Reducing Alcohol-related Sexual Assault on College Campuses

A PUBLIC HEALTH APPROACH
This report is designed for college administrators and staff who have responsibilities for campus programs addressing sexual assault prevention and alcohol use reduction. It is a companion report to A Public Health Approach to Reducing Sexual Assault: A Report for College Campuses. ¹

In this report, we:

• **Review the Haddon Matrix** and the 3 Es, two public health tools to help with planning effective prevention programs.

• **Describe the impact** that five evaluated college campus alcohol use reduction programs had on sexual assault outcomes.

• **Provide recommendations** using this information to enhance your campus’ programming efforts.

In this report, we look at the relationship between alcohol and sexual assault prevalence. Although alcohol use is a common factor in many sexual assaults, alcohol use does not cause sexual assault and many such assaults occur without alcohol use. Sexual assaults occur as the result of a multitude of personal, relational, cultural, and structural influences. While these influences affect the behavior and experiences of both victims and perpetrators, sexual assault (like other forms of assault) is solely the responsibility of the perpetrators.

Our goal with both reports is to contribute to reducing sexual assaults on college campuses by sharing relevant research evidence along with public health methods and strategies that have a proven track record in reducing other injury problems.

What do we mean by “sexual assault”?  

We have compiled information from many sources for this guide, each one with a slightly different definition of sexual assault. It could include any of the following unwanted acts:

• Penetration (oral, anal, vaginal)
• Attempted penetration (oral, anal, vaginal)
• Sexual touching

These unwanted acts may happen through:

• Physical force or threat of physical force
• Psychological force (e.g., continual pressure, lies, threats)
• Lack of ability to consent due to incapacitation from drugs, alcohol, or something else.

**Alcohol and sexual assault**

11% of women in the United States have experienced a completed rape that was alcohol or drug-facilitated. ²

50% of all sexual assaults involved alcohol consumption by one or both parties, including those that occur on college campuses. ³⁴

According to the 2010 National Intimate Partner and Sexual Violence Survey⁵, the overwhelming majority of alcohol-facilitated sexual assaults of women were perpetrated by someone they knew.

43% were perpetrated by an intimate partner and an additional 50% were perpetrated by an acquaintance.
Alcohol use among college students

- According to the 2018 National Survey on Drug Use and Health (NSDUH)\(^6\), more than one-half (54.9%) of college students drink alcohol, and more than one-third (36.9%) binge drink (5+ drinks on a single occasion for men, 4+ for women), rates that are higher than those among non-college attending peers.

- College students younger than the minimum legal drinking age of 21 report “high-intensity drinking” behaviors at alarming rates (see Figure 1).\(^7\)

**Figure 1: College drinking patterns**

<table>
<thead>
<tr>
<th>College drinking patterns</th>
<th>Binge drinking</th>
<th>High-intensity drinking</th>
</tr>
</thead>
<tbody>
<tr>
<td>Respondents aged 19 and 20</td>
<td></td>
<td></td>
</tr>
<tr>
<td>24% of respondents reported drinking 5+ drinks on a single occasion</td>
<td></td>
<td>10% of respondents reported drinking 10+ drinks on a single occasion</td>
</tr>
<tr>
<td></td>
<td></td>
<td>4% of respondents reported drinking 15+ drinks on a single occasion</td>
</tr>
</tbody>
</table>

Sexual assault and alcohol use among college students

- The AAU 2019 Campus Climate Survey on Sexual Assault and Misconduct\(^8\) found the overall prevalence of nonconsensual sexual contact among undergraduate college students was 25.9% among women; 22.8% among trans men, trans women, genderqueer, or non-binary people (TGQN); and 6.8% among men.

- The proportions of undergraduates who reported having experienced penetration with physical force or inability to consent since they enrolled in college were: 12.8% among women; 12% among TGQN people; and 2.9% among men. A majority of these assaults involved alcohol use prior to the incident by the victim, perpetrator, or both (see Figure 2).

- This graph does not reflect the other known factors that can impact the likelihood of sexual assault, such as the personal relationship between parties, cultural acceptability of violence against women and sexual minorities, pre-disposition towards sexual aggression of the perpetrator, intervening behaviors of bystanders, etc.
The Haddon Matrix and the 3Es: Public health tools to brainstorm prevention approaches

The companion report, A Public Health Approach to Reducing Sexual Assault: A Report for College Campuses, introduces the use of the Haddon Matrix as applied to campus sexual assault prevention. The Haddon Matrix provides a framework for examining violence as a product of time phases and influencing factors. It is a widely used tool for brainstorming prevention options. By identifying multiple influencing factors that occur before, during, and after an assault, program planners will see multiple opportunities for prevention. If you are not familiar with the Haddon Matrix, we recommend reading our companion report.

Table 1. A Haddon Matrix applied to sexual assault on college campuses, highlighting the role of alcohol

<table>
<thead>
<tr>
<th>Host</th>
<th>Agent</th>
<th>Environment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Characteristics and behaviors of the victim/potential victim</td>
<td>Characteristics and behaviors of the perpetrator/potential perpetrator</td>
<td>Physical features of the campus (buildings and grounds)</td>
</tr>
<tr>
<td>Pre-event: Before the assault</td>
<td>Event: During the assault</td>
<td>Post-event: After the assault</td>
</tr>
<tr>
<td>What factors influence whether or not an assault will occur?</td>
<td>What factors influence whether a physical or psychological injury will occur?</td>
<td>What factors influence the severity of physical or psychological long-term consequences for the host; or the likelihood of re-perpetration by the agent?</td>
</tr>
<tr>
<td>• Trauma and victimization history</td>
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<td>• Trauma and victimization history</td>
</tr>
<tr>
<td>• Beliefs re: relationships and sexual expectations</td>
<td>• Beliefs about gender, what constitutes consent</td>
<td>• Beliefs re: relationships and sexual expectations</td>
</tr>
<tr>
<td>• Communication skills</td>
<td>• Beliefs re: relationships and sexual expectations</td>
<td>• Alcohol consumption</td>
</tr>
<tr>
<td>• Alcohol consumption</td>
<td>• Alcohol consumption</td>
<td>• Alcohol consumption</td>
</tr>
<tr>
<td>• Physical design of student housing, including buildings where parties are held</td>
<td>• Availability of alcohol</td>
<td>• Level of misogyny in campus culture</td>
</tr>
<tr>
<td>• Availability of police and campus security</td>
<td>• Availability of call boxes to police/security</td>
<td>• Campus culture surrounding sexual assault</td>
</tr>
<tr>
<td>• Availability of helpfulness of police/security</td>
<td>• Lighting and visibility in and around campus buildings and walkways</td>
<td>• Availability of bystanders who are not impaired by alcohol use</td>
</tr>
<tr>
<td>• Availability of SANE nurses</td>
<td>• Availability and accessibility of support services for victims</td>
<td>• Campus climate of support for SA victims</td>
</tr>
<tr>
<td>• Availability of info for SA victims on where to get services</td>
<td>• Availability of support services for alcohol reduction, if indicated</td>
<td>• Availability of bystanders prepared and willing to support victim</td>
</tr>
<tr>
<td>• Availability of info for victims who are not impaired</td>
<td>• Campus culture surrounding helpfulness of police/security</td>
<td>• Accommodations for victims to meet academic requirements</td>
</tr>
<tr>
<td>availability</td>
<td>• Availability of bystanders prepared and willing to intervene</td>
<td></td>
</tr>
</tbody>
</table>

- The likelihood that an assault will happen on a given campus and how serious the injuries and outcomes will be is determined by many factors, a sample of which are displayed in Table 1.
- Availability and use of alcohol are relevant factors in a campus’ physical and social environment; and alcohol use can affect potential victims and perpetrators before, during, and after an assault.
- The factors listed in each cell are based on research the authors conducted for this guide and for the companion report, and are not intended to be an exhaustive list.
- For prevention planning, each individual campus should identify the factors that are most relevant to their unique setting and population.
- Identifying relevant factors to include in a Haddon Matrix is best done with a diverse set of stakeholders from the campus and its surrounding community.
Figure 3. The 3 Es of Intervention

ENGINEERING
Using engineering design and development strategies to create safer vehicles, products, and physical and social environments.

For engineering to work, the strategy must:
• Be effective and reliable.
• Be acceptable to the intended audience and compatible with the environment.
• Result in products that dominate the marketplace.
• Be easily understood and properly used by the intended audience.

EDUCATION
Providing counseling, campaigns, courses, media, and other strategies to shape the social environment, and to influence the behavior of potential victims and perpetrators.

For education to work, the intended audience must:
• Be exposed to the information.
• Understand and believe the information.
• Have the resources and skills to follow the information/take up the recommended actions.
• Derive benefits (or perceived benefits) from following the information/taking up the recommended actions.
• Be reinforced for following the information/taking up the recommended actions.

ENFORCEMENT
Implementing laws, regulations, codes and policies to shape the social and physical environments, and to influence the behavior of potential victims and perpetrators.

For enforcement to work, the strategy (policy/law/regulation/codes) must:
• Be widely known and understood.
• Be acceptable to the intended audience.
• Have high probability (or perceived probability) of enforcement actions happening.
• Have consequences of enforcement actions and punishments that are swift and severe (or perceived to be).

Once the most relevant and most changeable factors can be identified from a Haddon Matrix analysis, planners can determine the most effective combination of intervention strategies from among the 3 Es of Intervention that are described in Figure 3:

• Are there changes needed in the physical environment to protect against alcohol-related sexual assaults?

• Does the social environment need to be changed to strengthen peer and cultural support that protect against alcohol-related sexual assaults?

• Are there enough effective educational opportunities for students, staff, and faculty to embrace their roles in making the campus safe from alcohol-related sexual assaults?

• Are the campus policies and procedures sufficient to protect against alcohol-related sexual assaults and are they adequately enforced?
**The Evidence**

We conducted a systematic literature review of evaluated interventions from 2005 to 2019 addressing the reduction of alcohol use on college campuses and their impact on sexual assault-related outcomes. A summary of the research studies we reviewed is below.

**Table 2. Alcohol use reduction interventions and impacts on sexual assault outcomes.**

<table>
<thead>
<tr>
<th>Delivery Method</th>
<th>Summary of Intervention</th>
<th>Summary of Impact on Sexual Assault Outcome</th>
<th>Linkage to Haddon Matrix</th>
</tr>
</thead>
</table>
| Web-Based       | • Alcohol-EDU. Alcohol only intervention (no information on sexual assault)  
• Self-guided web-based intervention  
• Targeted all incoming freshmen  
| • The first study found lower rates of reported sexual assault victimization at 6-month follow up, but these were not sustained at 12 months.  
• A second study that tracked campus surveys over multiple years did not find a significant impact on reported sexual assault-related outcomes.  
| • This approach reached the entire freshman class to change their alcohol-related knowledge, attitudes and behaviors and then assessed impact on victimization and perpetration.  
• This approach attempts to change the individuals (potential victims and perpetrators) and collectively, the social environment.  
• In the Matrix, this intervention would be in the “pre-event,” “host,” “agent” and “social environment” cells. |
| Mailed          | • Alcohol and Sexual Assault Risk-Reduction modules  
• Compared three interventions:  
  - Self-guided web-based intervention covering alcohol risk-reduction strategies ONLY  
  - Self-guided web-based intervention covering sexual assault risk-reduction strategies ONLY  
  - Self-guided web-based intervention combining alcohol and sexual assault risk-reduction strategies  
• Targeted heavy drinking women  
| • The combined intervention led to greater reductions in reported frequency of attempted or completed incapacitated rape among women with greater sexual assault severity at baseline.  
• The combined intervention led to reduced alcohol-induced blackouts.  
| • This approach reached a subset of potential victims (heavy drinking women) to change their alcohol- and/or sexual assault-related knowledge, attitudes and behaviors and then assessed impact on victimization.  
• In the Matrix, this intervention would be in the “pre-event” “host” cell. |
| In-Person       | • Parent-based communication workbooks  
• Workbooks covering college drinking, partner selection, and sexual assertiveness sent to incoming female first-year students and their mothers  
| • The workbook intervention led to increased parent-child communication, which predicted lower rates of reported victimization and incapacitated rape during women’s first year of college.  
| • This approach reached a subset of potential victims (freshman women) to change their alcohol- and sexual assault-related knowledge, attitudes and behaviors and then assessed impact on victimization.  
• In the Matrix, this intervention would be in the “pre-event” “host” cell. |
| Modified Web/In-Person | • Sexual Assault and Alcohol Feedback Education (SAFE) program  
• Three in-person sessions using motivational interviewing, personalized feedback, and group discussion covering drinking, sexual activity, bystander behaviors, masculinity, and empathy  
• Targeted heavy drinking men  
| • The intervention led to a reduction in men endorsing rape myths and in engaging in sexual coercion.  
• The effect was weaker among men with a history of sexual aggression before entering college.  
| • This approach reached a subset of potential perpetrators to change their alcohol- and/or sexual assault-related knowledge, attitudes and behaviors and then assessed impact on perpetration.  
• In the Matrix, this intervention would be in the “pre-event” “agent” cell. |

| Modified Web/In-Person | • Motivational interviewing and/or personalized feedback  
• Alcohol only interventions (no information on sexual assault)  
• Compared in-person motivational interviewing to web-based personalized feedback  
| • The combined motivational interviewing/personalized feedback intervention led to lower reported rates of unwanted sexual activity at follow-up compared to a no-treatment control group.  
• The effect was stronger among women with histories of prior victimization.  
| • This approach reached a subset of potential victims (heavy drinking women) to change their alcohol-related knowledge, attitudes and behaviors and then assessed impact on victimization.  
• In the Matrix, this intervention would be in the “pre-event” “host” cell. |
Conclusions

• Despite the widespread implementation of alcohol use interventions on college campuses, we could only find seven peer-reviewed papers that presented data on five programs looking at the impact of alcohol reduction on preventing sexual assaults.

• This work focused on primary prevention of alcohol-related sexual assaults exclusively through education interventions, and most of the studies were focused on individuals (usually women) to prevent their own victimization.

• In the language of the Haddon Matrix and 3 Es, the evaluated interventions have been largely limited to the “pre-event host” cells and an educational strategy.

This body of literature suggests that reducing alcohol use can reduce the prevalence of sexual assaults, even when the program content is not specific to sexual assaults. However, these effects are strengthened when sexual assault content is included in the program, especially for the subset of women who are heavy drinkers and had a history of prior sexual assault.
Statement on inclusivity and justice:
Oppressive systems and policies are incompatible with safe and inclusive campus communities. Practitioners and researchers alike must address racism, sexism, and intersecting systems of oppression as public health crises.

Our database search was designed with deliberately inclusive terms; we made no assumptions about the gender, sexuality or race of the victim or perpetrator, understanding that prevention programming designed with only white, cisgender, heterosexual women in mind will be insufficient in building a safer college campus and community. However, existing intervention research we uncovered did not include the experiences of lesbian, gay, queer/questioning, and transgender students, even as other research has demonstrated a disproportionate level of violence directed toward people in these communities. Similarly, the existing literature on interventions does not specifically address the unique experiences of students of color, although available research indicates that the campus experience and sexual assault risk factors may be meaningfully different for students of color, as compared to their white peers. The building of safe campus communities must intentionally include, understand, and serve the needs of these and other groups who have faced centuries of oppression.

Recommendations

- Use the Haddon Matrix and the 3 E’s to brainstorm with campus leaders and stakeholders about risk factors and primary prevention programming (“pre-event”) needs specific to your campus.
- Address the “event” and “post event” phases on campus by considering how the impacts of alcohol-related sexual assault can be mitigated, when it occurs and afterwards.
- Explore ways in which Enforcement and Engineering could be incorporated to address the physical and social environments to make them more protective against alcohol-related sexual assault and its consequences.
- Explore alcohol use reduction interventions as a risk reduction strategy for both potential victims and perpetrators, while being mindful that the onus of preventing sexual assault always lies with the perpetrator. There is a pressing need for more attention to (and evaluation of) strategies to reduce alcohol-related sexual assault perpetration.
- Enhance bystander intervention trainings by including information on the role of alcohol in sexual assaults, as well as the impact of alcohol use by bystanders on their own ability to intervene.
- Involve student groups that are traditionally neglected in research, particularly LGBTQ students and students of color, in your brainstorming and planning.
- Promote collaboration between alcohol prevention and sexual assault prevention coordinators in order to strengthen both types of programs.
- Consider partnerships with program evaluators and/or researchers to evaluate your programs. The field is in dire needs of evidence from the practice community on what works to reduce sexual assaults on college campuses. “If we want more evidence-based practice, we need more practice-based evidence”.

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References


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Helping people to live in a society that is safe, where all are free from the burden of life-altering injuries.