Problem Analysis
The First Step in Prevention Planning
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Problem Analysis
The First Step in Prevention Planning

by William DeJong, Ph.D.

Student alcohol and other drug abuse and violence (AODV) still reign as the most serious social problems faced by U.S. institutions of higher education. To tackle these problems, campus administrators—working in conjunction with partners from the surrounding community—need to put in place an integrated set of strategies that address the mix of individual, group, institutional, community, and societal factors that lead to student substance abuse and violence. This type of comprehensive approach—called environmental management—cannot be implemented without using a systematic planning and evaluation process.

This publication outlines the first step of that process: problem analysis. This step, often referred to as needs assessment, is an essential feature of the U.S. Department of Education’s principles of effectiveness for AODV prevention programs.

Conducting a problem analysis involves (1) gathering objective data on the nature and scope of the problem at both national and local levels; (2) examining available resources and assets in the campus community; and (3) analyzing and summarizing this information to clarify needs and opportunities. Note that the process outlined here is suitable for both two- and four-year institutions, including both residential and commuter campuses.

Working from the problem analysis, a planning group can move on to the next steps of the planning process to decide on long-range goals and objectives, identify potential strategies, and create a strategic plan for reducing AODV-related problems.

Principles of Effectiveness for Prevention Programs

The U.S. Department of Education’s Office of Safe and Drug-Free Schools promotes principles of effectiveness for prevention programs, as codified in the No Child Left Behind Act of 2001. A subset of the principles of effectiveness that are most applicable to institutions of higher education can be summed up as follows:

- Design programs based on a thorough needs assessment using objective data.
- Establish a set of measurable goals and objectives linked to identified needs.
- Implement prevention activities that research or evaluation have shown to be effective in preventing high-risk drinking or violent behavior.
- Use evaluation results to refine, improve, and strengthen the program and refine goals and objectives as appropriate.

Problem analysis is frequently a neglected step in prevention planning. Campus and community leaders often underestimate how much they still need to learn about the multiple factors that contribute to student risk behavior, and they are therefore eager to sketch out new programs or policies right away. But acting in haste can lead to prevention efforts that are off target, not fully developed, or poorly integrated. In contrast, a careful problem analysis will result in a more thorough and detailed overview of problem behaviors and their consequences; a more complete understanding of their contributing causes; and an analysis of how current programs and policies match up against what is needed. Moreover, completing this exercise will help a planning group reach consensus on the priority concerns that should be the focus of their planning efforts, a crucial first step toward creating buy-in for the final prevention plan.

Assessing the Nature and Scope of the Problem

A key aspect of the problem analysis is a review of the nature, scope, consequences, and underlying causes of student AODV-related problems on campus and in the nearby community. Clearly, without a thorough understanding of the problem, a planning group is far less likely to develop a strategic plan that effectively meets local needs.

There are multiple information sources to draw on, including student surveys, key informant interviews, focus groups, field observations, and campus and community archival data. To the extent possible, this review of local conditions should be informed by both regional and national trend data, plus reviews of the research literature on the causes of AODV-related problems.

Surveys can be a vital source of information about student behavior. The first step in crafting a survey is to decide on its scope. Some campuses administer dedicated surveys on either alcohol and other drug use or violence, while others administer comprehensive surveys covering multiple health issues, depending on their institutional needs.

To obtain valid and reliable data, the planning group should administer its survey to a randomly drawn sample of students. It is important to obtain
a response rate of at least 50 percent: small payments or other modest incentives (e.g., store coupons, giveaway items) should be offered to encourage student participation. In addition, students should complete the survey either anonymously or under conditions of confidentiality. Paper-and-pencil surveys can be a good option, but Web site-based surveys are easier and faster to administer and can be less expensive.

There are several issues that can be covered in student surveys, including:

**Personal Characteristics**
- Demographic factors, such as gender, age, racial and ethnic background, relationship status, and current employment.
- Academic standing, including year in school, full- or part-time status, grade point average.
- Current residence, including living situation (alone, with roommates, with family), location of residence (on vs. off campus), and type of residence (fraternity or sorority house, residence hall or dormitory, house or apartment, or other).
- Participation in various student activities (e.g., community service, religious group, fraternity or sorority, intercollegiate athletics).

**Prevalence of AODV Behavior**
- Alcohol and Other Drug Use
  - Frequency and quantity of alcohol and other drug use (e.g., annual, 30-day).
  - Alcohol use in specific contexts (defined by occasions and settings).
  - Consequences due to own substance use (e.g., missed class, had unprotected sex).
  - Consequences due to other students’ substance use (e.g., interrupted sleep, personal property damaged).
- Violent Behavior and Victimization
  - Victimization experiences—hazing, stalking, partner violence, hate crimes, assault, sexual violence (life time, in college).

**Predictive Factors**
- Knowledge (e.g., effect of alcohol on learning, knowledge of which acts define sexual assault or hazing).
- Beliefs and attitudes regarding alcohol and other drug use and violence (e.g., expectancies, perceived benefits).
- Perceived AODV risks (seriousness and personal susceptibility).
- Perceptions of campus substance use norms, perceptions of peer support for aggressive behaviors and hazing.

**Protective Behaviors**
- Efforts made by the student to resolve conflicts nonviolently.
- Strategies used by the student to deal with unsafe situations (e.g., safe escort program, buddy system).

Written records are also an important source of information about student AODV problems and their consequences. Such records might show, for example, the number of students seen in local emergency rooms or the student health center for AODV-related injuries.
or illnesses; the number of students arrested for AODV-related infractions; building and equipment damage reports; and the number of residence hall complaints due to AODV-related behavior. To protect student privacy, it is essential that these data summaries not include any information that would allow individual students to be identified. On some campuses, an evaluation team, perhaps involving faculty, will need to work with various campus departments (e.g., campus police, student health services) and community agencies (e.g., local police, hospital ER) to develop forms and record-keeping procedures to improve the quality of information received.

Another vital part of the problem analysis is an assessment of environmental factors that contribute to AODV problems. Regarding violence, important aspects of the environment include policies and laws; monitoring and enforcement; the physical environment; weapon availability; and support for diversity. Regarding alcohol and other drug use, key factors include the availability of substance-free options, the normative environment, alcohol and other drug availability, alcohol marketing and promotion, and policy development and enforcement.

Again, student self-reports are an essential source of information about the campus and community environment. For example, survey, focus group, and interview questions can focus on sources of alcohol and other drugs (e.g., retail alcohol outlets, off-campus parties, Internet drug providers); perceptions of the campus and community environment (e.g., ease of access to low-cost or free alcohol, exposure to student-oriented alcohol advertising, fear of crime); awareness and support of campus violence prevention policies; and perceptions of law enforcement activity. Archival records and field observations are important here, too. Some example measures that capture important aspects of the campus and community environment include the following:

- **Substance-free options**: (1) number of substance-free recreational venues near campus and (2) number of substance-free concerts, film festivals, lectures, and other cultural events listed on community Web sites.
- **Normative environment**: (1) availability of alcohol and other drug-related paraphernalia in campus and community stores and (2) number of student newspaper stories and editorials that appear to glorify alcohol use.
- **Alcohol availability**: (1) number of liquor licenses within one, two, and three miles of campus and (2) average price paid for standard alcohol products (e.g., six-pack of beer).
- **Alcohol marketing and promotion**: (1) number of on-campus kiosk messages that promote high-risk drinking and (2) number of alcohol-industry sponsored events at local bars and restaurants.
- **Policy development and enforcement**: (1) number of students cited for AODV-related conduct violations and (2) number of calls by community residents to a complaint hotline.

Similar environmental measures related to other drugs (e.g., cost and availability) and violence (e.g., safety-oriented campus design and maintenance) also can be examined.

With these various sources of data in hand, the planning group will be able to identify specific AODV problems on their campus; discover high-risk environments on campus and in the community; and stimulate a broader discussion of the institutional, community, and societal factors that contribute to these problems. As the planning group implements its strategic plan, environment assessment should be an ongoing activity.

The **College Alcohol Risk Assessment Guide (CARA)** provides several tools and resources for scanning the environment and analyzing alcohol-related problems. The guide’s recommended procedures can be adapted to analyze problems related to other types of substance use or violence (e.g., buildings and grounds safety audit).

The **CARA** provides forms to document the nature and scope of alcohol-related problems; to identify high-risk environments; to monitor the contents of campus bulletin boards and kiosks; to monitor the print media and radio stations that target student audiences; to document pricing information for alcohol and nonalcoholic beverages; to identify high-risk alcohol service practices at on- and off-campus social events; and to analyze the alcohol environment at bars, taverns, pubs, and restaurants frequented by students.

This publication is available at the Web site of the Higher Education Center for Alcohol and Other Drug Abuse and Violence Prevention (http://www.higheredcenter.org).
Examining Available Resources and Assets in the Campus Community

The next phase of the problem analysis is to assemble information on existing AODV resources and initiatives. It is important to think not only about agencies, programs, and policies that have a direct and obvious connection to AODV problems but also about other administrative, scholastic, and extracurricular initiatives that contribute to a safe and healthy academic environment and foster personal resilience. How existing programs and policies line up with the planning group’s problem assessment will determine the direction of the strategic plan, moving toward a comprehensive and well-integrated prevention effort.

Resources include the on- and off-campus personnel available to work on prevention-related tasks as paid staff, consultants, or volunteers. A broad range of content expertise and skills is necessary, including coalition leadership, community organizing, strategic planning, risk management, formative research, intervention development, health communications, curriculum design, and evaluation.1 A critical issue is how much time people can devote to this work given their other duties and responsibilities. Funding is another critical piece. If the prevention work is to be a collaborative effort, then many institutional divisions and departments will need to have a budget line item to support that work.

The planning group can broaden its review of assets to assess the campus community’s readiness to develop, implement, and evaluate a comprehensive strategic plan for AODV prevention that has a specific set of goals, a feasible plan of action, and a manageable timeline. Signs of readiness can be placed in six categories:

- Support for the coalition;
- Structure of the coalition (e.g., lines of authority, committees);
- Support for data collection and evaluation;
- Support for Prevention
- Reliance on Evidence-based Approaches
- Resources for Effective Action

Assessing a Campus Community’s Readiness for AODV Prevention

Support for the Coalition
- The campus and community coalition has the full support of the college president.
- The coalition’s efforts are supported by community leaders.

Coalition Structure
- The coalition has an effective leader and a supportive committee structure.
- Key stakeholders from the campus and the surrounding community participate in the coalition.
- Coalition members are active and value high-performance team functioning.
- Members of the coalition are working toward a common goal.
- There are established channels for communication among coalition members.

Support for Data Collection and Evaluation
- There are ongoing student surveys and other data collection efforts to monitor the nature and scope of AODV problems.
- There is a long-term commitment to evaluate and improve the prevention effort.

Support for Prevention
- There is widespread recognition of AODV problems on campus.
- Community norms support action against student alcohol and other drug abuse and violence.
- There is a strong belief that prevention efforts can succeed.

Reliance on Evidence-based Approaches
- Members of the coalition see the value in a comprehensive approach that features environmental prevention strategies.
- Members of the coalition are committed to using evidence-based approaches.
- The coalition relies on current data and research to plan prevention activities.

Resources for Effective Action
- Adequate funds and other resources are available.
- The institution’s divisions and departments are encouraged to collaborate and share resources to develop alcohol abuse prevention initiatives.
- The staff members responsible for implementing the prevention effort are highly trained and experienced.
• Support for prevention;
• Reliance on evidence-based approaches; and
• Resources for effective action.

Progress in designing and implementing an effective strategic plan will be stymied if these elements are not in place.

Also needed is a list of prevention efforts currently under way. Existing AODV programs and policies can be categorized using a typology matrix developed by the U.S. Department of Education’s Higher Education Center for Alcohol and Other Drug Abuse and Violence Prevention (see table 1 on pp. 6 and 7).14

The matrix has two dimensions. The first divides programs and policies into one of five social ecological levels: individual, group, institution, community, and societal influences, with a special focus on state and federal public policy.15

The second dimension divides the programs and policies into areas of strategic intervention. For alcohol abuse prevention there are four areas to consider as part of a comprehensive environmental management approach:

1. Changing people’s knowledge, attitudes, skills, self-efficacy, and behavioral intentions regarding reduced alcohol use;
2. Eliminating or modifying environmental factors that contribute to the problem (i.e., environmental change);
3. Protecting students from the short-term consequences of alcohol consumption (“health protection”); and
4. Intervening with and treating students who are addicted to alcohol or otherwise show evidence of problem drinking.

Each category might include several program and policy efforts. Note in the matrix that the environmental change category is further divided into five subcategories, each focused on a strategic objective that addresses a problematic facet of the typical campus community environment.

Consider the subcategory of providing substance-free options. The central problem is that many students, especially those attending residential colleges, have few adult responsibilities like jobs and family, a great deal of unstructured free time, and too few social and recreational options that they can access on the spur of the moment. The strategic objective: offer and promote social, recreational, extracurricular, and public service options that do not include alcohol and other drugs.

Substance use problems are driven by five environmental factors that increase both the availability and the appeal of alcohol and other drugs, each of which can be addressed by a set of environmental management strategies.

1. Provide Alcohol-free Options: Many students, especially at residential colleges, have few adult responsibilities like jobs and family, a great deal of unstructured free time, and too few social and recreational options that they access on the spur of the moment. The strategic objective: offer and promote social, recreational, extracurricular, and public service options that do not include alcohol and other drugs.

2. Create a Normative Environment: Many people accept drinking and other drug use as a “normal” part of the college experience. The strategic objective: create a social, academic, and residential environment that supports health-promoting norms.

3. Restrict Alcohol Availability: Alcohol is abundantly available to students and is inexpensive. The strategic objective: limit alcohol availability both on and off campus.

4. Restrict Alcohol Marketing and Promotion: Local bars, restaurants, and liquor stores use aggressive promotions to target underage and other college drinkers. The strategic objective: restrict marketing and promotion of alcoholic beverages both on and off campus.

5. Strengthen Policy Development and Enforcement: Campus policies and local, state, and federal laws are not enforced consistently. The strategic objective: develop and enforce campus policies and enforce local, state, and federal laws.

Some of these tactics can be implemented at more than one level of the social ecological model. For example, efforts to create and promote alcohol-free events might be done at a group, institutional, or community level.

The matrix can be used later in the strategic planning process to highlight missing program elements and to facilitate the development of a comprehensive and well-integrated plan.
Clarifying Needs and Opportunities

The planning group should conclude the problem analysis phase by preparing and distributing a report of its findings. Major sections can include the following:

- The most prevalent and harmful types of AODV behavior on the campus;
- Characteristics of the students and settings involved;
- A list of individual and environmental factors that contribute to those problems;
- An inventory of the campus’s existing efforts (including their goals and objectives), resources, and personnel to address the problem; and
- Major gaps in the campus’s programs and policies.

A so-called gap analysis will look at whether current programs and policies are addressing the identified problems and their underlying causes. Lehigh University’s problem analysis provides a good example. The institution’s alcohol task force discovered the following: students had easy access to inexpensive or free alcohol; there was a lack of substance-free recreational options; the university’s “work hard, play hard” reputation was reinforced by “mixed messages” from faculty and staff that sometimes appeared to condone substance abuse; university rules were inconsistently enforced; many students reportedly used alcohol to relieve stress; and students did not believe it was acceptable to complain about other students’ drinking. A review of campus and community policies revealed a need to make substance-free housing available and to eliminate alcohol advertising in university publications. Many desired policies already existed, but there was inadequate enforcement both on and off campus.

The problem analysis report is the planning group’s best opportunity to make its case for a greater commitment of resources to address its campus’s AODV-related problems. Thus, it is important to demonstrate how the identified problems compromise the institution’s ability to fulfill its core mission—to provide a safe and healthy educational environment where students can develop their full potential.
### TABLE 1. Typology matrix of program and policy options for alcohol and other drug abuse and violence interventions (continued)

<table>
<thead>
<tr>
<th>Violence</th>
<th>Program and Policy Levels (Social Ecological Framework)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Areas of Strategic Intervention</td>
<td>Individual</td>
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<tr>
<td><strong>Prevention</strong></td>
<td></td>
</tr>
<tr>
<td>Knowledge, Attitudes, Skills, Self-efficacy, Behavioral Intentions</td>
<td></td>
</tr>
<tr>
<td>1. Risk of Perpetration</td>
<td></td>
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<tr>
<td>2. Vulnerability to Victimization</td>
<td></td>
</tr>
<tr>
<td>Peer and Bystander Norms and Behaviors</td>
<td></td>
</tr>
<tr>
<td>1. Perceived</td>
<td></td>
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<tr>
<td>2. Actual</td>
<td></td>
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<tr>
<td>Environmental Contributors to Violence</td>
<td></td>
</tr>
<tr>
<td>1. Policies and Laws</td>
<td></td>
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<tr>
<td>2. Monitoring and Enforcement</td>
<td></td>
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<tr>
<td>3. Physical Environment</td>
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<tr>
<td>4. Social Inequalities/Oppression</td>
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<tr>
<td>5. Cultural Influences</td>
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<tr>
<td>6. Weapon Availability</td>
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<tr>
<td>Environmental Contributors to Alcohol and Other Drug Abuse (see above)</td>
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<tr>
<td><strong>Early Intervention</strong></td>
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<tr>
<td>Student Distress, Early Signs of Aggressive or Problem Behavior</td>
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<tr>
<td><strong>Response and Treatment</strong></td>
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<tr>
<td>Effective Response to Survivors</td>
<td></td>
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<tr>
<td>Effective Response to Offenders</td>
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</tbody>
</table>

*This level corresponds to the policy and societal influences of the social ecological framework.

Note: This typology matrix is provided as an aid to help alcohol and other drug abuse prevention and violence prevention practitioners and their community partners in considering program and policy options. It is a useful tool for categorizing existing efforts, identifying missing program elements, and guiding new strategic planning.

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**Final Note**

A well-conducted problem analysis will provide a compelling case for making AODV prevention a priority, articulating the need for action while making clear that substantial progress is achievable. Continuing through the strategic planning process, the planning group can work from this report to establish its long-term goals and objectives, identify potential strategies, and create a strategic plan that has the right mix of programs and policies.

William DeJong, Ph.D., is a professor of social and behavioral sciences at the Boston University School of Public Health and a senior adviser to the Higher Education Center for Alcohol and Other Drug Abuse and Violence Prevention.
References


6. Ibid.


19. Ibid.

Resources

Office of Safe and Drug-Free Schools (OSDFS)
U.S. Department of Education
http://www.ed.gov/osdfs; 202-245-7896
OSDFS supports efforts to create safe schools, respond to crises, prevent alcohol and drug abuse, ensure the health and well-being of students, and teach students good character and citizenship. The agency provides financial assistance for drug abuse and violence prevention programs and activities that promote the health and well-being of students in elementary and secondary schools and institutions of higher education.

The U.S. Department of Education’s Higher Education Center for Alcohol and Other Drug Abuse and Violence Prevention
http://www.higheredcenter.org; 1-800-676-1730;
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The Higher Education Center considers strategic planning and evaluation to be an important component of a comprehensive prevention approach. The Higher Education Center has several publications and other materials, including literature reviews, to help campus administrators develop and evaluate prevention programs. These materials can be accessed for free from its Web site.

The Network Addressing Collegiate Alcohol and Other Drug Issues
http://www.thenetwork.ws; see Web site for telephone contacts by region
The Network Addressing Collegiate Alcohol and Other Drug Issues (Network) is a national consortium of colleges and universities formed to promote healthy campus environments by addressing issues related to alcohol and other drugs. Developed in 1987 by the U.S. Department of Education, the Network comprises member institutions that voluntarily agree to work toward a set of standards aimed at reducing AOD problems at colleges and universities. It has more than 1,600 members nationwide.
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