

This supplement reports the results of several of these Rapid Response projects, plus other findings of interest that emerged during the course of those studies. The first set of studies helps set the context for the findings of the Rapid Response projects. The subsequent articles present

the evaluation findings for eight prevention and treatment interventions, which can be grouped by the individual, group/interpersonal, institutional, and community levels of the social ecological framework (DeJong and Langford, 2002). An additional set of studies provides further insights that can inform prevention and treatment programs designed to reduce alcohol-related problems among college students.

#### *Setting the context for the Rapid Response initiative*

An article by Ralph W. Hingson and his colleagues (2009) reviews the trends in alcohol-related mortality and morbidity among U.S. college students between 1998 and 2005. Combining data from a variety of sources, the authors estimate that, among college students ages 18 to 24, there were 1,825 alcohol-related unintentional injury deaths in 2005, which showed an increase from 1,440 in 1998. During this period, increases in the proportion of college students who reported consuming five or more drinks on at least one occasion in the past month and increases in the proportion who drove under the influence of alcohol in the past year occurred among college students ages 21-24 but not 18-20, suggesting the need for targeted interventions for this age group. As the investigators explain, this is a conservative estimate, because they focused on college students ages 18-24, who represent less than two thirds of all college students; they did not include alcohol-related homicide and suicide deaths; and they assumed that nontraffic injury deaths among 18- to 24-year-olds were as likely to involve alcohol as those among persons of all ages, although the prevalence of heavy episodic drinking is higher among college students (O'Malley and Johnston, 2002).

Federal regulations state that institutions of higher education must employ a sound method for annually notifying every student and staff member about the institution's standards of conduct that prohibit the unlawful possession, use, or distribution of illicit drugs and alcohol on college property or as part of any college-related activities (DeRicco, 2006). Vivian B. Faden and her colleagues (2009) show that top U.S. institutions of higher education provided more complete alcohol policy information on their Web sites in 2007 than they did in 2002, especially regarding rules, restrictions, and possible disciplinary consequences for both individuals and groups of students. The sites varied in how well organized they were. Unfortunately, not all institutions presented their full set of policies on the same Web site page or provided an organized set of links to other pages.

#### *Individual-level interventions*

Two articles examine interventions directed to students who are found to drink heavily. James F. Schaus and his colleagues (2009b) demonstrated that brief motivational interviewing can be used effectively in the context of a

busy college health clinic. The investigators administered a screening question at registration to student patients to identify heavy episodic (high-risk) drinkers, who were then invited to participate in the study. Trained care providers conducted two brief motivational interview sessions with students in the intervention group. Compared with a control group, these students reported consuming less alcohol at both 3 and 6 months while also reporting fewer drinking-related problems on the Rutgers Alcohol Problem Index at both 6 and 9 months.

Hortensia Amaro and her colleagues (2009) conducted a randomized control trial to evaluate a student assistance program for students who had been sanctioned by a university judicial office for alcohol- or drug-related violations. The program included a psychosocial assessment, followed by multiple brief intervention sessions based on the BASICS program. Within the sessions, clinicians used a combination of other therapeutic approaches to help students with additional social, personal, or adjustment issues. At 6-month follow-up, those receiving the program, compared with students in a control group who received standard services, showed reduced weekday alcohol consumption, fewer alcohol-related consequences, and more frequent use of protective behaviors and coping skills.

#### *Group/interpersonal-level interventions*

Three articles examine strategies for reducing student alcohol-related problems that draw on the influence that parents and peers have on alcohol use. M. Dolores Cimini and her colleagues (2009) conducted a randomized control trial to compare the effectiveness of three peer-facilitated brief alcohol interventions for students who were referred for alcohol policy violations: (1) small group motivational interviewing, (2) interactive peer theater, and (3) an interactive alcohol education program. In contrast to expectations, the investigators did not find significant differences among the three groups, but additional analyses indicated that both decreases in perceived drinking norms and increased use of protective strategies were associated with reductions in alcohol use and alcohol-related problems.

Michael A. Ichiyama and his colleagues (2009) conducted a randomized trial to evaluate an informational handbook developed by Turrisi and colleagues (2001) for the parents of students about to enter college. In this study, the parent-based intervention was compared with the university's current practice, which involved sending an alcohol information fact sheet to parents with summer orientation materials. The investigators collected data during the summer before the start of classes and during the fall and spring semesters of the freshman year. Students in the parent-based-intervention condition who were not already drinking at matriculation were significantly less likely than nondrinking students in the comparison condition to transition from nondrinker to

drinker status over the freshmen year. For those already drinking, parent-based intervention was associated with less growth in drinking over the freshman year for female students but not male students.

Joseph W. LaBrie and his colleagues (2009) conducted a replication study to evaluate the long-term effectiveness of a motivational-enhancement group intervention for first-year college women in their first semester (LaBrie et al., 2008). The intervention featured a decisional balance exercise; normative feedback; information about the unique ways alcohol affects women; and an open-ended discussion of why women drink, focusing on relational and interpersonal reasons. A control group received a packet of alcohol-related information specific to women. Participants chose a group session, which was randomly assigned to the intervention or control group. The group-intervention participants consumed significantly less alcohol across 10 weeks of follow-up but not at 6-month follow-up, thus suggesting the need for booster sessions later in the first year.

#### *Institutional-level intervention*

James A. Cranford and his colleagues (2009) examined the impact of an institutional-level intervention: residential learning communities (RLCs). In a previous investigation, McCabe et al. (2007) reported increases in alcohol use over the first year of college for both RLC and non-RLC students at a large university, with a stronger increase among non-RLC students. Examining data collected during the students' fourth semester, 18 months after baseline, the present investigators found that drinking continued to increase for non-RLC students but not for RLC students. Overall, RLC students drank less before college, showed smaller increases in drinking over time, and were less likely to be in a heavy-increasing drinking trajectory group, leading the investigators to conclude that this pattern of results emerged as a result of both self-selection and socialization processes.

#### *Community-level interventions*

Two of the Rapid Response projects examined the impact of community-level efforts to deal with off-campus drinking problems. Robert F. Saltz and his colleagues (2009) evaluated the Neighborhoods Engaging with Students (NEST) project, which was launched by the Bellingham-Western Washington University Campus Community Coalition. Enforcement interventions, all heavily publicized, included additional police patrols in targeted neighborhoods and increased compliance checks at both on- and off-premise alcohol retailers near campus. A Web site and a series of neighborhood forums educated students regarding their rights and responsibilities as community residents. NEST also featured a neighborhood mediation program to help settle disputes involving students.

At the same time, the university boosted its late-night programming on campus, especially for underage, first-year students. A second public university in Washington created a similar program. Student surveys showed that the prevalence of heavy episodic drinking was lower at these two intervention schools than at a third comparison university.

As part of its Common Ground project, University of Rhode Island officials reached out to specific constituencies in Narragansett and South Kingstown to implement environmental prevention strategies, including enhanced police enforcement and a cooperating tavern program, all of which was publicized in a media campaign. Phase 1 of the media campaign targeted potential student resistance to environmentally focused prevention by reporting majority student support for alcohol policy and enforcement initiatives. Phase 2 informed students about state laws, university policies, and Common Ground's environmental initiatives. Mark D. Wood and his colleagues (2009) report that a series of annual telephone surveys showed increases in student awareness of formal efforts to address student alcohol use, perceived likelihood of apprehension for underage drinking, and perceived consequences for alcohol-impaired driving. Police reports of student incidents in the target community decreased by 27% over the course of the project, but there were no significant reductions in reported alcohol use or alcohol-impaired driving.

#### *Studies to inform future intervention research*

Four additional studies supported by the Rapid Response initiative provide additional insights to inform prevention and treatment programs that address alcohol-related problems among college students.

First, Debra L. Kaysen and her colleagues (2009) studied intra-individual variability in readiness-to-change and drinking behaviors, using data collected during the first 10 weeks of the LaBrie et al. (2009) study of a motivational-enhancement group intervention for first-year college women. The investigators found that about one third of explained readiness-to-change variance was within individuals. In weeks when students drank more than they typically do, they experienced a slight decrease in readiness to change their drinking. At the same time, in weeks when readiness-to-change was higher than their average readiness-to-change, students intended to drink less in the future. Intervention-group students had higher readiness-to-change scores than did control-group students. The relationship between readiness-to-change and changes in behavior was more complicated. Although control-group participants demonstrated little variation in their motivations to change drinking, for intervention-group participants, weeks of higher drinking were associated with lower motivation to change their drinking behavior.

Second, Mary E. Larimer and her colleagues (2009) surveyed a sample of college students regarding their own

drinking and perceived descriptive drinking norms for students at increasing levels of similarity to the respondents, based on a generic referent (typical student) or similarity at one level (gender, residence, or ethnicity), two levels (gender and residence, gender and ethnicity, or ethnicity and residence), and all three levels (perceptions of students who match the respondent on gender, ethnicity, and residence). Regardless of the referent group, the participants overestimated the drinking of other students. Perceptions of other students were most discrepant for the typical student and less discrepant when students were defined most similarly to the participants. Perceived norms at one level of specificity and perceived norms at all three levels of specificity significantly added to the prediction of the participants' own drinking, even after the participants' individual characteristics and perceived norms for the typical student were included. The investigators concluded that research is needed to determine whether increasingly specific reference group norms might improve the efficacy of interventions incorporating normative feedback.

Third, Laura Oster-Aaland and her colleagues (2009) examined factors associated with helping behavior in alcohol emergencies by asking a sample of students at a midwest university to complete a Web-based self-report assessment during the week before their 21st birthday. The majority of students had helped a fellow student who exhibited signs of alcohol poisoning, usually without outside help. When seeking outside help, they most often turned to a friend or parent. When students did not intervene, it was most often because of the perception that help was not needed. Heavier drinkers were more likely to help a peer showing symptoms of alcohol poisoning, which was probably because they were more frequently in situations requiring help. The investigators concluded that, although heavy drinkers should be a focus of future educational efforts, a broad-based program is needed to teach all students about alcohol poisoning symptoms and effective helping strategies.

Fourth, Schaus et al. (2009a) examined the characteristics of students who presented to a university health center and screened positive as high-risk drinkers according to the 5/4 definition of heavy episodic drinking—that is, for men, five or more drinks in a row on one or more occasions in the past 2 weeks and, for women, four or more drinks in a row. Non-heavy drinkers, heavy drinkers, and frequent heavy drinkers (who drank heavily three or more times in the past 2 weeks) had mean scores of 10, 14, and 23, respectively, on the Rutgers Alcohol Problem Index. Frequent heavy drinkers were 20% of the student sample but experienced 31% of the total harms reported. In the context of a busy health clinic, asking whether students had used alcohol at the 5/4 level provided an imperfect, but serviceable, screening tool to identify students who might benefit from attending two clinic-based motivational interview sessions. The investigators noted that adding a frequency question (specifically, whether students

used alcohol 3 or more days per week) would provide a simple method for identifying students in the greatest need of intervention.

### *Conclusion*

The results of these investigations make clear that NIAAA achieved its major objective for the Rapid Response to College Drinking Problems initiative: namely, to facilitate a new wave of rigorous research to help college and university administrators identify evidence-based strategies for addressing student alcohol problems. College drinking continues to be a daunting problem on many college campuses, but evidence-based strategies—such as those described in this supplement—provide hope that more effective solutions can be found.

There are three aspects of these Rapid Response projects that should be noted. First, several of the studies involve randomized control trials, but these were limited to interventions that involved random assignment at either the individual level (Amaro et al., 2009; Cimini et al., 2009; Ichiyama et al., 2009; Schaus et al., 2009b) or group level (LaBrie et al., 2009). Randomized control trials of institutional or community-level interventions are possible, of course, but are extremely expensive. No such evaluations could be funded under the Rapid Response initiative, and the evaluators therefore relied on either longitudinal (Cranford et al., 2009) or quasi-experimental (Saltz et al., 2009; Wood et al., 2009) designs. Although a strong theoretical case can be made for environmental-level prevention (Toomey et al., 2007), the science of population-level interventions will remain stunted until several more large-scale randomized control trials are funded and implemented.

Second, many of the studies involved repeated data collection over relatively long periods, sometimes as long as 9 months (Schaus et al., 2009b) or even into the subsequent academic year (Cranford et al., 2009). Obviously, it is important to determine whether interventions are effective, not only in the short term but also over a longer period. Such studies, using growth curve modeling and other sophisticated analysis strategies (Ichiyama et al., 2009), also offer the opportunity to enhance our understanding of intra-individual variation over time; the cognitive, motivational, and behavioral changes that mediate reduced alcohol consumption; and how an intervention's effectiveness interacts with differing environmental conditions.

Third, one-on-one brief motivational interviews are both labor- and time-intensive (Amaro et al., 2009; Schaus et al., 2009b). Group-level interventions are more efficient but still require an ongoing investment of significant staff resources (Cimini et al., 2009; LaBrie et al., 2009). As was the case in 2002, when the NIAAA task force issued its report, there remains a need for additional research designed to explore more efficient ways of delivering these types of interventions

so that they can be brought to scale at low cost (Larimer and Cronce, 2007). Particularly noteworthy in this regard is the parent-based intervention tested by Ichiyama et al. (2009), an informational handbook developed by Turrissi and colleagues (2001) for the parents of students about to enter college. Parents received the intervention materials during the summer months before their teen began college, along with a request to read the materials, discuss the contents of the handbook, and implement the suggested activities with their teen before college matriculation. Although the handbook could be broadly disseminated at low cost, the overall intervention effects were modest and limited to only one outcome. With refinement, this approach may yet prove to be an important component of comprehensive university efforts.

The work featured in this supplement underscores the value and critical importance of using scientifically sound research to guide the search for effective prevention and treatment strategies to reduce college student alcohol problems. The original premise for establishing the NIAAA task force on college drinking, and then for the Rapid Response to College Drinking Problems initiative, was to solidify the link between research and practice. Researchers must do their part to solidify that link, not only by continuing to do innovative and important research that is informed by input from prevention practitioners but also by becoming vigilant advocates for the use of evidence-based research in designing and implementing alcohol prevention and treatment programs. Ultimately, substantial progress in the reduction of collegiate alcohol abuse and its consequences will require the integration of empirically validated approaches that target individual drinkers, the institutional setting, and the broader environment.

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