REVISED AND UPDATED

Planning Alcohol Interventions Using NIAAA's

COLLEGE AIM

ALCOHOL INTERVENTION MATRIX

The National Institute on Alcohol Abuse and Alcoholism's *CollegeAIM* was developed for higher education officials, particularly alcohol and other drug program and student life staff, who seek to address harmful and underage drinking among their students. *CollegeAIM* is intended to inform and guide officials as they choose interventions for their campus communities. The *CollegeAIM* guide and website are updated periodically to reflect information from recent articles in peer-reviewed journals and to ensure that ratings are revised accordingly. This version of *CollegeAIM* is based on updates completed in 2019.

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Introduction

Harmful and underage college drinking remain significant problems on U.S. campuses, despite our collective efforts to address them. Higher education officials understand that, all too often, alcohol-related problems can seem intractable, leading to questions and frustration over how best to reduce student drinking and its negative consequences.

The National Institute on Alcohol Abuse and Alcoholism (NIAAA) developed the *CollegeAIM* guide and website to help college personnel choose wisely among the many potential interventions to address harmful and underage college student drinking.

The centerpiece of the guide is a user-friendly matrix developed with input from leading college alcohol researchers, along with college student life and alcohol and other drug (AOD) program staff. With this "college alcohol intervention matrix"—or *CollegeAIM*—school officials can easily use research-based information to inform decisions about alcohol intervention strategies.

If you are involved in efforts to prevent and reduce underage drinking and alcohol-related harm on your campus, you are in a critical position to improve the health and safety of your students—and NIAAA's *CollegeAIM* can help.

How can *CollegeAIM* help?

It can be challenging to decide where to focus your prevention efforts and dollars—especially given the magnitude of the problem and the dozens of varied interventions available.

CollegeAIM provides the evidence-based information you need to compare a broad range of alcohol interventions. So that this information remains current, *CollegeAIM* is updated periodically to include recent scientific findings. This edition of *CollegeAIM* was completed in 2019 and includes scientific literature published through the end of 2017. By rating the relative effectiveness and other characteristics of more than 60 strategies, *CollegeAIM* will help you:

- Identify strategies most likely to reduce drinking and its harmful consequences.
- See how your current strategies compare with other options.
- Find different research-based strategies to consider.
- Select a combination of approaches that meets the needs of your students and campus.

Where does *CollegeAIM* fit into an overall prevention planning process?

CollegeAIM, with its matrix-based guide, website, and related resources, is meant to be used in conjunction with your school's own processes for anticipating and responding to the needs of your student body, campus environment, and surrounding community. You probably already apply a variation of these steps for college prevention programs:

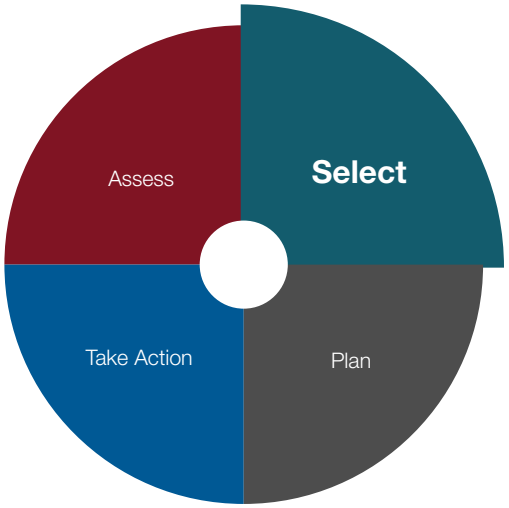
- **Assess** the problems on your campus and set priorities.
- **Select** strategies by exploring evidence-based interventions.
- **Plan** how you'll carry out the chosen strategies and how you'll measure results.
- **Take action**—implement the chosen strategies, evaluate them, and refine your program.

CollegeAIM supports the second step: select strategies. For help with the other phases, please see the Supporting Resources in Appendix C and on the *CollegeAIM* website at www.CollegeDrinkingPrevention.gov/CollegeAIM.

What's in this guide?

To help you choose an appropriate mix of effective, evidence-based interventions, *CollegeAIM* contains two matrices: one for interventions that target individual students, including those in higher-risk groups, such as first-year students, student athletes, members of Greek organizations, and mandated students; and the other for environmental-level interventions, which target the campus community and student population as a whole. Beyond rating the relative effectiveness of these strategies, the matrices provide estimates for anticipated costs, barriers to implementation, and other factors.

This guide also contains two summary tables that further define and characterize the interventions, a strategy planning worksheet, a list of the frequently asked questions answered online on the *CollegeAIM* website (see URL below), and a list of additional resources.



About *CollegeAIM*

CollegeAIM is distinctive because of the number and expertise of its contributors and the breadth of research covered by its analysis.

How was *CollegeAIM* created?

CollegeAIM is the product of a multi-year collaboration among college alcohol intervention researchers, college AOD and student life professionals, and NIAAA staff. Two development teams, each with three researchers, worked with NIAAA to produce the original *CollegeAIM* and this update. The first phase of the work involved identifying the interventions to be included in *CollegeAIM* and the factors by which they would be evaluated. The second phase involved analyzing the substantial research literature on college alcohol interventions and rating each of the interventions according to those factors. Ultimately, the development teams examined and rated more than 60 interventions on their relative effectiveness, costs, barriers to implementation, and amount and quality of research, among other variables.

In the subsequent phase, an additional 10 college alcohol researchers reviewed the analysis, applied their knowledge and professional judgment, and provided detailed feedback for refinements. Through multiple rounds of reviews and revisions, this consensus process distilled the results of decades of research and hundreds of studies into a user-friendly decision aid.

For more information on the methodology, see the Frequently Asked Questions section of the *CollegeAIM* website (see URL below).

What it is, what it's not.

CollegeAIM is grounded in a matrix that evaluates dozens of individual- and environmental-level interventions, allowing you to compare and contrast strategies across a number of criteria. Additional detailed information on each intervention is presented in summary tables, providing in-depth descriptions to help you choose wisely among many available options.

Although *CollegeAIM* covers an extensive list of strategies, it does not include every possible intervention available to colleges, nor does it outline the combination of strategies appropriate for any given school. With a few exceptions, *CollegeAIM* focuses on interventions to prevent and reduce underage and excessive alcohol consumption as a way to reduce their harmful consequences, rather than focusing directly on the consequences themselves.

An evolving information base.

As with any effort that relies on current research, *CollegeAIM* is a work in progress and will evolve as new research findings emerge. NIAAA will continue to conduct updates regularly with input from the research community.

What's new in this revised edition?

Information in the original *CollegeAIM* was grounded in scientific articles on college alcohol interventions published through 2012. In 2019, *CollegeAIM* was updated to include new research findings from peer-reviewed studies published from 2013 through 2017. The same team of experts and the same process was used to identify and evaluate articles for the matrix update. As a result, 7 interventions were added to the nearly 60 strategies already included in *CollegeAIM*. Based on the additional research, some interventions received updated ratings of their effectiveness and amount of research evidence. In the matrix, the superscript letter *a* indicates newly added interventions and the superscript letter *b* indicates those interventions that have moved position in the matrix as a result of a change in effectiveness.

Why Intervene?
College Drinking Is a Big Deal

While some see college drinking, even to excess, as a harmless rite of passage, it often results in adverse consequences for students and their schools.

Consequences for Students:

- **Academic fallout:** Missed classes, poor school performance, withdrawal from courses, and dropping out
- **Health problems:** Alcohol use disorder and other alcohol-related problems, such as sleep issues and depression
- **Acute risks:** Impaired driving, unsafe sexual behavior, fights, sexual assaults, suicide attempts, unintentional injuries, overdoses, and death

Even students who don't drink may experience secondhand effects, such as disrupted study and sleep, or being the victim of an alcohol-related assault.

Consequences for Schools:

- Higher costs for healthcare and security
- Campus vandalism
- Damage to a school's reputation
- Costs related to attrition and the need for additional recruitment

College drinking is a big deal. The problem is complex and challenging, but you can reduce the likelihood of alcohol-related harm to your students. Commit to a plan using evidence-based interventions.

About the Interventions in *CollegeAIM*

In the past several decades, significant progress has been made in clarifying what does and doesn't work to prevent alcohol-related problems among college students. Hundreds of studies have been published in peer-reviewed journals, providing the foundation for *CollegeAIM*.

Of the intervention strategies in *CollegeAIM*, about two-thirds have shown some degree of effectiveness, about a third have mixed results or have too little evidence to warrant an effectiveness rating, and a few have been shown to be ineffective. All are included so you can see how your current strategies stack up; identify other, perhaps more effective options; and compare costs, barriers to implementation, and other information to help your planning and decision-making process.

Two types of strategies: individual and environmental.

To cover the full spectrum of alcohol-related problems most campuses face, *CollegeAIM* now includes 28 individual-level strategies and 39 environmental-level strategies.

Individual-level strategies are designed to change your students' knowledge, attitudes, and behaviors related to alcohol so that students drink less, take fewer risks, and experience fewer harmful consequences. Categories of individual-level interventions include education and awareness programs, cognitive-behavioral skills-based approaches, motivation and feedback-related approaches, and behavioral interventions by health professionals.

Environmental-level strategies are designed to change the campus and community environments in which student drinking occurs and to educate the student body as a whole. Often, a major goal is to reduce the availability of alcohol, because research shows that reducing alcohol availability cuts consumption and harmful consequences on campuses as well as in the general population. Note that by focusing on single, stand-alone environmental strategies, this matrix does not include multicomponent environmental programs, some of which have shown success. Some strategies used in successful multicomponent programs, such as party patrols, may not have had enough research to demonstrate their effectiveness when used in isolation. Even so, this strategy and others designed to reduce alcohol availability may add to the effectiveness of a comprehensive campus program.

Consider a mix of strategies.

Your best chance for creating a safer campus could come from a combination of individual- and environmental-level interventions that work together to maximize positive effects.

Many individual-level strategies aim to assist students identified as having a problem with their drinking or with alcohol use disorder. It is important to engage these students as early as possible. Environmental strategies seek to affect the behavior of the overall student population by addressing the factors that accommodate or promote harmful and underage college drinking. Reducing the availability of alcohol in the broader campus and community environment, for example, can have wide-ranging positive effects for all students and the campus as a whole.

In short, as you develop your action plan, consider strategies that target individual students, the student body as a whole, and the broader college community.

Cut harmful consequences by reducing student drinking.

The strategies included in *CollegeAIM* focus primarily on reducing student drinking—and thereby reducing all possible harmful consequences—rather than on trying to prevent particular outcomes such as overdoses, sexual assaults, or alcohol-impaired driving. Three exceptions—amnesty policies, alcohol bystander interventions, and safe ride programs—are also included because a large number of campuses have instituted these programs. However, research has not yet established clear evidence of effectiveness for these strategies (see the matrix on page 12).

One consequence stands out in magnitude and may be a particular challenge for college AOD staff to address: alcohol-impaired driving. Alcohol-impaired driving accounts for the majority of alcohol-related deaths among college students nationwide. Your efforts to reduce student drinking will likely reduce the risk of alcohol-impaired driving as well; however, if you would like to take specific additional steps to help prevent your students from driving while impaired, please see the Frequently Asked Questions section of the *CollegeAIM* website (see URL below).

Campus and Community Partners Can Help

College AOD offices are often small in staff and budget, and some interventions may be beyond their purview. You can expand your reach and impact by enlisting people in other campus departments and in your community to help reduce alcohol-related harm among your students.

Who on your campus can help? A few possibilities:

- **Health and counseling centers** can conduct routine alcohol screening and brief interventions with your students.
- **Behavioral and social science departments**, both instructors and students, can plan and execute data collection and evaluate your interventions.
- **Campus security** can support onsite environmental interventions and share data on alcohol-related incidents.

Some of the most effective strategies are carried out in the communities and states surrounding the campuses, such as enforcing the minimum legal drinking age. Campus leaders can be influential in bringing about off-campus environmental changes that protect students.

To achieve success off campus, partner with leaders and coalitions in your community and state. Building these partnerships takes time, so you may want to make it part of a long-term plan. For models of campus-community collaboration, see the Frequently Asked Questions section of the *CollegeAIM* website (see URL below).

How To Use *CollegeAIM*

Now that you have a basic understanding of *CollegeAIM* and how it can help you select evidence-based interventions, you're ready to start using it. This section offers instructions on how to work your way through the guide and make the best use of its features.

Before using *CollegeAIM*: Briefly assess the problems on your campus.

The first step for effective intervention programming is to understand the nature of alcohol-related problems on your campus and answer the question, "What do we need to focus on now?" Consider how alcohol problems manifest themselves at your school. What do they look like? For example, are there problems with your Greek system? In your first-year residence halls? In off-campus student housing? Are there issues related to retail establishments in your neighborhood? Are there fights and vandalism at your school's athletic events? Do most problems occur at certain times of day or on certain days of the week? In short, what are the times, places, and subgroups that give rise to alcohol-related harm? While there may not be an intervention tailored to your specific issue in these matrices, knowing where your biggest problem areas are will help you choose wisely from the tested interventions presented here.

To help zero in on your school's most pressing needs, you can consult with colleagues and key stakeholders who can provide data along with informal reports. A collaborative process to assess your campus needs will yield the best results. It's important to do some research to inform your decisions, but do not get so bogged down that you lose momentum.

For information about developing a manageable system for assessing and monitoring alcohol-related problems on your campus, please see the Supporting Resources in Appendix C and the Frequently Asked Questions section of the *CollegeAIM* website (see URL below).

As you plan, it is also a good idea to be aware of the state and local alcohol laws and policies in your community. For details about alcohol-related policies at the state level, visit NIAAA's Alcohol Policy Information System at www.alcoholpolicy.niaaa.nih.gov.

Consult the matrices.

Once you have outlined your school's needs, *CollegeAIM* can help you:

1) *Inventory and rate your current strategies*: First, list basic information and notes about your current strategies on the Strategy Planning Worksheet, found in Appendix A and downloadable from the *CollegeAIM* website. Next, check the matrices on pages 11 and 12 and then the summary tables on pages 13–24 to see how your current interventions fare in terms of effectiveness, costs (including staff time), and other criteria of interest to you. Add this information to the worksheet.

2) *Consider alternative strategies*: Next, compare your strategies to other interventions in the matrices to see if any different, effective approaches might replace some of your existing strategies or be added to your overall plan. Add key information about potential new strategies to the worksheet.

As you review your list of potential interventions, remember that no single strategy is likely to be sufficient to address college student drinking and the problems it causes. In general, using a combination of individual and environmental strategies is recommended. Thus, the task is to put together a manageable mix of strategies that fits your school's priorities and your budget.

Make a plan and put it into action.

With information on your school's needs and current activities, and the results from *CollegeAIM* summarized on your Strategy Planning Worksheet, you can outline and execute plans to implement specific strategies on your campus, measure the results, and review and refine your practices.

For additional guidance and information on these steps, see the Supporting Resources section in Appendix C and the *CollegeAIM* website (see URL below), where you'll find links to help you implement many of the strategies rated as effective in *CollegeAIM*.

Although there is no simple solution to the problem of harmful and underage college drinking, choosing your interventions wisely, with help from *CollegeAIM*, boosts your odds of success by ensuring that you are using credible, evidence-based information to guide your decisions.

The *CollegeAIM* Matrices and Strategy Summary Tables

INDIVIDUAL-LEVEL STRATEGIES: Revised and Updated*

Estimated Relative Effectiveness, Costs, and Barriers; Public Health Reach; Research Amount; and Primary Modality[1]

COLLEGE AIM

EFFECTIVENESS: Success in achieving targeted outcomes[1]

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

	Lower costs $	Mid-range costs $$	Higher costs $$$
Higher effectiveness ★★★	**IND-3** Normative re-education: Electronic/mailed personalized normative feedback (PNF)—Generic/other[2] [##, B, ••••, online/offsite] **IND-10** Skills training, alcohol focus: Self-monitoring/self-assessment alone[3] [#, F, •••, online/offsite] **IND-24** Personalized feedback intervention (PFI): eCHECKUP TO GO (formerly, e-CHUG)[2] [#, B, ••••, online]	**IND-9** Skills training, alcohol focus: Goal/intention-setting alone[3] [##, F, ••, IPI] **IND-14** Skills training, alcohol plus general life skills: Alcohol Skills Training Program (ASTP)[2] [#, F, •••, IPG] **IND-18** Brief motivational intervention (BMI): In-person—Individual (e.g., BASICS) [##, F, ••••, IPI] **IND-26** Personalized feedback intervention (PFI): Generic/other[2] [##, B, ••••, online]	**IND-19** Multi-component education-focused program (MCEFP): AlcoholEdu® for College[2] [#, B, ••, online]
Moderate effectiveness ★★	**IND-11**[a] Skills training, alcohol focus: Decisional balance exercise alone[3] [#, F, ••, online/offsite] **IND-12**[a] Skills training, alcohol focus: Protective behavioral strategies alone[3] [#, B, ••, online/offsite]	**IND-4**[b] Normative re-education: In-person norms clarification alone[3] [#, F, •••, IPG] **IND-8** Skills training, alcohol focus: Expectancy challenge interventions (ECI)—Experiential [##, F, •••, IPG] **IND-15** Skills training, alcohol plus general life skills—Parent-based alcohol communication training [#, F, ••••, offsite] **IND-16** Skills training, alcohol plus general life skills or general life skills only: Generic/other[2] [#, F, ••••, IPG] **IND-17** Brief motivational intervention (BMI): In-person—Group [##, F, •••, IPG] **IND-20**[a] Multi-component education-focused program (MCEFP): Alcohol-Wise® (contains eCHECKUP TO GO) [#, B, ••, online]	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-27** Screening and behavioral treatments **IND-28** Medications for alcohol use disorder These approaches can reduce harmful drinking, according to studies conducted mainly in general adult populations (ages 18–65). *The differences in research populations, along with wide variations in costs and barriers across campuses, precluded ratings relative to other strategies. See page 18 for more information.*
Lower effectiveness ★	**IND-2** Normative re-education: Electronic/mailed personalized normative feedback (PNF) Event-specific prevention (21st birthday cards) [#, B, •••, online/offsite] **IND-13**[b] Skills training, alcohol plus general life skills: Alcohol 101 Plus™ [2] [#, B, ••, online]		
Not effective X	**IND-7** Skills training, alcohol focus: Expectancy challenge intervention (ECI)—By proxy/didactic/discussion alone[3] [#, F, ••, IPG]	**IND-1** Information/knowledge/education alone[3] [#, B, ••••, IPG] **IND-5** Values clarification alone[3] [#, F, •••, IPG] **IND-6**[b] Skills training, alcohol focus: Blood alcohol concentration feedback alone[3] [#, F, ••, IPI]	
Too few studies to rate effectiveness ?	**IND-22** Personalized feedback intervention (PFI): CheckYourDrinking (beta 1.0 version)[2] [#, B, •, online] **IND-23** Personalized feedback intervention (PFI): College Drinker's Check-up (CDCU)[2] [#, B, •, online] **IND-25**[a] Electronic/mailed Personalized Feedback Intervention (PFI): Drinking Assessment and Feedback Tool for College Students (DrAFT-CS) [##, B, •, computer]	**IND-21** Multi-component education-focused programs (MCEFP): Miscellaneous[2] [#, B, •, online]	

Legend

Effectiveness rating, based on percentage of studies reporting any positive effect:

★★★ = 75% or more
★★ = 50% to 74%
★ = 25% to 49%
X = Less than 25%
? = Too few studies to rate effectiveness

Barriers:

= Higher
= Moderate
= Lower

[a] = New intervention (2019)
[b] = Intervention changed position in the matrix

Public health reach:
B = Broad
F = Focused

Research amount/quality:
•••• = 11+ studies
••• = 7 to 10 studies
•• = 4 to 6 studies
• = 3 or fewer studies

Primary modality:
Computer
IPI = In-person individual
IPG = In-person group
Online
Offsite

*See box on page 3 for details. See brief descriptions and additional ratings for each individual-level strategy on the summary table beginning on page 13.

[1]**Effectiveness** ratings are based on the percentage of studies reporting any positive outcomes (see legend). Strategies with three or fewer studies did not receive an effectiveness rating due to the limited data on which to base a conclusion. **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 underage students); strategies with a focused reach affect individuals or small groups of students (e.g., sanctioned students). **Research amount/quality** refers to the number of randomized controlled trials (RCT) that evaluated the strategy (see legend).

[2]Strategies are listed by **brand name** 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.

[3]Although this approach is a component of larger, effective programs such as BASICS and ASTP, it is rated here as a stand-alone intervention.

ENVIRONMENTAL-LEVEL STRATEGIES: Revised and Updated*

Estimated Relative Effectiveness, Costs, and Barriers; Public Health Reach; and Research Amount/Quality[1]

COLLEGE AIM

EFFECTIVENESS: Success in achieving targeted outcomes[1]	COSTS: Lower costs $	COSTS: Mid-range costs $$	COSTS: Higher costs $$$
Higher effectiveness ★★★	**ENV-16** Restrict happy hours/price promotions [###, B, •••] **ENV-24** Retain age-21 drinking age [##, B, ••••]	**ENV-11** Enforce age-21 drinking age (e.g., compliance checks) [##, B, ••••] **ENV-22**[a] Establish minimum unit pricing [###, B, ••••] **ENV-25** Increase alcohol tax [###, B, ••••]	
Moderate effectiveness ★★	**ENV-17** Retain or enact restrictions on hours of alcohol sales [##, B, ••••] **ENV-21**[b] Retain ban on Sunday sales (where applicable) [##, B, ••••] **ENV-36** Enact social host provision laws [##, B, •••]	**ENV-3** Prohibit alcohol use/sales at campus sporting events [##, F, ••••] **ENV-23**[a] Conduct "reward & reminder" or "mystery shopping visits" [C/L = #, S = ##, B, •••] **ENV-27** Enact dram shop liability laws: Sales to intoxicated [##, B, ••••] **ENV-28** Enact dram shop liability laws: Sales to underage [##, B, •••] **ENV-32** Limit number/density of alcohol establishments [###, B, ••••] **ENV-37** Retain state-run alcohol retail stores (where applicable) [###, B, ••••] **ENV-39**[a] Enact false/fake ID laws [##, B, •••]	**ENV-12**[b] Restrict alcohol sponsorship and advertising [##, B, ••••] **ENV-33** Enact responsible beverage service training laws [##, B, •••]
Lower effectiveness ★		**ENV-1** Establish an alcohol-free campus [###, B, •••] **ENV-7** Conduct campus-wide social norms campaign[2] [#, B, ••••]	**ENV-14** Implement beverage service training programs: Sales to intoxicated [C = #, S/L = ##, B, ••••] **ENV-15** Implement beverage service training programs: Sales to underage [C = #, S/L = ##, B, ••••] **ENV-30** Enact keg registration laws [##, B, •••]
Too few robust studies to rate effectiveness—or mixed results ?	**ENV-4** Prohibit alcohol use/service at campus social events [##, B, 0] **ENV-5** Establish amnesty policies[2] [#, F, •••] **ENV-8** Require Friday morning classes[2] [#, B, ••] **ENV-9** Establish standards for alcohol service at campus social events [#, B, •••] **ENV-10** Establish substance-free residence halls[2] [#, F, ••] **ENV-13** Prohibit beer kegs [C = #, S/L = ###, B, •••] **ENV-18**[†] Establish minimum age requirements to serve/sell alcohol [##, B, ••] **ENV-19** Implement party patrols [##, B, •••] **ENV-26** Increase cost of alcohol license [##, B, •] **ENV-29** Prohibit home delivery of alcohol [##, B, ••] **ENV-31** Enact noisy assembly laws [##, B, 0]	**ENV-6** Implement bystander interventions[2] [#, F, •]	**ENV-2** Require alcohol-free programming[2] [#, F, ••] **ENV-20** Implement safe-rides program[2] [##, F, ••] **ENV-34** Conduct shoulder tap campaigns [##, B, ••] **ENV-35** Enact social host property laws [##, B, 0] **ENV-38** Require unique design for state ID cards for age < 21 [##, B, •••]

Legend

Effectiveness rating, based on estimated success in achieving targeted outcomes:

★★★ = Higher
★★ = Moderate
★ = Lower
? = Too few robust studies to rate effectiveness—or mixed results

Barriers:

= Higher
= Moderate
= Lower
C/S/L = Barriers at the college/state/local levels

Public health reach:

B = Broad
F = Focused

[a] = New intervention (2019)
[b] = Intervention changed position in the matrix

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
0 = No studies

*See box on page 3 for details on the revision and update. 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 underage 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.
[†]Research amount decreased from original *CollegeAIM* because studies indirectly measuring the approach were replaced with a fewer number of direct studies since published.

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).

Matrix number	Strategy	Description	Effective-ness	Cost	Barriers	Research amount
		EDUCATION/AWARENESS PROGRAMS				
IND-1	**Information/knowledge/education** alone	Information/knowledge/education programs solely provide students with alcohol-related education (e.g., how alcohol is processed by the body, potential consequences of alcohol misuse), without any alcohol-specific skills training. • Staffing expertise needed: Coordinator • Target population: Individuals, specific groups, or all students • Primary modality: In-person group • Duration of effects: No short- or long-term effects	X	$$	#	••••
IND-2	**Normative re-education:** Electronic/ mailed personalized normative feedback (PNF)—Event-specific prevention (21st birthday cards)	Under this event-specific prevention PNF strategy, students receive a birthday card on their 21st birthday, warning them against excessive celebratory alcohol consumption. • Staffing expertise needed: Coordinator • Target population: Individuals, underage, or specific groups • Primary modality: Online/offsite • Duration of effects: Mixed short-term (< 6 months) effects; long-term (≥ 6 months) effects not assessed	★	$	#	•••
IND-3	**Normative re-education:** Electronic/ mailed personalized normative feedback (PNF)—Generic/other See FAQs for more information on implementing a generic PNF strategy.	PNF programs provide all students with personalized information about their alcohol use in comparison with actual use by their peers. This information is represented graphically (with charts and text, showing personal behavior juxtaposed with normative information). Delivery of PNF interventions is done without the involvement of a facilitator, and students are allowed to consider this information on their own. • Staffing expertise needed: Coordinator • Target population: Individuals, specific groups, or all students • Primary modality: Online/offsite • Duration of effects: Short-term effects (< 6 months); long-term (≥ 6 months) effects	★★★	$	##	••••
IND-4[b]	**Normative re-education:** In-person norms clarification alone	Globally, normative re-education programs are designed to provide students with accurate information about peer alcohol use and consequences and to modify their attitudes about the acceptability of their excessive alcohol consumption to their peers and parents. • Staffing expertise needed: Coordinator • Target population: Individuals, specific groups, or all students • Primary modality: In-person group • Duration of effects: Short-term (< 6 months) effects; long-term (≥ 6 months) effects not assessed	★★	$$	#	•••

Legend

Effectiveness:
★★★ = Higher, ★★ = Moderate, ★ = Lower
X = Not effective, ? = Too few studies to rate effectiveness

Cost:
$$$ = Higher, $$ = Mid-range, $ = Lower

Barriers:
= Higher
= Moderate
= Lower

Research amount:
•••• = 11+ studies
••• = 7 to 10 studies
•• = 4 to 6 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

[a] = New intervention (2019)
[b] = Intervention changed position in the matrix

Duration of effects refers to the timeframe within which the intervention demonstrated effects on alcohol-related behavioral outcomes; follow-up periods for short-term effects were < 6 months; follow-up periods for long-term effects were ≥ 6 months.

Matrix number	Strategy	Description	Effective-ness	Cost	Barriers	Research amount
		EDUCATION/AWARENESS PROGRAMS (CONT.)				
IND-5	**Values clarification** alone	Values clarification programs are designed to help students evaluate their values and goals and incorporate responsible decision-making about alcohol use into these values and goals. • Staffing expertise needed: Coordinator • Target population: Individuals, specific groups, or all students • Primary modality: In-person group • Duration of effects: No short- or long-term effects	X	$$	#	•••
		COGNITIVE–BEHAVIORAL SKILLS-BASED APPROACHES				
IND-6[b]	**Skills training, alcohol focus:** Blood alcohol concentration (BAC) feedback alone	BAC feedback programs involve presenting students with their actual BAC, usually based on breath samples, during or following an evening of drinking. These programs challenge students' perceptions of their level of intoxication based on an objective BAC measurement or provide an incentive for students to limit their alcohol consumption (e.g., remaining under a certain BAC at a social event). • Staffing expertise needed: Coordinator • Target population: Individuals or specific groups • Primary modality: In-person individual • Duration of effects: No short-term (< 6 months) effects; long-term (≥ 6 months) effects not assessed	X	$$	#	••
IND-7	**Skills training, alcohol focus:** Expectancy challenge intervention (ECI)—By proxy/ didactic/discussion alone	ECIs target positive beliefs about the outcomes of alcohol use, highlighting through education or direct experience how many behaviors associated with alcohol use are driven by cognitions rather than pharmacology. Education on alcohol placebo effects is provided during in-person discussion or lecture or via video as a means of challenging students' positive beliefs about the outcomes of alcohol use. • Staffing expertise needed: Coordinator • Target population: Individuals, underage, specific groups, or all students • Primary modality: In-person group • Duration of effects: No short-term (< 6 months) effects; long-term effects (≥ 6 months) not assessed	X	$	#	••
IND-8	**Skills training, alcohol focus:** Expectancy challenge intervention (ECI)—Experiential	Experiential ECIs assign students to receive alcohol or a placebo, facilitate interaction in a social environment, and then ask students to guess who has or has not imbibed alcohol as a means of challenging students' positive beliefs about the outcomes of alcohol use. Education on alcohol placebo effects is also provided. • Staffing expertise needed: Coordinator • Target population: Individuals or specific groups • Primary modality: In-person group • Duration of effects: Short-term (< 6 months) effects; no long-term (≥ 6 months) effects	★★	$$	##	•••
IND-9	**Skills training, alcohol focus:** Goal/ intention-setting alone	Under this approach, students identified as having alcohol use problems set goals for limiting their alcohol use, based on their current drinking behaviors, other goals, and values. • Staffing expertise needed: Health professional and coordinator • Target population: Individuals • Primary modality: In-person individual • Duration of effects: Short-term (< 6 months) effects; long-term (≥ 6 months) effects not assessed	★★★	$$	##	••

[a] = New intervention (2019) [b] = Intervention changed position in the matrix

Matrix number	Strategy	Description	Effective-ness	Cost	Barriers	Research amount
		COGNITIVE–BEHAVIORAL SKILLS-BASED APPROACHES (CONT.)				
IND-10	**Skills training, alcohol focus:** Self-monitoring/self-assessment alone	Self-monitoring/self-assessment approaches involve repeated assessment (e.g., daily diary, multiple longitudinal assessment spread out over weeks, months, or years) without any other intervention. • Staffing expertise needed: Coordinator • Target population: Individuals, specific groups • Primary modality: Online/offsite • Duration of effects: Short-term (< 6 months) and long-term (≥ 6 months) effects	★★★	$	#	•••
IND-11[a]	**Skills training, alcohol focus:** Decisional balance exercise alone	Decisional balance exercises involve weighing the pros and cons of behavior change versus maintenance of the status quo without any other intervention. • Staffing expertise needed: Coordinator • Target population: Individuals • Primary modality: Online/offsite • Duration of effects: Short-term (< 6 months); mixed long-term (≥ 6 months) effects	★★	$	#	••
IND-12[a]	**Skills training, alcohol focus:** Protective behavioral strategies alone	Protective behavioral strategies involve delivery of tips for minimizing or avoiding alcohol-related harms without any other intervention. • Staffing expertise needed: Coordinator • Target population: Individuals, specific groups, or all students • Primary modality: Online/offsite • Duration of effects: Short-term (< 6 months) and long-term (≥ 6 months) effects	★★	$	#	••
IND-13[b]	**Skills training, alcohol plus general life skills:** Alcohol 101 Plus™	Alcohol 101 Plus™ is a web-based modification of the earlier CD-ROM-based Alcohol 101 program. It provides alcohol education and skills training using a "virtual campus," modeling potential drinking situations and discussing possible consequences and alternatives. Personalized blood alcohol concentration (BAC) calculations also are provided. The program is free to all students and educators. • Staffing expertise needed: Coordinator • Target population: Individuals, specific groups, or all students • Primary modality: Online • Duration of effects: Mixed short-term (< 6 months) effects; no long-term (≥ 6 months) effects	★	$	#	••
IND-14	**Skills training, alcohol plus general life skills:** Alcohol Skills Training Program (ASTP)	ASTP is a multicomponent alcohol skills training program for students at risk of developing alcohol use problems. The program provides information about addiction and offers exercises and training to help students identify personal drinking cues, develop alcohol refusal skills, and manage stress. ASTP consists of eight 90-minute sessions; however, programs conducted in as few as two sessions have been evaluated. • Staffing expertise needed: Health professional and coordinator • Target population: Individuals or specific groups • Primary modality: In-person group • Duration of effects: Short-term (< 6 months) and long-term (≥ 6 months) effects	★★★	$$	#	•••
IND-15	**Skills training, alcohol plus general life skills:** Parent-based alcohol communication training	Parent-based alcohol communication training is a campus-sponsored program for parents of students, particularly incoming freshmen, to train parents to effectively talk with their children about alcohol use, avoidance, and consequences. • Staffing expertise needed: Coordinator • Target population: Individuals, underage, specific groups, or all students • Primary modality: Offsite • Duration of effects: Short-term (< 6 months) effects; mixed long-term (≥ 6 months) effects	★★	$$	#	••••

[a] = New intervention (2019) [b] = Intervention changed position in the matrix

Matrix number	Strategy	Description	Effective-ness	Cost	Barriers	Research amount
		COGNITIVE–BEHAVIORAL SKILLS-BASED APPROACHES (CONT.)				
IND-16	**Skills training, alcohol plus general life skills or general life skills only:** Generic/other	These programs combine training in skills aimed at reducing alcohol use (e.g., drink refusal and moderation of alcohol use) with training in general life skills (e.g., stress management, coping, and lifestyle balance), or they provide training only in general life skills as a means of reducing alcohol use. • Staffing expertise needed: Health professional, coordinator • Target population: Individuals or specific groups • Primary modality: In-person group • Duration of effects: Mixed short-term (< 6 months) effects; long-term (≥ 6 months) effects	★★	$$	#	••••
		MOTIVATIONAL/FEEDBACK-BASED APPROACHES				
IND-17	**Brief motivational intervention (BMI):** In-person—Group	In-person group BMI combines a brief intervention with motivational interviewing in a group (rather than in a one-on-one setting). BMI emphasizes personal responsibility and self-efficacy of participants, offering them personalized feedback on their alcohol use, risks, expectancies, perceptions of social norms, and options for reducing problems and consequences. A trained facilitator guides the group discussion. Goals for behavioral change are set by participants. • Staffing expertise needed: Health professional and coordinator • Target population: Individuals or specific groups • Primary modality: In-person group • Duration of effects: Short-term (< 6 months) and long-term (≥ 6 months) effects	★★	$$	##	•••
IND-18	**Brief motivational intervention (BMI):** In-person—Individual	BMI combines a brief intervention with motivational interviewing. BMI emphasizes personal responsibility and self-efficacy of participants, offering them personalized feedback on their alcohol use, risks, expectancies, perceptions of social norms, and options for reducing problems and consequences. Discussions are guided by a trained facilitator. Goals for behavioral change are set by participants. One such BMI, which is the model after which most BMIs are patterned, is the Brief Alcohol Screening and Intervention for College Students (BASICS). BASICS involves initial screening to identify students at high risk for alcohol-related problems, subsequent baseline assessment to generate personalized feedback, and then a one-on-one meeting with the trained facilitator to review the feedback. In the original studies of BASICS, baseline assessment was completed in-person; participants were asked to self-monitor drinking for 2 weeks, then return for a second session to review their personalized feedback. More recent research has eliminated the first in-person meeting, opting instead to complete baseline assessment via the web. • Staffing expertise needed: Health professional and coordinator • Target population: Individuals or specific groups • Primary modality: In-person individual • Duration of effects: Short-term (< 6 months) and long-term (≥ 6 months) effects	★★★	$$	##	••••
IND-19	**Multi-component education-focused program (MCEFP):** AlcoholEdu® for College	AlcoholEdu® for College is a two-part, online program providing personalized feedback along with education around alcohol use. The first part of the program is typically completed in the summer before freshmen arrive on campus, with the second part being completed during the fall. Students must complete knowledge-based quizzes in order to complete the course. Cost of the program is based on first-year enrollment size. This program also may target individuals and all students. • Staffing expertise needed: Coordinator • Target population: Individuals, specific groups, or all students • Primary modality: Online • Duration of effects: Short-term (< 6 months) effects; no long-term (≥ 6 months) effects	★★★	$$$	#	••

[a] = New intervention (2019) [b] = Intervention changed position in the matrix

Matrix number	Strategy	Description	Effective-ness	Cost	Barriers	Research amount
		MOTIVATIONAL/FEEDBACK-BASED APPROACHES (CONT.)				
IND-20[a]	**Multi-component education-focused program (MCEFP):** Alcohol-Wise® (contains eCHECKUP TO GO)	Alcohol-Wise® is an approximately 1-hour-long online program providing personalized feedback through the eCHECKUP TO GO program along with education about alcohol use. Students must complete knowledge-based quizzes to complete the course. • Staffing expertise needed: Coordinator • Target population: Individuals, specific groups, or all students • Primary modality: Online • Duration of effects: Short-term (< 6 months) effects; long-term (≥ 6 months) effects not assessed	★★	$$	#	••
IND-21	**Multi-component education-focused programs (MCEFP):** Miscellaneous	MCEFP approaches target alcohol misuse by teaching students an array of alcohol-related skills (e.g., drink refusal, monitoring alcohol use, spacing drinks, advanced planning) and providing associated education to support skill use. Programs in this category not identified by name are highly variable in content and have not been sufficiently studied to draw strong conclusions about any individual program. • Staffing expertise needed: Coordinator • Target population: Individual, specific groups, or all students • Primary modality: Online • Duration of effects: Short-term (< 6 months) effects for most programs; two separate programs each assessed for long-term (≥ 6 months) effects: one found effects at 12 months, one did not.	?	$$	#	•
IND-22	**Personalized feedback intervention (PFI):** CheckYourDrinking (beta 1.0 version)	CheckYourDrinking is a web-based 18-question survey on personal drinking habits that provides survey takers with individualized feedback on their risk of alcohol-related diseases. Users can email results to themselves or their health care professional. The program is free. • Staffing expertise needed: Coordinator • Target population: Individuals, specific groups, or all students • Primary modality: Online • Duration of effects: Short-term (< 6 months) effects; long-term (≥ 6 months) effects not assessed	?	$	#	•
IND-23	**Personalized feedback intervention (PFI):** College Drinker's Check-up (CDCU)	The College Drinker's Check-up (CDCU) is a single-session, web-based program for students who drink heavily and is an adaptation of the well-established in-person Drinker's Check-Up, originally developed for heavy-drinking adults. Students receive personalized feedback on the quantity and frequency of their alcohol use in comparison with same-sex college peers. Students also receive blood alcohol content feedback. The CDCU is a commercial product. Campuses pay a one-time cost based on size: $2,500 for smaller institutions (< 15,000 students) and $4,500 for larger institutions. • Staffing expertise needed: Coordinator • Target population: Individuals or specific groups • Primary modality: Online • Duration of effects: Short-term (< 6 months) and long-term (≥ 6 months) effects	?	$	#	•
IND-24	**Personalized feedback intervention (PFI):** eCHECKUP TO GO (formerly, e-CHUG)	Alcohol eCHECKUP TO GO is a web-based survey that provides students with personalized feedback about their drinking patterns and how their alcohol use might affect their health and personal goals. The program has a special focus on two high-risk groups: first-year students and athletes. eCHECKUP TO GO is a commercial program. Campuses pay an annual subscription fee of about $1,000 for unlimited use of a customized program. • Staffing expertise needed: Coordinator • Target population: Individuals, specific groups, or all students • Primary modality: Online • Duration of effects: Short-term (< 6 months) effects; mixed long-term (≥ 6 months) effects	★★★	$	#	••••

[a] = New intervention (2019) [b] = Intervention changed position in the matrix

Matrix number	Strategy	Description	Effective-ness	Cost	Barriers	Research amount
MOTIVATIONAL/FEEDBACK-BASED APPROACHES (CONT.)						
IND-25[a]	**Electronic/mailed personalized feedback intervention (PFI):** Drinking Assessment and Feedback Tool for College Students (DrAFT-CS)	Drinking Assessment and Feedback Tool for College Students (DrAFT-CS) is a computer-based personalized feedback experience designed to approximate in-person interventions, through the inclusion of a video clinician that explains each piece of the feedback as it is presented. • Staffing expertise needed: Coordinator • Target population: Individuals, specific groups, or all students • Primary modality: Computer • Duration of effects: Short-term (< 6 months) effects; long-term (≥ 6 months) effects not assessed	?	$	##	•
IND-26	**Personalized feedback intervention (PFI):** Generic/other See FAQs for more information on implementing a generic PFI strategy.	PFI programs use a web-based assessment to generate graphic personalized feedback about students' alcohol use, risks, expectancies, perceptions of social norms, and drinking motives. Feedback is delivered electronically or by mail and is not discussed with a trained facilitator. • Staffing expertise needed: Coordinator • Target population: Individuals, specific groups, or all students • Primary modality: Online • Duration of effects: Short-term (< 6 months) and long-term (≥ 6 months) effects	★★★	$$	##	••••

INTERVENTIONS DELIVERED BY HEALTH CARE PROFESSIONALS

The approaches listed below, which are delivered by health care professionals, can reduce harmful drinking, according to studies conducted mainly in general adult populations (ages 18–65). These strategies are not rated relative to other individual-level strategies in *CollegeAIM* because of differences in research populations, along with wide variations in costs and barriers to providing these services across campuses.

These interventions are important for students whose drinking patterns put them at risk for harm, or who are already experiencing alcohol-related problems. Health care professionals in your campus health and counseling centers can help identify and assist these students, or residence hall or security staff members may bring students with alcohol-related conduct violations to your attention.

For resources to support you in providing these and other interventions, or referrals when needed, see the *CollegeAIM* URL below.

IND-27	**Interventions delivered by health care professionals:** Screening and behavioral treatments	**Screening and brief intervention:** The U.S. Preventive Services Task Force (USPSTF) recommends that primary care clinicians (1) conduct alcohol screening in adults ages 18 years or older and (2) provide brief behavioral counseling interventions for the full range of unhealthy drinking behaviors, from risky drinking to alcohol use disorder. The USPSTF concludes that brief behavioral counseling interventions reduce heavy drinking episodes and increase adherence to recommended drinking limits. **Additional behavioral treatments:** For some students, brief counseling sessions may not be sufficient for resolving drinking problems. In these cases, more intensive behavioral treatments can be beneficial, including cognitive-behavioral therapy and motivational enhancement therapy. Ultimately, choosing to get treatment may be more important than the approach used, provided it avoids heavy confrontation and incorporates empathy, motivational support, and a focus on changing drinking behavior.
IND-28	**Interventions delivered by health care professionals:** Medications for alcohol use disorder	**Medications for alcohol use disorder:** Three medications have been approved by the Food and Drug Administration to help people cut back or stop drinking and avoid relapse: naltrexone (in two forms, oral and extended-release injection), acamprosate, and disulfiram. They are not addictive and can be used alone; however, using them in combination with counseling can improve treatment outcomes.

[a] = New intervention (2019) [b] = Intervention changed position in the matrix

ENVIRONMENTAL-LEVEL STRATEGIES SUMMARY TABLE

Environmental-level strategies aim to change the alcohol use environment in the campus, community, or both, and thus can affect the student body as a whole or in large subgroups such as those under age 21. Most of the environmental-level strategies in this guide seek to reduce alcohol availability, one of the most effective ways to decrease alcohol use and related problems. A few strategies listed below try to reduce alcohol-related harm directly without restricting availability, and are included because colleges commonly use them. This guide isolated these strategies for assessment, and some may not be effective if used alone. Still, they may be useful parts of a multi-strategy effort. Potential resources to help you implement many strategies rated effective by *CollegeAIM* can be found online (see URL below).

Matrix number	Strategy	Description	Effective-ness	Cost	Barriers	Research amount/ quality
		CAMPUS ONLY				
ENV-1	Establish an **alcohol-free campus**	Under this strategy, a campus bans the sale, distribution, or consumption of alcohol on campus property. • Staffing expertise required: Policy advocate • Target population: All students • Research population: College	★	**$$**	**###**	**•••**
ENV-2	Require **alcohol-free programming**	Under this strategy, a campus hosts alcohol-free events to provide students with social alternatives to parties and bars where alcohol is being served. • Staffing expertise required: Coordinator • Target population: All students • Research population: College	?	**$$$**	**#**	**••**
ENV-3	Prohibit **alcohol use/sales at campus sporting events**	Under this strategy, a campus bans the sale and consumption of alcohol at sporting events. • Staffing expertise required: Policy advocate • Target population: All students • Research population: College	★★	**$$**	**##**	**••••**
ENV-4	Prohibit **alcohol use/service at campus social events**	Under this strategy, a campus bans the sale and consumption of alcoholic beverages at social events held on campus property. • Staffing expertise required: Policy advocate • Target population: All students • Research population: Not assessed	?	**$**	**##**	**0**
ENV-5	Establish **amnesty policies**	Under an amnesty policy, a campus does not impose sanctions on a student who seeks help for another student in danger of serious harm or death from alcohol use, even if the help seeker has been drinking underage or has provided the alcohol to an underage peer. Amnesty policies also may be known as medical amnesty or Good Samaritan policies, and some exist at the state level. • Staffing expertise required: Policy advocate • Target population: All students • Research population: College	?	**$**	**#**	**•••**

Legend

Effectiveness:
★★★ = Higher, ★★ = Moderate, ★ = Lower
? = Too few robust studies to rate effectiveness —or mixed results

Cost:
$$$ = Higher, $$ = Mid-range, $ = Lower

[a] = New intervention (2019)
[b] = Intervention changed position in the matrix

Barriers:
= Higher
= Moderate
# = Lower
C = Barriers at college level
S = Barriers at state level
L = Barriers at 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
0 = No studies

Staffing expertise:
Policy advocate = Advocacy or community organizing; understanding of political strategy

Coordinator = Program development and management

Health professional = Specific expertise/training in delivering a health program

Matrix number	Strategy	Description	Effective-ness	Cost	Barriers	Research amount/ quality
CAMPUS ONLY (CONT.)						
ENV-6	Implement **bystander interventions**	In this context, bystander intervention 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: College	?	$$	#	•
ENV-7	Conduct **campus-wide social norms campaign**	Under this strategy, a campus conducts a campus-wide awareness campaign that informs students about actual quantity and frequency of alcohol use among their fellow students, with the intent of changing their perception of what is normal or acceptable. • Staffing expertise required: Coordinator • Target population: All students • Research population: College	★	$$	#	••••
ENV-8	Require **Friday morning classes**	Under this strategy, a campus requires classes on Friday mornings to discourage excessive alcohol use by students on Thursday evenings. • Staffing expertise required: Coordinator • Target population: All students • Research population: College	?	$	#	••
ENV-9	Establish **standards for alcohol service at campus social events**	Under this strategy, a campus establishes policies that set certain constraints on alcohol sales, such as a limited number of alcoholic beverages per person, availability of food and non-alcoholic beverages, no self-service, and required beverage service training. • Staffing expertise required: Policy advocate • Target population: All students • Research population: College	?	$	#	•••
ENV-10	Establish **substance-free residence halls**	Under this strategy, a campus bans the possession and consumption of all substances within its residence halls. • Staffing expertise required: Policy advocate • Target population: All students • Research population: College	?	$	#	••
CAMPUS OR COMMUNITY-BASED						
ENV-11	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.) • Staffing expertise required: Policy advocate • Target population: Underage students • Research population: General	★★★	$$	##	••••
ENV-12[b]	Restrict **alcohol sponsorship and advertising**	Under this strategy, a campus or local or state government establishes policies that restrict or prohibit alcohol sponsorship and/or advertising of alcoholic beverages, particularly where such sponsorship or advertising exposes young people to alcohol messages, such as on college campuses, at rock concerts, or at athletic events. • Staffing expertise required: Policy advocate • Target population: All students • Research population: General	★★	$$$	##	••••

[a] = New intervention (2019) [b] = Intervention changed position in the matrix

Matrix number	Strategy	Description	Effective-ness	Cost	Barriers	Research amount/ quality
		CAMPUS OR COMMUNITY-BASED (CONT.)				
ENV-13	Prohibit **beer kegs**	A ban on beer kegs is an approach taken by a campus or local or state government in an effort to decrease the amount of alcohol at parties. Campus bans may apply to specific settings, such as athletic events or tailgate parties. • Staffing expertise required: Policy advocate • Target population: All students • Research population: College	?	**$**	**C = #, S/L = ###**	•••
ENV-14	Implement **beverage service training programs: Sales to intoxicated**	This type of program can be implemented at the campus, community, or state level to require training of those who sell or serve alcohol to recognize signs of intoxication, slow the service of alcohol, and cut off individuals who are obviously intoxicated. Note: Rating based on studies of programs in a few establishments. • Staffing expertise required: Coordinator • Target population: All students • Research population: General	★	**$$$**	**C = #, S/L = ##**	••••
ENV-15	Implement **beverage service training programs: Sales to underage**	This type of program can be implemented at the campus, community, or state level to require training of those who sell or serve alcohol to verify the age of young customers, recognize false identification documents, and refuse sales to those under the legal drinking age. Note: Rating based on studies of programs in a few establishments. • Staffing expertise required: Coordinator • Target population: Underage students • Research population: General	★	**$$$**	**C = #, S/L = ##**	••••
ENV-16	Restrict **happy hours/price promotions**	Under this strategy, a campus or local or state government prohibits or restricts drink specials, such as the sale of two alcoholic beverages for the price of one, that encourage customers to drink more than they might otherwise. • Staffing expertise required: Policy advocate • Target population: All students • Research population: College, general	★★★	**$**	**###**	•••
ENV-17	Retain or enact restrictions on **hours of alcohol sales**	Under this strategy, campuses or local and state governments retain or enact policies limiting the hours during which alcohol may be sold legally. • Staffing expertise required: Policy advocate • Target population: All students • Research population: General	★★	**$**	**##**	••••
ENV-18	Establish **minimum age requirements to serve/sell alcohol**	Under this strategy, a campus or local or state government establishes requirements specifying how old someone must be to serve or sell alcohol. Requirements may differ by type of alcohol establishment (e.g., off- vs. on-premises establishments and type of alcohol—beer, wine, or spirits) and may include exceptions under certain circumstances. • Staffing expertise required: Policy advocate • Target population: All students • Research population: General	?	**$**	**##**	••
ENV-19	Implement **party patrols**	Party patrols are a community-based approach in which campus or local teams, made up of police and sometimes volunteers, visit locations where there have been reports and complaints about noisy party activity or visit addresses associated with keg registrations to determine whether underage drinking is taking place. If illegal activity is occurring, the police cite any adults who appear to have facilitated underage drinking and cite those drinking underage. • Staffing expertise required: Policy advocate • Target population: Underage students • Research population: College	?	**$**	**##**	•••

[a] = New intervention (2019) [b] = Intervention changed position in the matrix

Matrix number	Strategy	Description	Effective-ness	Cost	Barriers	Research amount/ quality
CAMPUS OR COMMUNITY-BASED (CONT.)						
ENV-20	Implement **safe-rides program**	Safe-rides programs are conducted by a campus or the local community to provide free or low-cost transportation, such as taxis or van shuttles, from popular drinking venues or events to residences or other safe destinations. • Staffing expertise required: Coordinator • Target population: All students • Research population: General	?	**$$$**	**##**	••
ENV-21[b]	Retain ban on **Sunday sales** (where applicable)	Under this strategy, campuses and local and state governments support existing bans on Sunday sales of alcohol for offsite consumption. (No state bans such sales for onsite consumption.) • Staffing expertise required: Policy advocate • Target population: All students • Research population: General	★★	**$**	**##**	••••
ENV-22[a]	Establish **minimum unit pricing**	Under this strategy, colleges or local/state/federal government sets the minimum price at which alcohol is allowed to be sold in alcohol establishments. The price may be set based on a variety of units or measures, such as per drink, per container size, or per volume of ethanol. This ensures that the price of alcohol is not discounted so much that customers are encouraged to purchase and consume more alcohol than they might otherwise. • Staffing expertise required: Policy advocate • Target population: All students • Research population: General	★★★	**$$**	**###**	••••
ENV-23[a]	Conduct **"reward and reminder"** or **"mystery shopping visits"**	Under this strategy, patrons who appear underage or intoxicated attempt to purchase alcohol. Servers/sellers are rewarded and/or congratulated for checking IDs and/or refusing alcohol service. Servers/sellers who sell alcohol receive education about the laws and training to improve compliance rather than punishment. The system can be implemented by an individual establishment or a campus, local, or state organization or enforcement agency. • Staffing expertise required: Coordinator • Target population: All students • Research population: General	★★	**$$**	**C/L = #, S = ##**	•••
COMMUNITY-BASED ONLY						
ENV-24	Retain **age-21 drinking age**	All 50 U.S. states, the District of Columbia, and Guam currently prohibit anyone under age 21 from possessing alcoholic beverages; most states also prohibit those under age 21 from purchasing and consuming alcoholic beverages. Under this strategy, campuses and local and state governments support continuation of the age-21 minimum legal drinking age due to its effectiveness in reducing underage drinking consequences. • Staffing expertise required: Policy advocate • Target population: Underage students • Research population: General	★★★	**$**	**##**	••••
ENV-25	Increase **alcohol tax**	Under this strategy, a state or local government increases the tax on the sale of alcohol, thereby increasing the cost of alcohol and decreasing the affordability of excessive drinking. • Staffing expertise required: Policy advocate • Target population: All students • Research population: College, general	★★★	**$$**	**###**	••••

[a] = New intervention (2019) [b] = Intervention changed position in the matrix

Matrix number	Strategy	Description	Effective-ness	Cost	Barriers	Research amount/ quality
		COMMUNITY-BASED ONLY (CONT.)				
ENV-26	Increase **cost of alcohol license**	Under this strategy, a state or local government increases the cost of an alcohol license, thereby increasing the cost of operating an alcohol establishment and potentially increasing the price of alcohol and reducing the density of alcohol establishments in a given area. • Staffing expertise required: Policy advocate • Target population: All students • Research population: General	?	$	##	•
ENV-27	Enact **dram shop liability laws: Sales to intoxicated**	This type of dram shop liability law is enacted at the state level to hold the owner or server(s) at a bar, restaurant, or other location responsible for damages caused by an intoxicated person who was overserved alcohol at that location. Liability can be established by case law or statute. • Staffing expertise required: Policy advocate • Target population: All students • Research population: General	★★	$$	##	••••
ENV-28	Enact **dram shop liability laws: Sales to underage**	This type of dram shop liability law is enacted at the state level to hold the owner or server(s) at a bar, restaurant, or other location responsible for damages caused by an underage drinker who was sold alcohol at that location. • Staffing expertise required: Policy advocate • Target population: Underage students • Research population: General	★★	$$	##	•••
ENV-29	Prohibit **home delivery of alcohol**	Under this strategy, local or state governments prohibit home delivery of alcohol, either by local establishments or over the Internet, with the intent of preventing underage alcohol sales. • Staffing expertise required: Policy advocate • Target population: Underage students • Research population: Not available	?	$	##	••
ENV-30	Enact **keg registration laws**	Keg registration laws, enacted at the local or state level, require alcohol retailers to place a unique identifier on a keg and record the purchaser's name and address at the time of sale. Keg registration enables law enforcement agents to identify and hold responsible the adult who provided the alcohol, should underage drinking occur. • Staffing expertise required: Policy advocate • Target population: Underage students • Research population: General	★	$$$	##	•••
ENV-31	Enact **noisy assembly laws**	Noisy assembly laws, enacted at the local or state level, give law enforcement legal cause to enter a private residence if a gathering of more than one person in a residential area or building produces noise that unreasonably disturbs the peace, quiet, or repose of another. Such laws also enable law enforcement to enter residences where they have reason to suspect underage drinking is occurring. • Staffing expertise required: Policy advocate • Target population: All students • Research population: Not assessed	?	$	##	0
ENV-32	Limit **number/density of alcohol establishments**	Under this strategy, local or state governments enact regulations that reduce the number of alcohol establishments or limit the number that may be established in a community or area, often through licensing or zoning laws. • Staffing expertise required: Policy advocate • Target population: All students • Research population: College, general	★★	$$	###	••••

[a] = New intervention (2019) [b] = Intervention changed position in the matrix

Matrix number	Strategy	Description	Effective-ness	Cost	Barriers	Research amount/ quality
		COMMUNITY-BASED ONLY (CONT.)				
ENV-33	Enact **responsible beverage service training laws**	Responsible beverage service training laws, enacted at the local or state level, mandate that all or some servers, managers, and/or license holders at alcohol establishments receive formal training on how to responsibly serve alcohol. Training includes ways to recognize signs of intoxication, methods for checking age identification, and intervention techniques. Note: Rating based on research on the effect of a statewide law. • Staffing expertise required: Policy advocate • Target population: All students • Research population: General	★★	$$$	##	•••
ENV-34	Conduct **shoulder tap campaigns**	Shoulder tap campaigns are a method used to enforce minimum legal drinking age laws whereby undercover youth, supervised by local law enforcement, approach adults outside alcohol establishments and ask them to purchase alcohol on their behalf. When a violation occurs, law enforcement issues warnings or citations to the adult. • Staffing expertise required: Policy advocate • Target population: Underage students • Research population: General	?	$$$	##	••
ENV-35	Enact **social host property laws**	Social host property laws are enacted by local or state governments to hold accountable adults who permit underage drinking to occur on property they control. The primary purpose of social host property laws is to deter underage drinking parties. • Staffing expertise required: Policy advocate • Target population: Underage students • Research population: Not assessed	?	$$$	##	0
ENV-36	Enact **social host provision laws**	Social host provision laws are enacted by local or state governments to hold accountable adults who supply alcohol to those under age 21. • Staffing expertise required: Policy advocate • Target population: Underage students • Research population: College, general	★★	$	##	•••
ENV-37	Retain **state-run alcohol retail stores** (where applicable)	Under this strategy, campuses and local and state governments support existing state control systems for wholesale and off-premises retail distribution whereby a state sets the prices of alcohol and gains profit/revenue directly rather than solely from taxation. Retention of the state system may reduce alcohol outlet density and pricing competition among commercial distributors. • Staffing expertise required: Policy advocate • Target population: All students • Research population: General	★★	$$	###	••••
ENV-38	Require **unique design for state ID cards for age < 21**	Under this strategy, states adopt a unique design for identification cards (e.g., vertical instead of horizontal state driver licenses) for those under age 21 so that age of the card holder is easier to identify. • Staffing expertise required: Policy advocate • Target population: Underage students • Research population: General	?	$$$	##	•••
ENV-39[a]	Enact **false/fake ID laws**	Under this strategy, local, state, and federal governments may enact laws to hold producers of fake IDs accountable for creating illegal identification products. These laws may also: (1) hold users of fake or false identification accountable for misrepresenting their age and/or identity, (2) make it illegal to loan or transfer an ID to an underage person, and (3) allow retailers to seize a fake ID from an underage person. • Staffing expertise required: Policy advocate • Target population: Underage students • Research population: General	★★	$$	##	•••

[a] = New intervention (2019) [b] = Intervention changed position in the matrix

Appendix A: Strategy Planning Worksheet

STRATEGY PLANNING WORKSHEET

COLLEGE AIM

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.

CURRENT STRATEGIES

Strategy Name (and the IND or ENV identifier from *CollegeAIM*, if applicable)	**Individual or Environmental?**		***CollegeAIM* Ratings**				**Notes and Next Steps:** Keep as is? Modify to boost effectiveness? Add complementary strategies? Shift to more effective options?
	✔ IND	**✔ ENV**	**Effectiveness**	**Cost**	**Barriers**	**Reach: Broad or Focused (% of students)**	

POSSIBLE NEW STRATEGIES

Strategy Name (and the IND or ENV identifier from *CollegeAIM*)	**Individual or Environmental?**		***CollegeAIM* Ratings**				**Notes and Next Steps:** Staff training or hiring needed? Other resources? Does the strategy require a plan for conducting an outcome evaluation?
	✔ IND	**✔ ENV**	**Effectiveness**	**Cost**	**Barriers**	**Reach: Broad or Focused (% of students)**	

Appendix B: Frequently Asked Questions

Visit the CollegeAIM website (see URL below) for answers to these 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?
- We have seen recommendations for multi-component strategies to address college student drinking. Are any particular elements of these strategies more effective than others?
- 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?
- Many alcohol-related deaths among college students nationwide result from driving under the influence. What can alcohol and other drug program staff, working with campus leadership, do about this?

About responding to potential objections or challenges

- How do I respond to people who say "College drinking has been around forever and students are always going to drink, so why bother?"
- Some people continue to wonder if campus officials could better manage student drinking if the minimum legal drinking age were reduced to age 18. What does the research say?
- How do I respond to comments that efforts to reduce alcohol-related problems on our campus may just shift them to off-campus locations?
- Campus revenue is declining. How can we build a case for investing in prevention?
- What can we accomplish with a limited budget?
- We've tried prevention strategies in the past and were not successful—how can we stay motivated?

About *CollegeAIM* and ongoing research

- How did the research teams arrive at ratings for the various strategies?
- What are some ways to keep up with the research literature on college alcohol interventions?

Appendix C: Supporting Resources

Federal Websites and Resources Supporting the Prevention of Harmful and Underage Drinking by College Students

National Institute on Alcohol Abuse and Alcoholism (NIAAA) (www.niaaa.nih.gov)

College Drinking: Changing the Culture is a central location for information related to alcohol use by college students. Resources on this site include:

- College Alcohol Policies, by Campus
- Supporting Research

NIAAA Alcohol Treatment Navigator® is an online resource that helps focus the search for alcohol treatment to find options that increase the chance for success. The Navigator helps people learn about different types of alcohol treatment options and how to spot quality treatment, as well as linking to databases of providers and recommending questions to ask them.

Alcohol Policy Information System provides detailed information on alcohol- and cannabis-related policies in the United States at both state and federal levels.

Safer Campuses and Communities (www.prev.org)

Safer Campuses and Communities website is based on an NIAAA-funded study that examined a variety of environmental-level strategies that could be implemented on campuses and in their surrounding communities. A free toolkit for implementing the collaborative model is available online.

Substance Abuse and Mental Health Services Administration (SAMHSA) (www.samhsa.gov)

The **Evidence-Based Practices Resource Center** contains a collection of scientifically based resources for a broad range of audiences, including Treatment Improvement Protocols, toolkits, resource guides, clinical practice guidelines, and other science-based resources.

Center for the Application of Prevention Technologies is a national substance abuse prevention training and technical assistance site. Resources on the site include:

- Evaluation tools and resources from federal and nonfederal sources
- Strategic Prevention Framework, a five-step planning process that guides the selection, implementation, and evaluation of evidence-based, culturally appropriate, sustainable prevention activities

Report to Congress on the Prevention and Reduction of Underage Drinking (2018) includes policy summaries and state summaries identifying current legislative and other ongoing efforts. This report is compiled by the Interagency Coordinating Committee on the Prevention of Underage Drinking and is available through **www.StopAlcoholAbuse.gov** and the SAMHSA Store.

Centers for Disease Control and Prevention (CDC) (www.cdc.gov)

The Guide to Community Preventive Services is a resource for evidence-based recommendations from the Community Preventive Services Task Force about what works to improve public health.

U.S. Department of Education (www.ed.gov)

National Center on Safe Supportive Learning Environments offers training, technical assistance activities, and resources to support assessment, capacity building, strategic planning, implementation, and evaluation. Resources on this site include:

- Using a Public Health and Quality Improvement Approach to Address High-Risk Drinking with 32 Colleges and Universities (2014)
- College Alcohol Risk Assessment Guide: Environmental Approaches to Prevention (2009)
- Methods for Assessing College Student Use of Alcohol and Other Drugs (2008)

Appendix D: Acknowledgments

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Visit *CollegeAIM* Online for:

- Interactive matrices for comparing individual- and environmental-level interventions
- A strategy planning worksheet that you can fill in online or download
- Answers to frequently asked questions—see Appendix B in this guide
- Resources to help you implement strategies rated by *CollegeAIM*
- References for studies analyzed for *CollegeAIM*
- A downloadable version of the *CollegeAIM* guide

www.CollegeDrinkingPrevention.gov/CollegeAIM

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