Targeting Harmful and Underage Student Drinking with NIAAA’s COLLEGE AI M

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Learning Objectives

- What is CollegeAIM?
- Why is CollegeAIM needed?
- How is CollegeAIM distinctive?
- How can college/university personnel (and off-campus partners use) CollegeAIM?
College drinking is not a new phenomenon.

“Fry (1945) noted that fraternities often served wine at dinner ‘in the hope that members will learn to appreciate proper wines with food’ (p. 244); however, Fry warned a ‘state of intoxication’ (p. 245) could be the primary purpose of some events.”

1Kilmer, Cronce & Larimer (2014)
Responding to College Student Drinking

- Creation of **NIAAA (1970)** to respond to the public health problem of alcohol misuse.

- **Gadaletto and Anderson (1986)** documented the state of alcohol programs on college campuses in 1985:
  - information and articles in campus publications (76%)
  - films shown on campus or speakers (63%)
  - workshops focused on drinking attitudes (61%)
  - poster and slogan campaigns (60%)
  - educational handouts (51%)
  - discussion groups (50%)

- “There was recognition of the need to address college student drinking, yet no clear guidelines on how to best do this.”

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1Kilmer, Cronce & Larimer (2014)
2002 NIAAA Task Force Tier System

- **Tier 1**: Evidence of effectiveness among college students (≥2 studies supporting efficacy)

- **Tier 2**: Evidence of success with other populations that could be applied to college environments

- **Tier 3**: Evidence of logical and theoretical promise, but require more comprehensive evaluation

- **Tier 4**: Evidence of ineffectiveness
2002 NIAAA Task Force Recommendations

- **Tier 1**: Primarily INDIVIDUAL-FOCUSED strategies
- **Tier 2**: Primarily ENVIRONMENTAL strategies
- **Tier 3**: Unproven/untested individual-focused/environmental approaches
- **Tier 4**: Alcohol education ONLY (not as part of skills training)
2002 NIAAA Task Force Recommendations

- Tier I: Primarily INDIVIDUAL-FOCUSED strategies
  1. Cognitive-behavioral skills with norms clarification and motivational enhancement (ASTP only program mentioned by name as an example).
  2. Brief motivational enhancement interventions (BASICS only program mentioned by name as an example).
2002 NIAAA Task Force Recommendations

- **Tier 1**: Primarily INDIVIDUAL-FOCUSED strategies
- **Tier 2**: Primarily ENVIRONMENTAL strategies
- **Tier 3**: Unproven/untested individual-focused/environmental approaches
- **Tier 4**: Alcohol education ONLY (*not* as part of skills training)
Task Force Report Lead to Important Progress; Still Room For Improvement

Implementation of NIAAA College Drinking Task Force Recommendations: How Are Colleges Doing 6 Years Later?

Tobin F. Nelson, Taci L. Toomey, Kathleen M. Lork, Dain J. Erickson,
and Ken C. Winters

Background: In 2002, the National Institute on Alcohol Abuse and Alcoholism (NIAAA) College Drinking Task Force issued recommendations to reduce heavy drinking by college students, but little is known about implementation of these recommendations. Current discussion about best strategies to reduce student drinking has focused more on lowering the minimum legal drinking age as advocated by a group of college and university presidents called the Anheuser Busch Initiative than the NIAAA recommendations.

Methods: A nationally representative survey of administrators was conducted at 356 4-year colleges in the United States to ascertain familiarity with and progress toward implementation of NIAAA recommendations. Implementation was compared by enrollment size, public or private status, and whether the school president signed the Anheuser Busch Initiative.

Results: Administrators at most colleges were familiar with NIAAA recommendations, although more than 1 in 5 (22%) were not. Nearly all colleges use educational programs to address student drinking (80%). Half the colleges (50%) offered intervention programs with documented efficacy for students at high risk for alcohol problems. Few colleges reported that empirically supported, community-based alcohol control strategies including conducting compliance checks to monitor illegal alcohol sales (33%), instituting mandatory responsible beverage service (RBS) training (42%), restricting alcohol outlet density (7%), or increasing the price of alcohol (12%) were operating in their communities. Less than half the colleges with RBS training and compliance checks in their communities actively participated in these interventions. Large colleges were more likely to have RBS training and compliance checks, but no differences in implementation were found across public/private status or whether the college president signed the Anheuser Busch Initiative.

Conclusions: Many colleges offer empirically supported programs for high-risk drinkers, but few have implemented other strategies recommended by NIAAA to address student drinking. Opportunities exist to reduce student drinking through implementation of existing, empirically based strategies.

Keywords: Alcohol Prevention, College Drinking, Policy, Community-Based Intervention, Prevention Practice.

By 2010, only 79% of colleges were aware of the task force report.

Only 1/3 were implementing an evidence-based environmental strategy.

Recommendations were less likely to be implemented by smaller institutions with more limited resources.
What is COLLEGE AIM?

- **College Alcohol Intervention Matrix**
- Released in the fall of 2015.
- Easy-to-use and comprehensive tool to identify effective, evidence-based alcohol interventions to reduce college student drinking.

**Overarching Goal:** Increase the likelihood that research will inform interventions to address drinking on campuses by providing a framework for schools to compare and select evidence-based intervention strategies.
Why is **COLLEGEAIM** needed?

- Alcohol misuse is a public health problem.
  - >30% of students engage in heavy episodic drinking monthly, placing them at risk for negative consequences.
  - Second-hand effects among those that don’t drink (e.g., disrupted study/sleep, alcohol-related assault).
  - Costs to schools/employers (e.g., vandalism, security, attrition, absenteeism, lost productivity).

- Deciding how to intervene is not always straightforward.
  - Not all intervention options are equally effective.
  - The science is constantly growing and evolving.
  - Reviewing the science is a resource-intensive process.
How is COLLEGE AIM distinctive?

- CollegeAIM is distinctive because of the breadth of its research and analysis, the number and expertise of its contributors, and the convenience and accessibility of its presentation:
  - Extensive review of decades of scientific literature with evaluations of ~60 interventions.
  - A multi-year collaboration with 16 developers and reviewers.
  - Two accessible and user-friendly matrices and other resources that are freely available and will be updated regularly to keep pace with the science.
Two Development Teams

Individual Strategies
- Mary E. Larimer
- Jason R. Kilmer
- Jessica M. Cronce

Environmental Strategies
- Traci L. Toomey
- Toben F. Nelson
- Kathleen M. Lenk

University of Washington
University of Minnesota
Development Process

- **Phase I:** Identified interventions to be included in *CollegeAIM*; finalized dimensions on which they would be evaluated; developed coding system.

- **Phase II:** Identified, reviewed, and rated the substantial research literature on college alcohol interventions.

- **Phase III:** Completed iterative review process.
  - Multiple rounds of review and revision.
  - Consensus process.
Decision Parameters

- Relative Effectiveness - insufficient, not effective, limited, moderate, higher
- Amount /Quality of Research - 0, +, ++, ++++, ++++
- Relative Monetary Costs for Program and Staff for Adoption and Implementation/ Maintenance - lower, mid-range, higher
- Relative Magnitude of Barriers - higher, moderate, lower
- Staffing Expertise - policy advocate, coordinator, health professional
- Strategy Level - federal, state, local, college
- Public Health Reach - broad vs. limited
- Targeted Population - underage, all students, individuals, small groups
- Research Population - college vs. general
- Short/Long-term Effects (individual-level only) - short-term effects (yes/no), long-term effects (yes/no), not assessed
- Primary Modality (individual-level only) - individual, group, online
Prevention Planning Process

1. Assess behavior on campus and set priorities.
2. Select strategies after exploring evidence-based interventions.
3. Plan how to carry out strategies and measure results.
4. Implement the chosen strategies, evaluate them, and refine the program.
How can schools use COLLEGE AIM?

- Use the website and/or printed materials to review individual and environmental strategies to compare approaches.

- Find new evidence-based options to replace less effective strategies or address gaps.

- Use the interactive strategy planning worksheet to select a mix of approaches based on needs and budget.
Printed & Website Options

What Is CollegeAIM and Why Is It Needed?

CollegeAIM—the College Alcohol Intervention Matrix—is a new resource to help schools address harmful and underage student drinking. Developed with leading college alcohol researchers and staff, it is an easy-to-use and comprehensive tool to identify effective alcohol interventions.

While there are numerous options for addressing alcohol issues, they are not all equally effective.

CollegeAIM can help schools choose interventions wisely—boosting their chances for success and helping them improve the health and safety of their students.

www.collegedrinkingprevention.gov/CollegeAIM
### INDIVIDUAL-LEVEL STRATEGIES:
Estimated Relative Effectiveness, Costs, and Barriers; Public Health Reach; Research Amount; and Primary Modality

#### COSTS: Combined program and staff costs for adoption/implementation and maintenance

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<thead>
<tr>
<th></th>
<th>Lower effectiveness</th>
<th>Moderate effectiveness</th>
<th>Higher effectiveness</th>
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<tbody>
<tr>
<td><strong>IND-3</strong></td>
<td><strong>Normative re-education: Electronic/mailed personalized normative feedback (PNF)—Generic/other</strong></td>
<td>[###, B, •••, online/offsite]</td>
<td><strong>IND-9</strong></td>
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<td><strong>IND-21</strong></td>
<td><strong>Personalized feedback intervention (PFI): cCHECK UP TO GO (formerly, e-CHUG)</strong></td>
<td>[###, B, •••, online]</td>
<td><strong>IND-6</strong></td>
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<td><strong>IND-8</strong></td>
<td><strong>Normative re-education: Electronic/mailed personalized normative feedback (PNF)—Event-specific prevention (21st birthday cards)</strong></td>
<td>[###, B, •••, online/offsite]</td>
<td><strong>IND-17</strong></td>
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<tr>
<td><strong>IND-4</strong></td>
<td><strong>Normative re-education: In-person norms clarification alone</strong></td>
<td>[###, F, •••, IPG]</td>
<td><strong>IND-12</strong></td>
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<td><strong>IND-7</strong></td>
<td><strong>Skills training, alcohol focus: Expectancy challenge intervention (ECI)—By proxy/didactic/discussion alone</strong></td>
<td>[###, F, •••, IPG]</td>
<td><strong>IND-13</strong></td>
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<tr>
<td><strong>IND-1</strong></td>
<td><strong>Information/knowledge/education alone</strong></td>
<td>[###, B, •••, IPG]</td>
<td><strong>IND-14</strong></td>
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<td><strong>IND-5</strong></td>
<td><strong>Values clarification alone</strong></td>
<td>[###, F, •••, IPG]</td>
<td><strong>IND-15</strong></td>
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<td><strong>IND-11</strong></td>
<td><strong>Skills training, alcohol plus general life skills: Alcohol 101 Plus™&lt;sup&gt;2&lt;/sup&gt;</strong></td>
<td>[###, B, •, online]</td>
<td><strong>IND-16</strong></td>
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<td><strong>IND-18</strong></td>
<td><strong>Multi-component education-focused programs (MCEFP): Miscellaneous</strong></td>
<td>[###, B, •, online]</td>
<td><strong>IND-23</strong></td>
</tr>
<tr>
<td><strong>IND-19</strong></td>
<td><strong>Personalized feedback intervention (PFI): CheckYourDrinking (beta 1.0 version)</strong></td>
<td>[###, B, •, online]</td>
<td><strong>IND-24</strong></td>
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<tr>
<td><strong>IND-20</strong></td>
<td><strong>Personalized feedback intervention (PFI): College Drinker’s Check-up&lt;sup&gt;2&lt;/sup&gt;</strong></td>
<td>[###, B, •, online]</td>
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#### Interventions Delivered by Health Care Professionals
Strategies in which health care professionals identify and help students whose drinking patterns put them at risk for harm, or who are already experiencing alcohol-related problems.

**IND-23** | **Screening and behavioral treatments** |
**IND-24** | **Medications for alcohol use disorder** |

#### Legend
- **Effectiveness rating**: based on percentage of studies reporting any positive effect:
  - •••• = 75% or more
  - ••• = 50% to 74%
  - •• = 25% to 49%
  - • = Less than 25%
- **Public health reach**: based on percentage of target population reached:
  - B = Broad
  - F = Focused
- **Research amount**: based on number of studies:
  - ••••• = 12+ studies
  - ••• = 7 to 11 studies
  - •• = 4 to 6 studies
  - • = 3 or fewer studies
- **Barriers**: strategies blocked by factors on the summary table:
  - ### = Higher
  - ## = Moderate
  - # = Lower
  - ? = Not effective
  - Online Offsite

See brief descriptions and additional ratings for each individual-level strategy on the summary table beginning on page 13.

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1. **Effectiveness ratings** are based on the percentage of studies reporting any positive outcomes (see legend). Strategies with three or fewer studies were not rated for effectiveness due to the limited data on which to base a conclusion.
2. **Cost ratings** are based on the relative program and staff costs for adoption, implementation, and maintenance of a strategy. Actual costs will vary by institution, depending on size, existing programs, and other campus and community factors. **Barriers to implementing a strategy** include cost and opposition, among other factors. **Public health reach** refers to the number of students that a strategy affects. Strategies with a broad reach affect all students or a large group of students (e.g., all undergraduate students); strategies with a focused reach affect individuals or small groups of students (e.g., sanctioned students). **Research amount** refers to the number of randomized controlled trials (RCT) of a strategy (see legend).
3. **Strategies are listed by brand name** (e.g., CheckYourDrinking) if they were evaluated by at least two RCTs; strategies labeled generic/other have similar components and were not identified by name in the research or were evaluated by only one RCT; strategies labeled miscellaneous have the same approach but very different components.
4. **Although this approach is a component of larger, effective programs such as BASICS and ASTP**; it is evaluated here as a stand-alone intervention.
## INDIVIDUAL-LEVEL STRATEGIES SUMMARY TABLE

Individual-level strategies aim to produce changes in attitudes or behaviors related to alcohol use rather than the environments in which alcohol use occurs. Expected outcomes, in general, are that a strategy may decrease an individual’s alcohol use (e.g., frequency, quantity, or blood alcohol concentration) and/or alcohol-related risk-taking behaviors, thereby reducing harmful consequences. All studies used college students as the research population except the behavioral interventions by health professionals, which used a general population. Potential resources to help you implement many strategies rated effective by CollegeAIM can be found online (see URL below).

<table>
<thead>
<tr>
<th>Matrix number</th>
<th>Strategy</th>
<th>Description</th>
<th>Effectiveness</th>
<th>Cost</th>
<th>Barriers</th>
<th>Research amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>IND-1</td>
<td>Information/knowledge/education alone</td>
<td>Information/knowledge/education alone</td>
<td>X</td>
<td>$</td>
<td>#</td>
<td>•••••</td>
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<td>IND-2</td>
<td>Normative re-education: Electronic/mailed personalized normative feedback (PNF)—Generic/other</td>
<td>See FAQs for more information on implementing a generic PNF strategy.</td>
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<tr>
<td>IND-3</td>
<td>Normative re-education: Electronic/mailed personalized normative feedback (PNF)—Generic/other</td>
<td>PNF programs provide all students with personalized information about their alcohol use in comparison with actual use by their peers. This information is represented graphically (with charts and text, showing personal behavior juxtaposed with normative information). Delivery of PNF interventions is done without the involvement of a facilitator, and students are allowed to consider this information on their own.</td>
<td>★★★</td>
<td>$</td>
<td>#</td>
<td>•••••</td>
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<tr>
<td>IND-4</td>
<td>Normative re-education: In-person norms clarification alone</td>
<td>Globally, normative re-education programs are designed to provide students with accurate information about peer alcohol use and consequences to restructure their attitudes about the acceptability of excessive alcohol consumption to their peers and parents. Normative re-education programs can be delivered in-person (typically in group format) or remotely via the web or by mail as personalized graphic feedback.</td>
<td>★</td>
<td>$</td>
<td>#</td>
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</tbody>
</table>

### Legend
- **Effectiveness:**
  - ★★★ = Higher, ★★ = Moderate, ★ = Lower;
  - X = Not effective, ☞ = Too few studies to rate effectiveness
- **Cost:**
  - $$$ = Higher, $$ = Mid-range, $ = Lower
  - C = Barriers at college level
- **Barriers:**
  - # = Higher, # = Moderate, # = Lower
- **Research amount:**
  - ••••• = 11+ studies
  - •••• = 7 to 10 studies
  - •••* = 4 to 5 studies
  - •* = 3 or fewer studies
- **Staffing expertise:**
  - Policy advocate = Advocacy or community organization; understanding of political strategy
  - Coordinator = Program development and management
  - Health professional = Specific expertise/training in delivering a health program

**Individual-Level Strategies**

Individual-level strategies aim to produce changes in attitudes or behaviors related to alcohol use rather than the environments in which alcohol use occurs. Expected outcomes, in general, are that a strategy may decrease an individual's alcohol use (e.g., frequency, quantity, or blood alcohol concentration) and/or alcohol-related risk-taking behaviors, thereby reducing harmful consequences. All studies used college students as the research population.

Duration of effects refers to the length of time that a strategy appears to have influenced student attitudes and behaviors related to alcohol use. Effects are short-term if within 6 months and long-term if 6 months or longer. Effects are mixed if research studies reached different conclusions about duration.

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### All individual-level strategies rated by CollegeAIM

✓ Check all strategies you would like to print

<table>
<thead>
<tr>
<th>Lower costs $</th>
<th>Mid-range costs $$</th>
<th>Higher costs $$$</th>
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<tbody>
<tr>
<td></td>
<td>Higher effectiveness</td>
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</table>

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- **Personalized feedback intervention (PFI):** eCHECKUP TO GO (formerly, e-CHUG)

- **Skills training, alcohol focus:** Goal/intention-setting alone
- **Skills training, alcohol plus general life skills:** Alcohol Skills Training Program (ASTP)
- **Brief motivational intervention (BMI):** In-person—Individual (e.g., BASICS)
- **Personalized feedback intervention (PFI):** Generic/other

- **Multi-component education-focused program (MCEFP):** AlcoholEdu® for College
Individual-Level Strategies

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Normative re-education: Electronic/mailed personalized normative feedback (PNF)—Generic/other

PNF programs provide all students with personalized information about their alcohol use in comparison with actual use by their peers. This information is represented graphically (with charts and text, showing personal behavior juxtaposed with normative information). Delivery of PNF interventions is done without the involvement of a facilitator, and students are allowed to consider this information on their own.

**Effectiveness:** ★ ★ ★ = Higher  
**Cost:** $ = Lower  
**Barriers:** ## = Moderate  
**Research Amount:** *** = 7 to 10 studies  

**Public Health Reach:** Broad  
**Primary Modality:** Online/offsite  
**Staffing Expertise Needed:** Coordinator  
**Target Population:** Individuals, specific groups, or all students  
**Duration of Effects:** Short-term effects (up to 5 months); long-term (≥ 6 months) effects not assessed

See the FAQs to learn more about generic PNF strategies and how to develop and implement them.

**Potential Resources:**

For information about intervention designs and implementation, check the articles in the References tab. Also see the FAQs for more information on generic PNF interventions.

**References:**


# Environmental-Level Strategies:

## Estimated Relative Effectiveness, Costs, and Barriers; Public Health Reach; and Research Amount/Quality

### COSTS: Combined program and staff costs for adoption/implementation and maintenance

<table>
<thead>
<tr>
<th>Strategy</th>
<th>Lower costs $</th>
<th>Moderate costs $</th>
<th>Higher costs $$$</th>
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<tbody>
<tr>
<td>ENV-11 Enforce age-21 drinking age (e.g., compliance checks)</td>
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<tr>
<td>ENV-17 Retain or enact restrictions on hours of alcohol sales</td>
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<tr>
<td>ENV-34 Enact social host provision laws</td>
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<tr>
<td>ENV-23 Increase alcohol tax</td>
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<td>ENV-3 Enact dram shop liability laws: Sales to intoxicated</td>
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<tr>
<td>ENV-25 Enact dram shop liability laws: Sales to underaged</td>
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<tr>
<td>ENV-30 Limit number/density of alcohol establishments</td>
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<tr>
<td>ENV-35 Retain state-run alcohol retail stores (where applicable)</td>
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<tr>
<td>ENV-1 Establish an alcohol-free campus</td>
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<td>ENV-7 Conduct campus-wide social norms campaign</td>
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<td>ENV-4 Prohibit alcohol use/service at campus social events</td>
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<td>ENV-5 Establish amnesty policies</td>
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<td>ENV-8 Require Friday morning classes</td>
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<td>ENV-9 Establish standards for alcohol service at campus social events</td>
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<td>ENV-10 Establish substance-free residence halls</td>
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<tr>
<td>ENV-13 Prohibit beer kegs</td>
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<td>ENV-18 Establish minimum age requirements to serve/sell alcohol</td>
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<tr>
<td>ENV-19 Implement party patrols</td>
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<td>ENV-24 Increase cost of alcohol license</td>
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<td>ENV-27 Prohibit home delivery of alcohol</td>
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<tr>
<td>ENV-29 Enact noisy assembly laws</td>
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<tr>
<td>ENV-12 Restrict alcohol sponsorship and advertising</td>
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<tr>
<td>ENV-14 Implement beverage service training programs: Sales to intoxicated</td>
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<td>ENV-15 Implement beverage service training programs: Sales to underaged</td>
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<tr>
<td>ENV-28 Enact keg registration laws</td>
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<tr>
<td>ENV-2 Require alcohol-free programming</td>
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<td>ENV-20 Implement safe-rides program</td>
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<tr>
<td>ENV-32 Conduct shoulder tap campaigns</td>
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<tr>
<td>ENV-33 Enact social host property laws</td>
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<tr>
<td>ENV-36 Require unique design for state ID cards for age &lt; 21</td>
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</table>

## Effectiveness: Success in achieving targeted outcomes

### Higher effectiveness (★★★★)

- ENV-16 Restrict happy hour/promotions
- ENV-21 Retain ban on Sunday sales (where applicable)
- ENV-22 Retain age-21 drinking age
- ENV-23 Increase alcohol tax

### Moderate effectiveness (★★)

- ENV-17 Retain or enact restrictions on hours of alcohol sales
- ENV-34 Enact social host provision laws
- ENV-3 Enact dram shop liability laws: Sales to intoxicated
- ENV-25 Enact dram shop liability laws: Sales to underaged
- ENV-30 Limit number/density of alcohol establishments
- ENV-35 Retain state-run alcohol retail stores (where applicable)

### Lower effectiveness (★)

- ENV-4 Prohibit alcohol use/service at campus social events
- ENV-5 Establish amnesty policies
- ENV-8 Require Friday morning classes
- ENV-9 Establish standards for alcohol service at campus social events
- ENV-10 Establish substance-free residence halls
- ENV-13 Prohibit beer kegs
- ENV-18 Establish minimum age requirements to serve/sell alcohol
- ENV-19 Implement party patrols
- ENV-24 Increase cost of alcohol license
- ENV-27 Prohibit home delivery of alcohol
- ENV-29 Enact noisy assembly laws
- ENV-12 Restrict alcohol sponsorship and advertising
- ENV-14 Implement beverage service training programs: Sales to intoxicated
- ENV-15 Implement beverage service training programs: Sales to underaged
- ENV-28 Enact keg registration laws
- ENV-2 Require alcohol-free programming
- ENV-20 Implement safe-rides program
- ENV-32 Conduct shoulder tap campaigns
- ENV-33 Enact social host property laws
- ENV-36 Require unique design for state ID cards for age < 21

## Too few robust studies to rate effectiveness—or mixed results (★)

- ENV-11 Enforce age-21 drinking age (e.g., compliance checks)
- ENV-21 Retain ban on Sunday sales (where applicable)
- ENV-22 Retain age-21 drinking age
- ENV-23 Increase alcohol tax

### Legend

- ### = Higher
- #### = Moderate
- ## = Lower
- B = Broad
- F = Focused
- 5 or more longitudinal studies
- 5 or more cross-sectional studies or 1 to 4 longitudinal studies
- 2 to 4 studies but no longitudinal studies
- 1 study that is not longitudinal

## Barriers:

- ### = Higher
- #### = Moderate
- ## = Lower
- C = Barriers at college level
- S/L = Barriers at the state/local level

## Research amount/quality:

- 5 or more longitudinal studies
- 5 or more cross-sectional studies or 1 to 4 longitudinal studies
- 2 to 4 studies but no longitudinal studies
- 1 study that is not longitudinal

## Public health reach:

- 0 = No studies
- B = Broad
- F = Focused

---

See brief descriptions and additional ratings for each environmental-level strategy on the summary table beginning on page 19.

1. **Effectiveness** ratings are based on estimated success in achieving targeted outcomes. **Cost** ratings are based on a consensus among research team members of the relative program and staff costs for adoption, implementation, and maintenance of a strategy. Actual costs will vary by institution, depending on size, existing programs, and other campus and community factors. **Barriers** to implementing a strategy include cost and opposition, among other factors. **Public health reach** refers to the number of students that a strategy affects. Strategies with a broad reach affect all students or a large group of students (e.g., all undergraduate students); strategies with a focused reach affect individuals or small groups of students (e.g., sanctioned students). **Research amount/quality** refers to the number and design of studies (see legend).

2. Strategy does not seek to reduce alcohol availability, one of the most effective ways to decrease alcohol use and its consequences.
<table>
<thead>
<tr>
<th>Matrix number</th>
<th>Strategy</th>
<th>Description</th>
<th>Effectiveness</th>
<th>Cost</th>
<th>Barriers</th>
<th>Research amount/quality</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><img src="image" alt="Green highlighted cells" /></td>
<td><img src="image" alt="Expanded green highlighted cells" /></td>
<td></td>
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</tr>
</tbody>
</table>
# Environmental-Level Strategies

Environmental-level strategies aim to reduce underage and excessive drinking at the population level by changing the context (i.e., places, settings, occasions, and circumstances) in which alcohol use occurs, thereby reducing consequences.

All environmental-level strategies rated by CollegeAIM

<table>
<thead>
<tr>
<th>Lower costs ($)</th>
<th>Mid-range costs ($$)</th>
<th>Higher costs ($$$)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Higher effectiveness</td>
<td></td>
</tr>
<tr>
<td>☐ Restrict happy hours/price promotions</td>
<td>☐ Enforce age-21 drinking age (e.g., compliance checks)</td>
<td></td>
</tr>
<tr>
<td>☐ Retain ban on Sunday sales (where applicable)</td>
<td>☐ Increase alcohol tax</td>
<td></td>
</tr>
<tr>
<td>☐ Retain age-21 drinking age</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Moderate effectiveness</td>
<td></td>
</tr>
<tr>
<td>☐ Retain or enact restrictions on hours of alcohol sales</td>
<td>☐ Prohibit alcohol use/sales at campus sporting events</td>
<td>☐ Enact responsible beverage service training laws</td>
</tr>
<tr>
<td>☐ Enact social host provision laws</td>
<td>☐ Enact dram shop liability laws: Sales to intoxicated</td>
<td></td>
</tr>
</tbody>
</table>
Enforce age-21 drinking age (e.g., compliance checks)

Under this strategy, campuses and local and state government support and implement strong enforcement of the existing age-21 minimum legal drinking age. (Compliance checks are an approach regulated at the local or state level whereby undercover youth, supervised by law enforcement or licensing authorities, attempt to purchase alcohol. When a violation occurs, a penalty is applied to the server and/or the license holder, depending on local or state law.)

Effectiveness: ★★★ = Higher
Cost: $$$ = Mid-range
Barriers: ### = Moderate
Research Amount: ***** = 5 or more longitudinal studies

Public Health Reach: Broad
Staffing Expertise Needed: Policy advocate
Target Population: Underage
Research Population: General

Potential Resources:
Underage Drinking Enforcement Training Center, Conducting Compliance Check Operations (online training)

For more information about intervention designs and implementation, check the articles in the References tab.

References:

Levels of Prevention

Universal
(all students)

Selective
(known high-risk groups)

Indicated*
*(specific students experiencing harm or engaging in high-risk behavior)
Daily and weekly alcohol consumption over academic year. (Tremblay et al., 2010)
How can schools and off-campus partners use COLLEGEAIM?

- Use the website and/or printed materials to review individual and environmental strategies to compare approaches.

- Find new evidence-based options to replace less effective strategies or address gaps.

- Use the interactive strategy planning worksheet to select a mix of approaches based on needs and budget.
A mix of individual and environmental strategies that target different levels of prevention is likely to be most effective!
STRATEGY PLANNING WORKSHEET

Use this worksheet or download a copy to capture your thoughts about your current strategies and new ones you’d like to explore. Keep in mind:

**Priorities:** Which alcohol-related issues are of most concern to your campus? Make sure your school’s needs and goals are well defined, and keep them front and center as you fill in the worksheet.

**Effectiveness:** Does research show that your current strategies are effective in addressing your priority issues? Might others be more effective?

**Balance:** Realistically assess what you can do with your available resources. Strike a balance, if possible, between individual- and environmental-level strategies, and between strategies that will face few barriers and can be put in place quickly and others that may take longer to implement. Consider the financial cost relative to the program’s expected effectiveness and the approximate percentage of the student body that the strategy will reach.

<table>
<thead>
<tr>
<th>Strategy Name</th>
<th>Individual or Environmental?</th>
<th>CollegeAIM Ratings</th>
<th>Notes and Next Steps:</th>
<th>POSSIBLE NEW STRATEGIES</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Effectiveness</td>
<td>Cost</td>
<td>IND</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Barriers</td>
<td>Reach: Broad or Focused (% of students)</td>
<td></td>
</tr>
<tr>
<td></td>
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<td></td>
<td></td>
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<td></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Strategy Name</td>
<td>Individual or Environmental?</td>
<td>CollegeAIM Ratings</td>
<td>Notes and Next Steps</td>
<td></td>
</tr>
<tr>
<td>-------------------------------</td>
<td>------------------------------</td>
<td>--------------------</td>
<td>----------------------</td>
<td></td>
</tr>
<tr>
<td>Wrecked car display</td>
<td>X</td>
<td>...</td>
<td>Broad this approach isn't rated</td>
<td></td>
</tr>
<tr>
<td>“Beer Goggles” program</td>
<td>X</td>
<td>...</td>
<td>focused this approach isn't rated either</td>
<td></td>
</tr>
<tr>
<td>Bystander approach</td>
<td>X</td>
<td>?</td>
<td>$$ Low</td>
<td>Too few studies to know effectiveness. Evaluate?</td>
</tr>
</tbody>
</table>

**Possible New Strategies**

<table>
<thead>
<tr>
<th>Strategy Name</th>
<th>Individual or Environmental?</th>
<th>CollegeAIM Ratings</th>
<th>Notes and Next Steps</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bystander approach</td>
<td>X</td>
<td>?</td>
<td>$$ Low</td>
</tr>
</tbody>
</table>

**Matrix number**

<table>
<thead>
<tr>
<th>Strategy</th>
<th>Description</th>
<th>Effectiveness</th>
<th>Cost</th>
<th>Barriers</th>
<th>Research amount/quality</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENV-6 Implement bystander</td>
<td>Implement bystander interventions</td>
<td>?</td>
<td>$$</td>
<td>#</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>programs offered by campuses are designed to increase a student's capacity and willingness to intervene when another student may be in danger of harming him/herself or another person due to alcohol use. Bystander intervention programs also are used to reduce consequences of drug use, sexual assault, and other problems. • Staffing expertise required: Coordinator • Target population: All students • Research population: Not assessed</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Frequently Asked Questions

About monitoring campus alcohol problems

▷ How do you recommend monitoring the extent of campus alcohol problems and the effects of our intervention efforts?

About selecting and implementing strategies

General questions about selecting strategies

▷ Why does CollegeAIM recommend both individual-level and environmental-level strategies?

▷ At times we hear about campuses trying out interesting strategies that CollegeAIM doesn’t identify, or that have too few studies to rate effectiveness. Should we follow suit?

About specific individual-level strategies

▷ How do we choose strategies to target specific subgroups such as first-year students, student athletes, members of Greek organizations, and mandated students?

▷ Many of our incoming freshmen students arrive on campus with established drinking habits. How can we address this issue?

▷ How can we assess the potential effectiveness of commercial products before we invest our limited resources in them?

▷ Personalized feedback interventions (PFIs) and personalized normative feedback (PNF) are among the more effective individual-level strategies in CollegeAIM. What are PFI and PNF? Some of these are listed as “generic” strategies—what does “generic” mean? Where can we learn to implement a generic strategy?

▷ We are planning to conduct routine alcohol screenings and interventions through our health and counseling centers. Which screening tools should we use? Where can we find resources to train staff to deliver screenings and interventions with fidelity?

About specific environmental-level strategies

▷ Where can we find models of campus-community collaboration that have been effective in reducing student alcohol use and related consequences?
**About specific individual-level strategies**

✔️ How do we choose strategies to target specific subgroups such as first-year students, student athletes, members of Greek organizations, and mandated students?

The chart below lists strategies from the full CollegeAiM that (1) focused on specific subgroups and (2) were shown to be effective in the majority of at least four studies. Five strategies for freshmen and two for mandated students met these criteria. Although a handful of strategies focused on student-athletes and members of the Greek system, there were too few studies for each strategy to draw strong conclusions about effectiveness.

<table>
<thead>
<tr>
<th>Subgroup</th>
<th>Strategies (# studies showing effectiveness/total # studies evaluated)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Freshmen</strong></td>
<td></td>
</tr>
<tr>
<td>IND-3</td>
<td>Generic personalized normative feedback (PNF) (5/5)</td>
</tr>
<tr>
<td>IND-21</td>
<td>e-CHECKUP TO GO (4/4)</td>
</tr>
<tr>
<td>IND-13</td>
<td>Parent-based alcohol communication training (4/6)</td>
</tr>
<tr>
<td>IND-15</td>
<td>Brief motivational intervention —in-person, individual based (7/7)</td>
</tr>
<tr>
<td>IND-17</td>
<td>AlcoholEdu for College (contains personalized feedback intervention, or PFI) (3/4)</td>
</tr>
<tr>
<td><strong>Mandated Students</strong></td>
<td></td>
</tr>
<tr>
<td>IND-22</td>
<td>Personalized feedback intervention (PFI): Generic/other (4/4)</td>
</tr>
<tr>
<td>IND-15</td>
<td>Brief motivational intervention —in-person, individual based (11/13)</td>
</tr>
</tbody>
</table>

Of course, students can be members of more than one high-risk group, such as freshmen who are student athletes or pledges or both. You may wish to consider how these groups overlap on your campus when deciding on a program.

Among the choices listed above, the size and duration of effects on drinking differ, so be sure to check details in the **individual-level** or **environmental-level** summaries before making a selection. And keep in mind that an effective means of reducing alcohol use among all students, including those in these subgroups, is to use multiple strategies and include both individual- and environmental-level approaches.
The Importance of Evaluation

- The CollegeAIM summarizes the available science with certain caveats.
  - 2+ studies minimum of a given program were needed for inclusion in individual-focused section.
  - 3+ studies minimum to rate effectiveness.
The Importance of Evaluation

Many campuses are using programs that could be effective, but are untested or only tested once.

Systematic (and in the case of individual-focused approaches, controlled) evaluation and publication of findings are necessary to make it into the CollegeAIM!

Consider partnering with faculty/research institutes to complete evaluations.
Goal is to update the CollegeAIM every few years to keep up with the science (anticipated next release: September, 2018).

As updates are made, there is the potential to add new features.

Stakeholder input is key. We want to hear your thoughts!

Individual-focused approaches:

jcronce@uoregon.edu
Acknowledgements:

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- Shuly Babitz, Fred Donodeo, and Dr. Vivian Faden
- Other members of the CollegeAIM development teams and the independent reviewers