

EVIDENCE-BASED RESOURCE GUIDE SERIES

Substance Misuse Prevention for Young Adults



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ISSUE BRIEF

Preventing Substance Misuse Among Young Adults



Young adulthood—typically defined as the period from ages 18 to 25 years—is a time of transition. This period is often characterized by identity exploration, self-focus, increased independence, and new choices and possibilities, as well as changes in residence, employment or education, and romantic relationships.¹ It is also a time when many individuals initiate or increase alcohol and other substance use such as tobacco or nicotine, and more recently with increasing frequency, marijuana.

For those who show heavier patterns of drinking, frequent binge drinking, regular nicotine intake, or early onset of substance use, interventions are required to prevent serious consequences of problem use and alter the path toward substance use disorder (SUD).² Such interventions include practices shown to delay substance use initiation in adolescents and reduce substance misuse and its associated consequences in young adulthood.

Effective prevention practices address factors that place young adults at increased risk for substance misuse—or protect them from substance misuse—and often focus on youth who may be more vulnerable due to their life circumstances, sexual orientation, and pre-existing health conditions.

This chapter provides information on the patterns of substance misuse, risk, and protective factors, and consequences of misuse—and describes how this knowledge applies to best prevention practices.

Substance Misuse Among Young Adults

Youth transitioning into adulthood have some of the highest rates of alcohol and substance misuse. For instance, in 2018, an estimated 35 percent of young adults aged 18 to 25 were binge drinkers (drank five or more drinks on a single occasion) in the past month compared to 4.7 percent of 12 to 17-year-olds and 25 percent of adults aged 26 or older.³

In 2018, more than one-fifth (19.1 percent) of young adults aged 18 to 25 smoked cigarettes in the past month. This percentage is larger than that for other age groups.⁴

Of greater concern is the current popularity and rise in e-cigarette use. In 2014, the prevalence of e-cigarette use among young adults was (13.6 percent).⁵ By 2016, the prevalence of e-cigarette use among young adults aged 18–24 had risen to 23.5 percent.⁶ Recent data on a popular brand of e-cigarette suggests that by the time youth reach young adulthood, current e-cigarette

users are using regularly (vs. experimenting) and may already be addicted to nicotine. Among current users aged 15–17 years, 55.8 percent reported use on three or more days in the past month, and more than a quarter reported use on 10 to 30 days.⁷

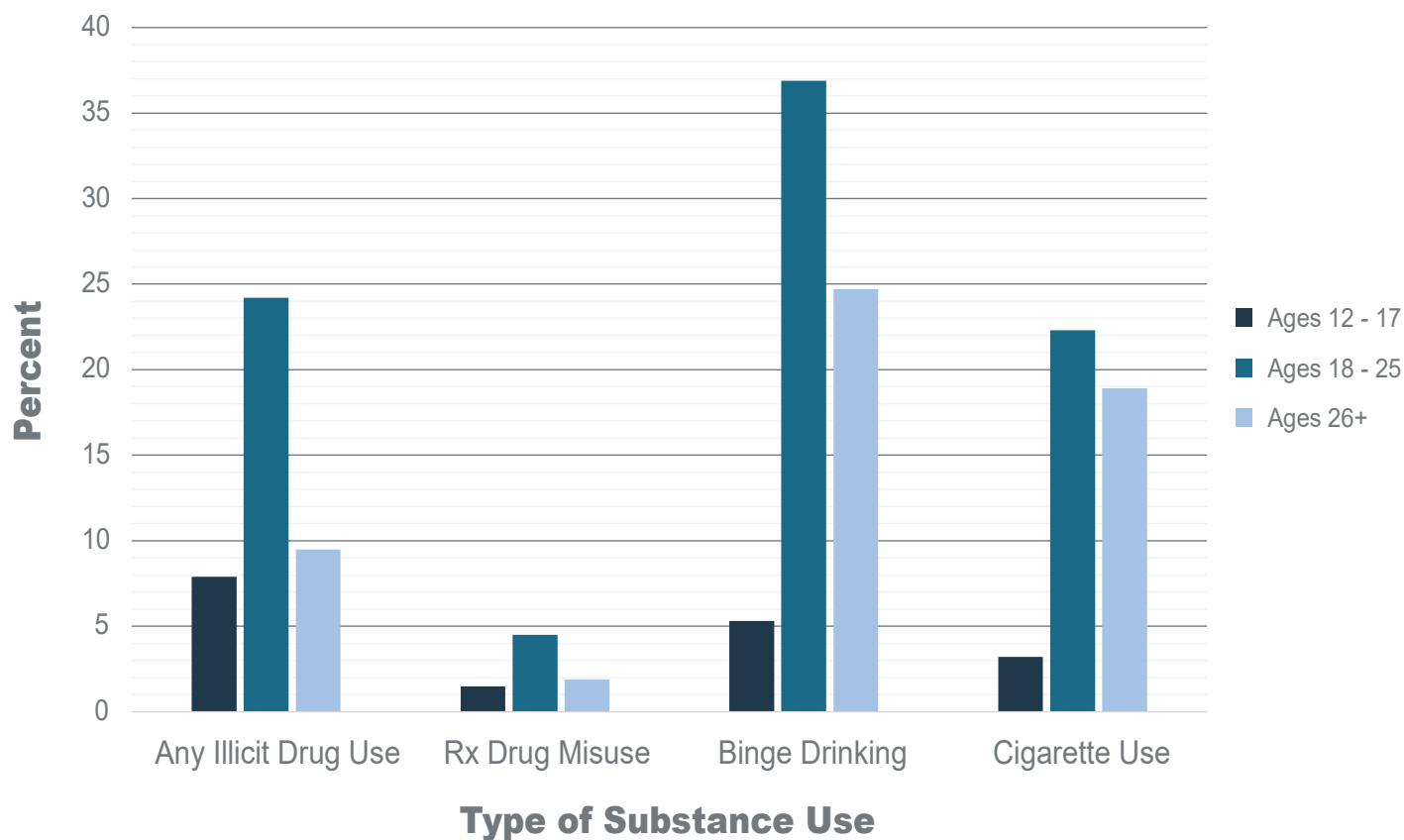
Young adults are also more likely to use illicit substances. In 2018, 8 percent of Americans aged 12 or older used an illicit substance in the past 30 days. For young adults aged 18 to 25, approximately 24 percent used illicit drugs in the past month. The most commonly misused was marijuana.⁴

Furthermore, this population is more likely than other age groups to think that substance use is not harmful. Percentages of people who perceived great risk of harm from weekly binge drinking were lowest among young adults aged 18 to 25 (37.5 percent), followed by adolescents aged 12 to 17 (43.2 percent), then by adults aged 26 or older (45.4 percent). Young adults aged 18 to 25 were also less likely than adolescents

aged 12 to 17 or adults aged 26 or older to perceive great risk from smoking marijuana monthly or weekly.⁴

Among young adults, those living in rural areas may be at greater risk as they have higher rates of alcohol and methamphetamine use than urban youth and are more likely to have engaged in driving under the influence of alcohol or other illicit substances.⁸ Other demographic groups also have higher rates of substance use during emerging adulthood than their counterparts: males (vs. females); those who are single (vs. those in committed relationships), and those experiencing lengthy unemployment (vs. those in college or employed).⁹ While males have higher rates of substance use than females, research shows that women often use and respond to substances differently which has implications for prevention. For example, compared to men, women are more likely to misuse prescription drugs to self-treat for problems other than pain, such as anxiety or tension.¹⁰

Figure 1. Past Month Substance Use by Age Groups–2018⁴



Key Definitions

- **Protective Factor:** Factors that directly decrease the likelihood of substance use and behavioral health problems or reduce the impact of risk factors on behavioral health problems.
- **Prevention Practice:** A practice is a type of approach, technique, or strategy—for example, skill building with young adults or messaging regarding the harmful effects of marijuana on the brain of young adults—intended to prevent initiation or escalation of substance use.
- **Prevention Program:** A program is a set of predetermined, structured, and coordinated set of activities. Some programs are proprietary, and some programs may be the intellectual property of the originator(s). A program can incorporate different practices. Guidance for implementing a specific practice can be developed and distributed as a program.
- **Risk Factor:** Factors that increase the likelihood of beginning substance use, of regular and harmful use, and of other behavioral health problems associated with use.
- **Substance Misuse:** Risky use of substances without addiction, including heavy or excessive use of alcohol, underage drinking, any use of illicit substances, and use of prescription medications without medical justification.

Trends in substance use among young adults vary by substance. Past-month cigarette use among young adults has been declining since 2002; cocaine use is decreasing; alcohol use has held steady; and marijuana use has steadily increased.⁴ However, trends in marijuana use vary by college attendance with daily marijuana use continuing to rise for non-college young adults, but not for college students.¹¹ The percentage of young adults in 2018 who were current heroin users was higher than the percentages in most years between 2002 through 2007, but it was similar to the percentages in 2008 through 2016.⁴

Risk and Protective Factors

There are several explanations for increased risk of substance misuse among young adults. During adolescence, the limbic areas of the brain (which include the reward center) develop before the frontal lobe (which governs processing, natural inhibitions, decision-making, and cognitive flexibility).^{12, 13} The frontal lobe completes development in the second decade of life.¹³

This imbalance in the maturity of brain operations, researchers argue, may result in immaturity, excess emotionality, drive towards reward-seeking, unreliable judgment, and consequentially, risk for substance misuse and SUD.^{12, 14}

Other researchers have offered psychosocial explanations for the increased risk.¹ Substance use is considered part of identity exploration as young adults want to have a wide range of experiences before they settle into adult life. Additionally, as these individuals move away from home, the influence of parents becomes less important and the influence of friends increases. Peer networks may be more likely to encourage rather than discourage substance use.

The Socio-Ecological Developmental Model

In context, substance use among young adults is often the result of multiple contributing factors. Young adults are influenced not only by their specific personality traits or genetics but also by their relationships with others, the institutions and communities to which they belong, and the broader society in which those institutions are embedded.

For this reason, we apply a socio-ecological model to understand research on young adults. This model consists of multiple levels that consider the different contexts and settings within which a person interacts as they age. What goes on at each level is influenced by and influences the other. Contexts include the following:^{15, 16}

- **Individual:** Factors specific to the individual, such as age, education, income, genetics, health, and psychosocial strengths.
- **Relationship:** An individual’s closest social circle—family members, peers, teachers, and other close relationships—that contribute to their range of experience and may influence their behavior.
- **Community:** The settings in which social relationships occur, such as schools, workplaces, online communities, and neighborhoods.
- **Societal:** Often referred to as social determinants of health, societal level factors include the conditions in the environment in which people live that affect their health and well-being. These conditions include, for example, historical trauma, discrimination, social constructions of gender, laws limiting access to substances, and media portrayal of substance use.



- Empirical evidence supports this lens, revealing that several factors place young adults at increased risk for substance misuse. **Table 1-A** lists risk factors identified by at least two longitudinal studies.⁹ Some of these factors emerge during childhood and adolescence and provide early opportunities to intervene. Other factors are more related to young adulthood and point to the importance of social contexts that involve greater freedom and less social control, such as attending college and living in a community with laws and norms favorable toward use. Therefore, risk factors not only emerge at different stages of development, but across different contexts or levels.



Table 1-A. Risk Factors for Substance Misuse in Young Adulthood⁹

Childhood (C), Adolescence (A), Young Adulthood (YA). Risk factors measured in the developmental periods indicated predict substance misuse in young adulthood.

Socio-Ecological Level	Developmental Period		
	C	A	YA
Individual			
Adolescent substance use		✓	
Constitutional factors	✓		
Early and persistent antisocial behavior	✓	✓	✓
Early initiation of substance use	✓		
Internalizing behaviors (e.g., depression, anxiety, social withdrawal)	✓	✓	
Relationships			
Family management problems	✓	✓	
Family history of substance use	✓	✓	
Family conflict	✓	✓	✓
Favorable parental involvement in substance use	✓	✓	
Friends who engage in substance use		✓	✓
Community / School			
College attendance/environment			✓
College fraternity/sorority membership			✓
Academic failure	✓	✓	✓
Lack of commitment to school		✓	
Societal / Community			
Availability of substances			✓
Laws/norms favoring substance use, firearms, and crime			✓
Income and parental education	✓		✓

Although research on protective factors is limited, studies show that solid bonds and support from family of origin, as well as healthy beliefs and strong values, can protect young adults from substance misuse.⁹ Other research shows additional factors protect young adults from substance misuse, for example: social, emotional, behavioral, and moral competence; self-efficacy; spirituality; resiliency; opportunities for positive social involvement; recognition for positive behavior; and being in a committed relationship with a partner who does not misuse alcohol or other substances.¹⁷

For young adults, an adaptive and protective coping strategy is help seeking—or knowing when to seek help, feeling confident in one’s abilities, and comfortable enough to seek care for distress or suspected mental health disorders. This is an especially important issue for individuals who may feel like they can and should deal with mental health issues alone, are accustomed to parents arranging care, or do not readily recognize they may have a problem. **Table 1-B** lays out barriers and facilitators to help-seeking in young adults that should be addressed.¹⁸

Table 1-B. Barriers and Facilitators to Mental Health Help-Seeking Among Young Adults¹⁸

Barriers	Facilitators
Fear of being stigmatized	Positive experience with help-seeking
Limited confidentiality and trust	Social support of encouragement from others
Difficulty identifying symptoms	Perceiving problem as serious
Concern about provider characteristics	Confidentiality and trust in provider
Self-reliance	Ease of expressing emotion and openness
Limited knowledge about mental health services	Education and awareness
Stress about help-seeking	Positive attitudes toward help-seeking

Risk and protective factors operate in ways that inform interventions to prevent or reduce substance misuse among young adults:

- ***They are correlated and cumulative.*** Risk factors tend to be positively correlated with one another and negatively correlated to protective factors. In other words, people with some risk factors have a greater chance of experiencing even more risk factors, and they are less likely to have protective factors. Risk and protective factors also tend to have a cumulative effect on the development of behavioral health problems, including substance misuse. Young adults with multiple risk factors have a greater likelihood of experiencing substance misuse problems or engaging in other

related harmful behaviors while individuals with multiple protective factors are at a reduced risk. These correlations underscore the importance of intervening early and implementing programs and practices that target multiple, rather than single, factors.

- ***Individual factors can be associated with multiple outcomes.*** Though preventive programs and practices are often designed to produce a single outcome, both risk and protective factors can be associated with multiple outcomes. For example, negative life events are associated with substance misuse as well as anxiety, depression, and other harmful behavioral health problems.

Prevention efforts targeting a set of risk or protective factors have the potential to produce positive effects in multiple areas.

- ***They are influential over time.*** Risk and protective factors can have influence throughout a person's lifespan. For example, early stressful life events (e.g., poverty, family disruption) and negative parent-child interactions disrupt children's ability to regulate their behavioral responses which can evolve into problem behavior in middle to late childhood and potentially substance use in early adolescence.¹⁹ Risk and protective factors within one particular context—such as the family—may also influence or be influenced by factors in another context. Effective parenting has been shown to mediate the effects of multiple risk factors, including poverty, divorce, parental bereavement, and parental mental illness.

Substance Use and Mental Health

Young adults with serious mental health conditions have higher rates of SUD than those without. Moreover, when compared to other developmental periods, co-occurrence of serious mental health conditions and SUDs is concentrated in young adults. Specifically, 2.6 percent of young adults have a co-occurring SMI and SUD compared to 1.7 percent of adults aged 26 to 49 years and 0.5 percent of adults aged 50 years and older.⁴

Several factors differentiate adolescents who developed single mental health diagnoses from those who developed comorbid mental health and SUDs. These include higher levels of perceived family support, higher income levels, and better parental marital adjustment.²⁰

Of greatest concern are consequences of substance misuse among young adults with mental health diagnoses who already face significant obstacles navigating the developmental challenges of adulthood.²¹ These consequences include greater risk for dropping out of school, unemployment, and legal problems^{22, 23} and functional impairment.²⁴

Vulnerable Population Groups

In addition to those with SMI, other population groups are at increased risk for substance use during young adulthood.

Sexual Minority Young Adults. Because they are more likely than heterosexual youth to experience certain stressors, such as stigma, discrimination, harassment and violence, young adults who are sexual minorities are at increased risk for various behavioral health issues, including substance misuse. Surveys have found that sexual minorities have higher rates of substance misuse and SUDs than people who identify as heterosexual.²⁵ Although research specific to young adults who identify as LGBTQ+ is limited, a meta-analysis based on studies of adolescents found that lesbian, gay, and bisexual youth were 90 percent more likely to use substances than heterosexual youth, and the difference was pronounced in some subpopulations.²⁶ Bisexual adolescents misused substances at 3.4 times the rate of heterosexual adolescents, and lesbian and bisexual females misused substances at four times the rate of their heterosexual counterparts. Similarly, studies have found that transgender adolescents are more likely to engage in problem drinking and substance use behaviors than their cisgender peers.²⁷⁻²⁹

Young Adults Who Are Homeless. Substance use among young adults experiencing homelessness is higher than that of peers who are not homeless.³⁰ It is estimated that 39 to 70 percent of youth experiencing homelessness misuse alcohol and other substances.^{31, 32} Social networks, economic factors, and more negative expectation about the future also are associated with relatively high levels of substance use among this population.³³ Polysubstance use is also common among young adults experiencing homelessness; and those who use substances are more likely to have co-occurring mental health disorders such as depression, anxiety, and conduct disorders, and to engage in high-risk behaviors, including risky sex.^{34, 35}

Young Adults Aging out of Foster Care. Youth in foster care are thought to be at greater risk of substance misuse because of their documented experiences with trauma and maltreatment and exposure to parental alcohol and substance use. A review of the evidence provides partial support for these concerns, revealing that alcohol and marijuana misuse is similar among foster and non-foster youth and recent alumni.³⁶ However, use of illicit substances is higher among foster youth than the general population; and the prevalence of SUDs is markedly higher among youth in foster care.

Juvenile Justice-Involved Young Adults. Young people involved in the juvenile justice system have substantially higher rates of SUD than their counterparts.³⁷ Young offenders are also more likely to experience traumatic adverse childhood experiences (e.g., parental abuse and neglect, exposure to neighborhood violence), which may contribute to substance misuse in adolescence. If substance misuse and the constellation of related problems that system-involved youth face are not addressed early, the risk for recidivism and SUD increases into young adulthood.³⁸

Young Adults in the Military. Heavy alcohol and tobacco use, and especially prescription drug misuse, are much more prevalent among young adult veterans and members of the armed forces than among their civilian counterparts.³⁹ Reasons for these differences include stresses associated with deployment, combat exposure, and the unique culture of the military.⁴⁰ Military personnel also experience combat-related injuries and strains associated with carrying heavy equipment. These injuries produce pain⁴¹ that physicians may treat with highly addictive pain-reliever prescriptions that can become difficult to stop using once started.

Young Adults in College Fraternities or Sororities. College students who belong to fraternities and sororities have higher rates of substance use than their college peers who do not join such organizations. This is because those who use substances before college, especially those who engage in heavy drinking, may be more likely to join groups that

support their drinking norms; and once enrolled, the social subculture serves to reinforce and contribute to an increase in their heavy drinking.⁴² Compared to other college students, young men who belong to fraternities are at greater risk of heavy drinking well into adulthood, with one study finding that by age 35 almost half of residential fraternity members reported alcohol use disorder symptoms.⁴³

Young Adults with Attention Deficit Hyperactivity Disorder (ADHD). Children with ADHD are at increased risk of developing a SUD as young adults.⁴⁴⁻⁴⁸ People with ADHD are twice as likely to develop a SUD as the general population.^{49,50} Explanations for increased risk include self-medication to temper moods or cope with stress, demoralization, and feelings of failure often associated with this chronic condition.⁵¹ Other explanations focus on abnormal brain structures in youth and adults with ADHD including relatively smaller areas of the brain that control processes like reasoning, memory, and problem solving, and responses like fear and pleasure;⁵² differential development of areas that govern emotion, motivation, and the ability to associate actions with consequences;¹⁴ and different patterns of impulse.⁵³



Youth Perceptions of Substance Misuse

The attitudes and beliefs that young adults have about substance misuse depend on the substance and have changed over time. Perceptions of harm are especially important. A person's belief that using substances will cause them harm together with their belief that abstaining or reducing their use will lead to improved health is thought to predict the extent of their substance use.

Marijuana Use: Overall, people's perception of marijuana harm has decreased as more states have legalized use of medical and recreational marijuana. Despite growing evidence about the negative effects of marijuana on maturing brains, 71 percent of young adults report they do not view regular marijuana use as very harmful. In 2017, the experimental use of marijuana was perceived to be risky by only about 7 to 10 percent of this population.⁹

Illicit Substance Use: Among young adults aged 19-30 years old, 46 to 50 percent believed the use of cocaine involved great risk, 71 to 74 percent believed the use of heroin involved great risk, and 44 to 48 percent believed the use of narcotics other than heroin involved great risk. In addition, among young adults, 30 to 41 percent of them saw a great risk in the experimental use of LSD.⁹

Alcohol Use: In 2017, 38 to 42 percent of young adults saw binge drinking or occasions of heavy drinking (having five or more drinks in a row) on weekends as dangerous. This increased perception of risk is attributed to the success of media campaigns against drunk driving and the increase of the drinking age in the United States. However, the perception that having one or two drinks per day is dangerous continues to be low.⁹

Tobacco Use: In 2017, 84 to 86 percent of young adults perceived regular pack-a-day cigarette smoking as a high-risk behavior. However, in recent years, 18-year-olds consistently showed lower perceived risk of cigarette smoking than other adults.⁹

E-Cigarettes: The most commonly cited reasons for using e-cigarettes among both adolescents and young adults are curiosity, flavoring/taste, and low perceived harm compared to other tobacco products. Unlike adults, adolescents and young adults do not report using e-cigarettes as an aid to quit conventional cigarettes.⁵

Prescription Drug Misuse: Young adults are least concerned about the consequences of prescription drug misuse. They believe that these substances are generally used for legitimate purposes, and thus are not as harmful as other illicit substances.¹⁰

Negative Consequences of Substance Use

Young adults who misuse substances and/or develop a SUD are more likely to struggle to attain traditional adult roles and responsibilities such as forming and maintaining healthy relationships and attaining and holding a job.⁵⁴ Substance misuse is also associated with more immediate repercussions with most evidence coming from studies focused on drinking. For example, about half of college students report past-year hangovers, nausea, and vomiting due to

drinking, and about one-fourth report blackouts (or memory loss while intoxicated).⁵⁵ Excessive drinking among young adults is also associated with increased physical and sexual assaults, insults and humiliation, preventing others from studying/sleeping, and vandalism.^{55, 56} Of particular concern are the effects of substances on the developing brain, links to chronic disease, and injury and death resulting from motor vehicle accidents.

Effects of Substances on the Brain

Until the age of 25, the human brain is still developing and thus vulnerable to neurotoxins like alcohol and other substances, and to activities like violence, driving under the influence, and others.⁵⁷ Substance misuse can permanently change brain areas, resulting in lower intelligence (IQ), reduced motivation, increased impulsivity, and reduced attention span.^{4,12,22} Substances are most likely to negatively affect the following parts of the developing brain during emerging adulthood:

- **The basal ganglia.** This part of the brain plays an important role in positive forms of motivation. It supplies pleasurable effects of healthy activities like eating, socializing, and sex. It is also involved in the formation of habits and routines.
- **The amygdala.** This part of the brain plays a role in the perception and management of stress including anxiety, irritability, and unease. When an individual stops taking substances or the drug-high fades, this area of the brain increases the sense of anxiety and unease.
- **The prefrontal cortex.** This is the last part of the brain to mature in humans, and fully matures in the mid-20s. It powers the ability to plan, solve problems, make decisions, and exert self-control over impulses.
- **The brain stem.** This essential part of the brain controls basic functions critical to life, such as heart rate, breathing, and sleeping.

Substance Use and Chronic Disease

Alcohol-, tobacco- and other substance-related problems among young adults can have long-term effects on physical well-being.⁵⁸ Substance misuse is associated with health issues including cardiovascular diseases, respiratory diseases, cancers, liver damage, kidney damage, mental disorders, prenatal defects and others.¹² Injectable substances can increase the risk of

infections such as the human immunodeficiency virus (HIV) and hepatitis C (a serious liver disease).⁴

More importantly, for those young adults with chronic underlying diseases such as asthma and diabetes, there is an immediate negative impact of substance misuse on their already compromised well-being. For this group, the foreshortened timetable of negative repercussions raises the stakes in terms of health outcomes and requires that health care providers and social supports remain vigilant and understand how to intervene.

Substance Use and Motor Vehicle Collisions

Impaired driving is especially prevalent among young adults. In 2018, 15.3 percent of those aged 16 to 25 reported that they drove under the influence (DUI) of alcohol or selected substances, whereas, 10.2 percent of those 26 and older drove under the influence.⁴

Self-reports of DUI peaks for those ages 20 to 25 with 21.2 percent reporting DUI. National Highway Safety Administration (NHTSA) data is even more alarming, indicating that the highest percentage of drunk drivers (with Blood Alcohol Concentrations (BACs) of 0.08 g/dL or higher) were aged 21 to 24 (at 27 percent), followed by those aged 25 to 34 (at 26 percent).⁵⁹

Young adults are also more likely than other age groups to ride with an impaired driver—with 33 percent of recent high school graduates reporting having done so at least once in the past year.⁶⁰ Of greater concern are injury and death associated with DUI. In 2017, 42 percent of drivers involved in fatal drunk-driving crashes were young drivers aged 16 to 24.⁵⁹

Conclusion

Understanding the scope, etiology, and consequences of substance misuse among young adults helps inform the selection of appropriate, practical, and acceptable interventions to prevent SUDs among them.

Scientists have developed a broad range of practices and programs that positively alter the balance between risk and protective factors for substance use in young adults. Well-researched evidence-based programs can significantly reduce early use of tobacco, alcohol,

and other substances.⁶¹ These prevention programs work to boost *protective factors* and eliminate or reduce *risk factors* for substance use. The next chapter provides information on what constitutes an evidence-based program and provides examples of prevention programs evaluated and shown to reduce alcohol or other substance use during adolescence or the progression to harmful use during young adulthood.

Key Points

- 1 Young adults are at increased risk of substance misuse, with most commonly misused substances being alcohol, marijuana, and tobacco or nicotine.
- 2 Risks for misuse include individual, relationship, community, and societal factors that interact to influence them as they age.
- 3 Risk factors may emerge during childhood, adolescence, and/or adulthood.
- 4 Less is known about factors that protect young adults from substance misuse.
- 5 Some groups of young adults are especially vulnerable to substance misuse due to co-occurring mental or developmental disorders, life circumstances, and/or the way others treat them.
- 6 Substance use can permanently affect the developing brain leading to addiction and other negative changes in cognitive functioning.
- 7 Preventive intervention is needed to delay onset of substance use during adolescence and reduce substance misuse and associated harms during young adulthood.
- 8 Effective prevention practices aim to mitigate risk factors associated with increased substance misuse by promoting protective factors for universal, selective, and indicated populations.

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Effectiveness of Substance Misuse Prevention Among Young Adults

Prevention can reduce the burden of substance misuse and its associated costs during young adulthood. There is strong scientific evidence supporting the effectiveness of prevention programs and policies aimed at preventing the initiation of substance use during adolescence and reducing problematic use and negative consequences during young adulthood. This chapter reviews the evidence base (programs and policies supported by research) for the use of prevention strategies with young adult populations.

Evidence-Based Prevention Programs and Policies

Appendix 2 includes brief information on universal, selective, and indicated prevention programs evaluated and shown to reduce alcohol or other substance use during adolescence or the progression to harmful use during young adulthood. Programs included are based on a series of extensive reviews of published research studies. Programs developed for individuals who already had a substance use disorder (SUD) were excluded.

Sources and Process

The review of published research primarily focused on refereed professional journals, which were searched using relevant EBSCO databases (e.g., PubMed, Medline, PsycINFO). Government reports, annotated bibliographies, and relevant books and book chapters were also reviewed. In addition, programs were searched in *Facing Addiction in America: The Surgeon General's Report on Alcohol, Drugs, and Health*; the Centers for Disease Control and Prevention (CDC) *Guide to Community Preventive Services*; and the Office of Juvenile Justice and Delinquency Prevention (OJJDP) *Model Programs Guide* (operated by CrimeSolutions.gov). From these collective sources, a set of over 400 core prevention programs was identified for possible inclusion in this guide. Of those, 70 met the evaluation criteria (see Appendix 2).



Evaluation Criteria

Programs were included only if they met the program criteria listed below. These criteria are the same as those used in *Facing Addiction in America* as well as *Blueprints for Health*.

- **Experimental design:** All programs were evaluated using a randomized trial design or a quasi-experimental design that used an adequate comparison group. The prevention effects described compare the group or individuals that received the prevention intervention with those who did not.
- **Sample specification:** The behavioral and social characteristics of the sample for which outcomes were measured must have been specified.
- **Outcome assessments:** These assessments must have included pretest, posttest, and follow-up findings. The need for follow-up findings was considered essential given the frequently observed dissipation of positive posttest results. Follow-up data had to be reported more than six months beyond the time point at which the primary components of the intervention were delivered in order to examine the duration and stability of intervention effects. Evaluation studies of institution- and community-based programs or policies were exempt from this rule regarding follow-up data.
- **Effects:** Programs were included only if they produced outcomes showing a measurable difference in substance use or substance use-related outcomes between intervention and comparison groups based on statistical significance testing. Programs that broadly affected other behavioral health problems or risk and protective factors but did not show reductions in at least one direct measure of substance use were excluded.
- **Additional quality-of-evidence criteria:** The program provided evidence that seven quality of evidence criteria were met: (1) reliability of outcome measures, (2) validity of outcome measures, (3) pretest equivalence, (4) intervention fidelity, (5) analysis of missing data, (6) degree and evaluation of sample attrition, and (7) appropriate statistical analyses.



Populations Targeted

Prevention programs and practices are most effective when they are matched to their target population's level of risk and fall into three broad categories:¹

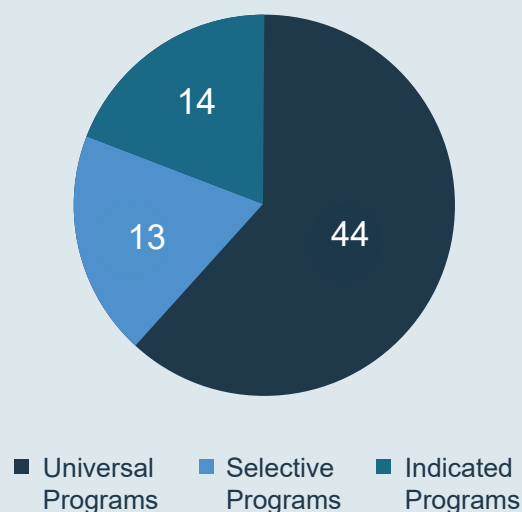
- **Universal programs and practices** take the broadest approach and are designed to reach all individuals. Universal prevention programs and practices might target all individuals in schools, whole communities, or workplaces.
- **Selective programs and practices** target biological, psychological, or social risk factors that are more prominent among high-risk groups than among the wider population. Examples include prevention education for college students or peer support groups for young adults with a family history of SUDs.
- **Indicated programs and practices** target individuals who show signs of being at risk for a SUD. These types of interventions include referral to support services for young adults who violate substance use policies or screening and consultation for families of young adults admitted to hospitals with potential alcohol-related injuries.

Most of the programs identified in Appendix 2 target universal populations.

Prevention Program Types

Using the criteria discussed within this chapter, a total of 70 programs were identified as evidence-based for preventing substance misuse among young adults. Appendix 2 includes information on each of the programs.

The programs fall into these three categories: (1) Universal, (2) Selective, and (3) Indicated. In this chart, one program is counted in two categories since the approach is different depending on the age group targeted.



Prevention Practices

Evidence suggests that prevention programs demonstrating evidence of effectiveness in reducing substance misuse and its consequences in young adulthood often incorporate practices informed by theories that explain what might cause substance misuse and what might change factors that contribute to it. Most of the evidence we have on effective programs and practices comes from evaluations of programs implemented during childhood and adolescence. Many of these programs have lasting effects, as their participants continue to show delayed or reduced substance misuse well into young adulthood when compared with nonparticipants.



Practices That Focus on Childhood and Adolescence with Impacts Lasting into Young Adulthood

Programs implemented in childhood and adolescence with protective effects lasting into young adulthood typically have employed these practices:



Behavior Modification and Behavior Management

Behavior modification encourages individuals to change problem or harmful behaviors by providing rewards in exchange for good behavior, whereas behavior management encourages individuals to effectively address problem behaviors through persuasion and teaching the individual how to behave in a prosocial way.



Classroom Management

This practice includes systems that emphasize student expectations for behavior and learning, promote active learning and student involvement, and identify important student behaviors for success.²



Full Service Schools

These schools provide comprehensive academic, social, and health services (e.g., mentoring, tutoring, and mental health services) for students, students' family members, and community members.



Home Visiting Services

Services are provided by trained professionals who meet regularly in the homes of selective expectant parents or families with young children to teach positive parenting skills and parent-child interactions; promote strong parent-child communication to stimulate language development; provide information and guidance on a range of health-related topics; conduct screenings and provide referrals to address postpartum depression, substance misuse, and family violence; screen children for developmental delays and facilitate early diagnosis and intervention; and connect families to other services and resources as appropriate.³



Parenting Skills Education

Content will vary depending on age of child or youth, but typically aims to enhance (1) family functioning and management (e.g., practice in developing, discussing, and enforcing family policies on substance misuse, training in substance use education and information, training on rule-setting, techniques for monitoring activities, praise for appropriate behavior, and moderate, consistent discipline that enforces defined family rules) and (2) family bonding (e.g., through skills training on parent supportiveness of children, parent-child communication, and parental involvement).



Social and Emotional Skills Education

This type of approach helps children and adults learn to understand and manage emotions, set goals, show empathy for others, establish positive relationships, and make responsible decisions⁴ and can also help youth develop social competencies with communication, self-efficacy, assertiveness, and substance resistance.

Practices That Focus on Young Adults

Compared to programs for children and adolescents, there are fewer programs with demonstrated evidence of effectiveness that are designed to reduce substance misuse among young adults. Evidence-based programs implemented in young adulthood typically have employed these practices:



Cognitive Restructuring

This practice is drawn from cognitive therapy and helps individuals identify, challenge, and alter thought patterns and beliefs that support substance misuse.



Community Mobilization

This approach brings together multiple sectors to address substance misuse among young adults by assembling necessary resources, disseminating information, generating support, fostering cooperation, and developing a plan of action informed by evidence-based practice.



Social Norms Campaigns or Education

These practices focus on positive messages about healthy behaviors and attitudes that are common to most people in a group (i.e., athletes, fraternity members, college students) and are designed to correct misconceptions that normalize substance use behaviors.⁵



Environmental Changes

The focus is to alter the social, legal, or physical context in such a way as to help individuals make healthy choices and often combines multiple practices (e.g., communication campaigns, screening and brief intervention, policy, enforcement).⁶



Policy Enforcement

This practice includes making sure that laws and regulations designed to reduce access to alcohol and other substances are implemented effectively by holding adults accountable, providing deterrents to using or incentives for not using, restricting use and sale, and restricting types of advertising.



Screening and Brief Intervention

This intervention includes a validated screening tool sensitive to a given substance use problem followed by a brief intervention based on the results of the screening that includes tailored feedback about screening results, concrete advice based on medical concern, and support for individual goals.



Wraparound Services

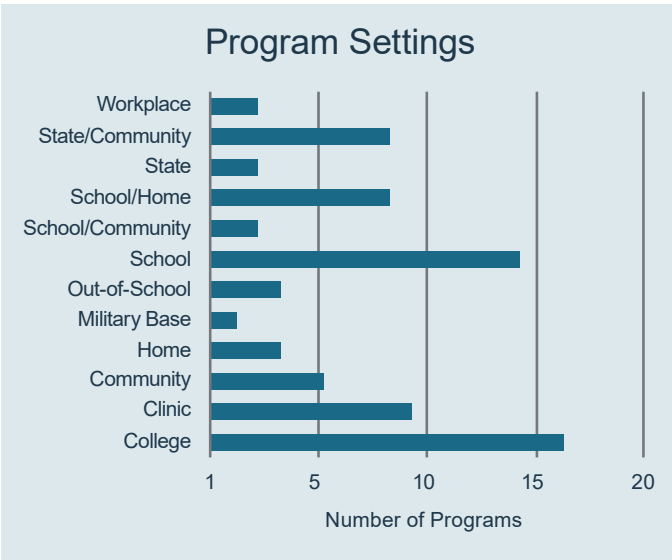
Wraparound services provide comprehensive, holistic, and tailored youth- and family-driven responses to young adults who face serious mental health or behavioral challenges.⁷

Prevention Settings

Program developers typically design interventions for implementation in specific settings. These settings are often places where adolescents and young adults congregate.

The majority of the programs in Appendix 2 are implemented in college settings, followed by those implemented in elementary, middle, and high school settings.

Three programs, one delivered in a clinical setting and two others delivered at home, were computer-assisted. Adolescents and young adults make ample use of online technologies to socialize and seek health information. More research and development are needed to understand how online and mobile health technologies might be harnessed to address substance misuse among young adults. For example, although mobile health applications proliferate, few have been evaluated to test their effectiveness in producing behavior change.



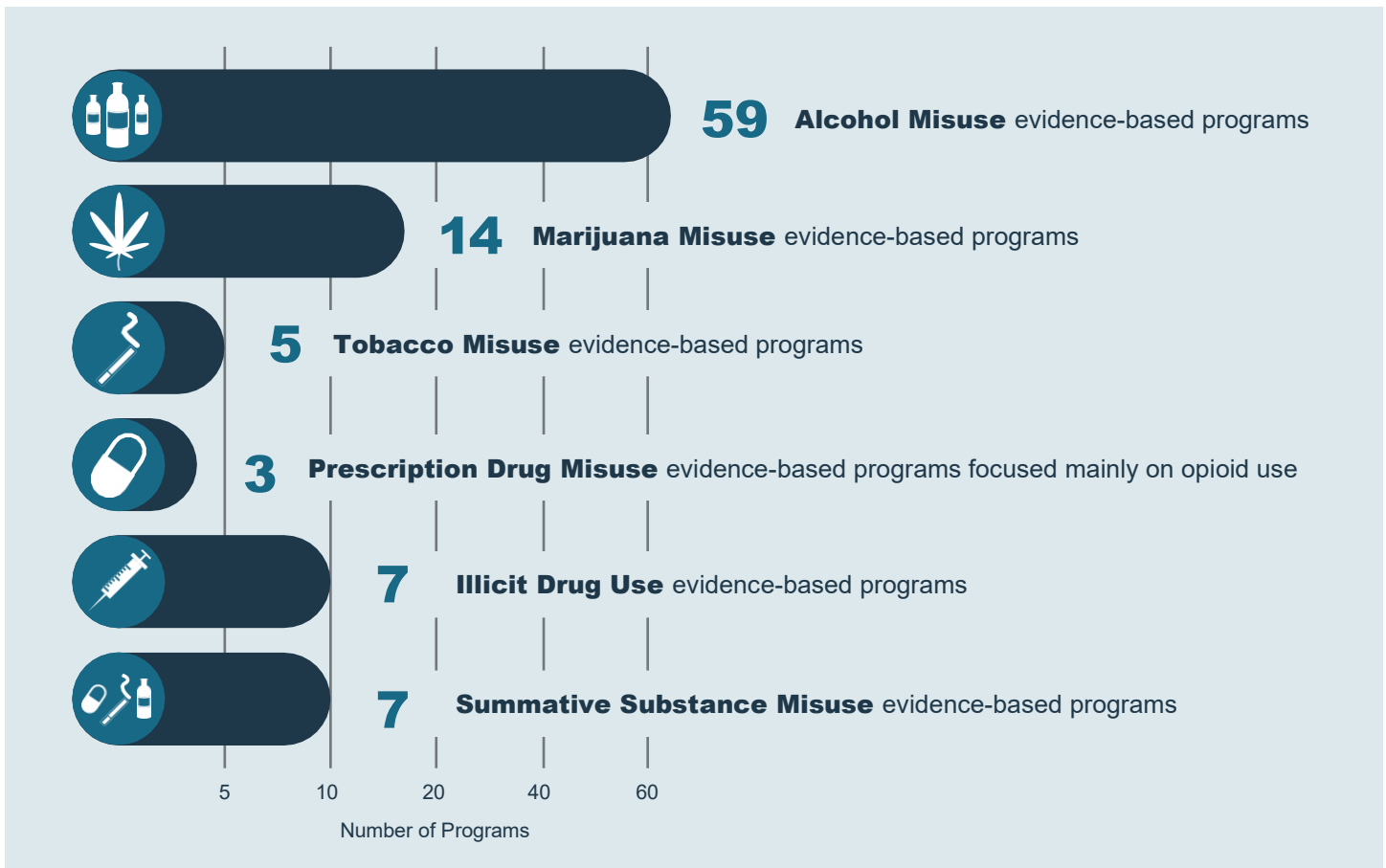
Focus on Substance Misuse

Appendix 2 includes programs associated with changes in substance misuse among young adults. While this guide focuses on young adults, the programs listed in Appendix 2 include programs associated with changes in substance use behaviors

among adolescents. This is because substance misuse during adolescence is a strong predictor of substance misuse in young adulthood.

The majority of the programs focus on alcohol misuse (59 programs). More research and development are needed to understand whether existing programs and practices that are tested and proven effective with alcohol can be adapted to address other substances, or whether more innovative approaches are needed to address risk and protective factors unique to other types of substance misuse among young adults.





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Evidence-Based Programs for Preventing Substance Misuse Among Young Adults

This chapter highlights seven programs evaluated and proven effective in reducing substance misuse and/or its consequences among young adults. Most of the programs target alcohol misuse as that is the most commonly used substance during young adulthood.

Choosing Programs

As seen in Chapter 2, researchers have evaluated and found that many programs prevent or reduce substance misuse and its consequences during adolescence and young adulthood. Seven of these programs were selected by the expert panel to be featured in this chapter. Two of the programs, Family Check-Up and Communities Mobilizing for Change on Alcohol target adolescent substance use which has been linked to substance misuse in young adulthood, whereas, the other programs target young adult substance misuse. Some of the programs are designed and implemented with racially and ethnically diverse populations.

Format of the Chapter

Following is a succinct description of each of the seven programs, including a brief program description, an explanation of the program's mechanisms of change, substances targeted, the population with which the program was tested, risk factors addressed and protective factors promoted, settings where tested, program duration, implementation considerations, substance misuse outcomes, and supporting evaluation studies. The format of each description is uniform to enable the reader to quickly find and compare information across programs.



Substances Targeted

Alcohol (primary target) and other substances

Target Population

African American youth in the last two years of secondary school and their parents residing in six rural Georgia counties with high poverty and unemployment rates

Risk Factors Addressed

- Communities with high poverty rates
- Limited access to youth programs
- Racial discrimination
- Parent-child conflict
- Friends who engage in alcohol and other substance use

Protective Factors Promoted

- Development of problem-solving skills
- Goal-setting
- Skillful response to racial discrimination
- Ability to self-regulate
- Use of developmentally-appropriate emotional and instrumental social support
- Responsible decision-making and taking responsibility for one's actions

Setting

Group meetings at community facilities in rural Georgia counties

Duration

Six weekly group meetings at a community facility, with a total program time of 12 hours

Adults in the Making

Description

Adults in the Making (AIM) is a family-centered intervention designed to promote resilience and prevent substance use by enhancing protective factors for African American youth as they enter adulthood. Protective processes addressed in the intervention include developmentally appropriate emotional support, educational mentoring, and strategies for dealing with discrimination.

AIM provides adolescents experiencing racism with strategies for self-control and problem-focused coping. The intervention also supports youth in developing and pursuing educational or career goals, and connects them with community resources. AIM consists of separate skill-building courses for parents and youth, followed by a joint parent-youth session, where parents are able to exhibit the skills they learned in the skill-building training.

Mechanism of Change

The AIM program promotes social and emotional competencies by drawing on stress-coping and social cognitive theories. Stress-coping theory argues that substance misuse and risky sexual behavior are consequences of life stress and negative life events, and social cognitive theory suggests that supportive and positive family relationships foster the ability to develop problem-solving skills.¹

As such, AIM seeks to safeguard against the negative impact of life stressors on African American youth in rural areas by promoting positive family relationships so that youth are better suited to handle life stressors and less inclined to engage in risky substance use as they grow into adulthood. AIM also focuses on enhancing youth's ability to self-regulate, which includes the ability to set goals and solve problems—especially in settings where racial discrimination is present and where they are likely to be exposed to substance use by friends and acquaintances.

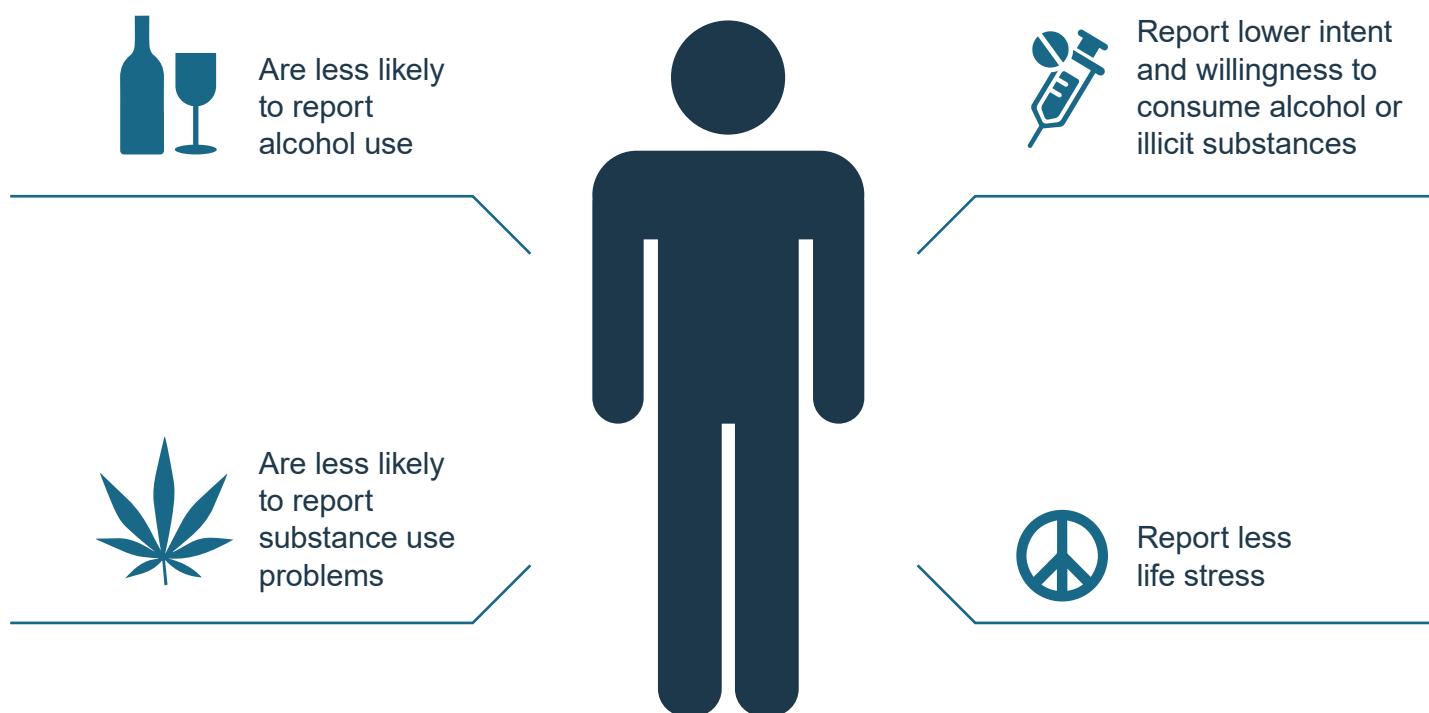
Implementation Requirements

- Training for youth and parent group facilitators (AIM group leaders who led the youth and parent training sessions were instructed during three training sessions over four days)
- Meeting facility for training activities
- Support for youth and parent transportation
- Cost for participant recruitment and program marketing

Outcomes

AIM is most effective for individuals with more contextual risk factors. Contextual risk factors include conflict with parents, friends who engage in alcohol and other substances, and perceived racial discrimination.

Individuals with relatively more contextual risk factors that participate in AIM:^{1,2}



Substance Targeted

Alcohol

Target Population

Alcohol retailers and consumers

Risk Factor Addressed

Easy access to alcohol by minors

Protective Factor Promoted

Limited access to alcohol by minors

Settings

Implemented at the federal and state level; state laws governing alcohol pricing vary widely

Duration

Varies according to legislation

Alcohol Taxes

Description

Alcohol price increases involve raising the unit price of alcohol by raising excise taxes (often included in the price of alcohol) and/or sales taxes (charged in addition to the price of alcohol). The revenue generated from tax increase(s) can be used to support public health and public safety services. Alcohol taxes are implemented at the state and federal level, and are beverage-specific (i.e., they differ for beer, wine, and spirits). States may adjust taxes regularly so their effects do not erode over time due to inflation.

Mechanism of Change

Alcohol excise taxes are a type of regulatory policy designed to reduce easy access to alcohol. The policy is based on the premise that as the price of alcohol increases, the demand for alcohol will decrease. In addition to tax-related policies, there are several other regulations that may directly or indirectly affect the prices of alcoholic beverages.

Examples include:

- regulations on wholesale and retail distribution
- bans on price-related promotions (e.g., happy hours)
- targeted minimum-pricing policies.

Many states also implement other regulatory policies that reduce the availability of alcoholic beverages, including:

- limits on the places where or times when alcoholic beverages can be sold or
- dram shop laws

These regulations raise the time and legal costs associated with obtaining alcohol.³

Implementation Requirements

- Familiarity with local, state, and federal tax policies and regulations
- Knowledge of governmental processes required for the development and implementation of policies and regulations
- Stakeholders supportive of price increases
- Communication campaign to build stakeholder support for alcohol price increases
- Educational materials based on research and reliable data about effectiveness of alcohol price increases

Implementation Resources

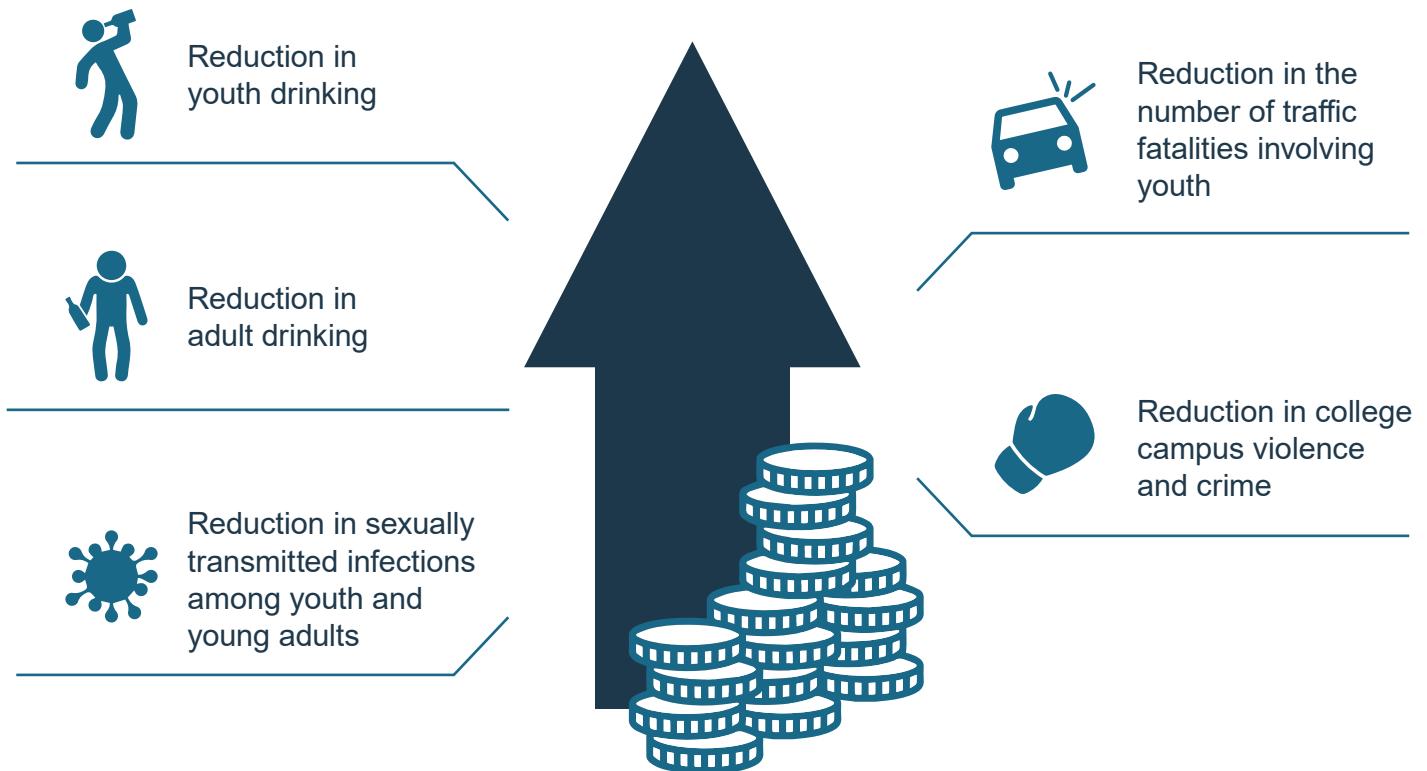
National Institute on Alcohol Abuse and Alcoholism's [Alcohol Policy Information System](#) provides detailed information on a wide variety of alcohol-related policies in the United States at both state and federal levels, as well as policy information regarding recreational cannabis use.

Centers for Disease Control and Prevention's [Pricing Strategies for Alcohol Products](#) provides brief information on implementation considerations as well as links to other tools.

Outcomes

In populations with a high prevalence of heavy drinkers (defined as more than 5 percent of the population), the most effective and cost-effective intervention is taxation.

Alcohol price increases are associated with:



Brief Alcohol Screening and Intervention for College Students Program

Substance Targeted

Alcohol

Target Population

College students who drink alcohol heavily and have experienced or are at risk for alcohol-related problems

Risk Factors Addressed

- Personal beliefs that favor risky alcohol use
- Social norms that favor risky alcohol use
- Family history of alcohol misuse or use disorder

Protective Factors Promoted

- Personal efficacy to change behavior
- Healthy goal-setting and decision making

Settings

University settings (including health clinics, mental health centers, residential units, and administrative offices); private office space is needed for confidential interviews

Duration

Two 60 – 90 minute interviews over three months, with a brief online assessment survey taken by the student after the first session

Description

Brief Alcohol Screening and Intervention for College Students (BASICS) is a harm reduction program for college students who drink alcohol heavily and have experienced or are at risk for alcohol-related problems. The program is aimed at revealing the discrepancy between the student's risky drinking behavior and his/her goals and values, and motivating students to reduce alcohol use in order to decrease the negative consequences of drinking. BASICS consists of two individual interviews with a brief assessment survey completed by the student between the two sessions.

The first interview gathers information about the student's recent alcohol consumption patterns, personal beliefs about alcohol, and drinking history, while providing instructions for self-monitoring any drinking between sessions and preparing the student for the online assessment survey. Information from the online assessment survey is used to develop a customized feedback profile used in the second interview, which compares personal alcohol use with alcohol use norms, reviews individualized negative consequences and risk factors, clarifies perceived risks and benefits of drinking, and provides options to assist in making changes to decrease or abstain from alcohol use.

Mechanism of Change

BASICS employs the practice of screening and brief intervention (SBI), a preventive service that identifies and helps individuals who are drinking too much but who do not have an alcohol use disorder.

SBI is based on the premise that people are different when it comes to readiness to change their drinking behavior. Some people may be unaware that they have a drinking problem; some recognize that their drinking is problematic; others plan small steps toward changing their drinking; and still others modify their drinking behaviors.

SBI is also based on the understanding that people have specific psychological needs related to self-determination—they want to feel capable, connected, and in control. Individuals can change their behavior when helped to see how:

- their drinking may be harmful;
- their drinking may prevent them from meeting important psychological needs; and
- responsible drinking or abstaining from drinking can help them be capable, connected, and in control.

Implementation Requirements

- Tailored assessment and feedback tools to the specific setting and population
- Training for program personnel on knowledge of alcohol use among college students and clinical techniques for non-confrontational interviewing
- Health educators, chemical dependency professionals, clinical or counseling psychologists, and clinical social workers who can deliver BASICS

Implementation Resources

BASICS developers can provide on-site and off-site training. For information about training, see the [Addictive Behaviors Research Center \(ABRC\)](#).

The American Public Health Association's manual [Alcohol Screening and Brief Intervention: A Guide for Public Health Practitioners](#) provides public health professionals with information and resources needed to conduct SBI.

The Centers for Disease Control and Prevention's [Planning and Implementing Screening and Brief Intervention for Risky Alcohol Use: A Step-by-Step Guide for Primary Care Practices](#) helps primary care providers adapt alcohol SBI to the unique needs of their practice.

The National Institute on Alcohol Abuse and Alcoholism and the American Academy of Pediatrics' [Alcohol Screening and Brief Intervention for Youth: A Practitioner's Guide](#) describes how to implement screening and interventions for youth at risk for alcohol-related problems.

Outcomes

College students that participated in BASICS had significant positive outcomes at one-year follow-up compared to those that did not receive BASICS.⁴⁻⁶ Those that participated in BASICS maintained improved alcohol-related outcomes up to 4 years post-intervention.

Reduction in alcohol consumption⁴⁻⁶

Reduction in frequency of alcohol consumption⁴



Fewer alcohol-related problems^{4,5}

Lower peak blood alcohol concentration⁶

Substance Targeted

Alcohol

Target Population

Youth ages 15-20

Risk Factors Addressed

- Social norms that favor underage drinking
- Easy access to alcohol by minors
- Weak enforcement of legal sanctions

Protective Factors Promoted

- Policies, practices, and norms that deter underage drinking

Settings

Upper Midwestern communities; the Cherokee Nation (northeastern Oklahoma)

Duration

The community develops a timeline and schedule for implementing activities as part of the planning process

Communities Mobilizing for Change on Alcohol

Description

Communities Mobilizing for Change on Alcohol (CMCA) is designed to reduce youth access to alcohol by changing community and law enforcement policies, attitudes, and practices, and by targeting commercial and noncommercial availability of alcohol to underage drinkers. A community organizer works with several community institutions, including local public officials, law enforcement, alcohol merchants, the media, and local schools to:

- Assess community needs and resources with regard to underage drinking prevention;
- Develop a strategic plan to address these needs; and
- Collaborate with media partners to raise public awareness of the initiative and attract new supporters.

The goals of these collaborative efforts are to select and implement strategies that will eliminate illegal alcohol sales to minors, obstruct the provision of alcohol to youth, and ultimately reduce alcohol use by teens.

Mechanism of Change

CMCA is a multi-staged environmental change approach based on democratic traditions of local citizen action to hold local institutions and community leaders responsible for creating safe and healthy communities. Drawing on the social influence model, it seeks to modify individuals' opinions, beliefs, and behaviors about substance use, by modifying the opinions, beliefs and behaviors of others in their surrounding communities.

CMCA and other community organizing programs also draw on collective efficacy theory, or helping communities realize and act on their potential to organize and execute change to improve the lives of their members. Moreover, CMCA combines the principles of social influence and collective efficacy with a focus on policies that restrict minors' access to alcohol.

Implementation Requirements

A part-time community organizer to coordinate and implement the CMCA process.

Implementation Resources

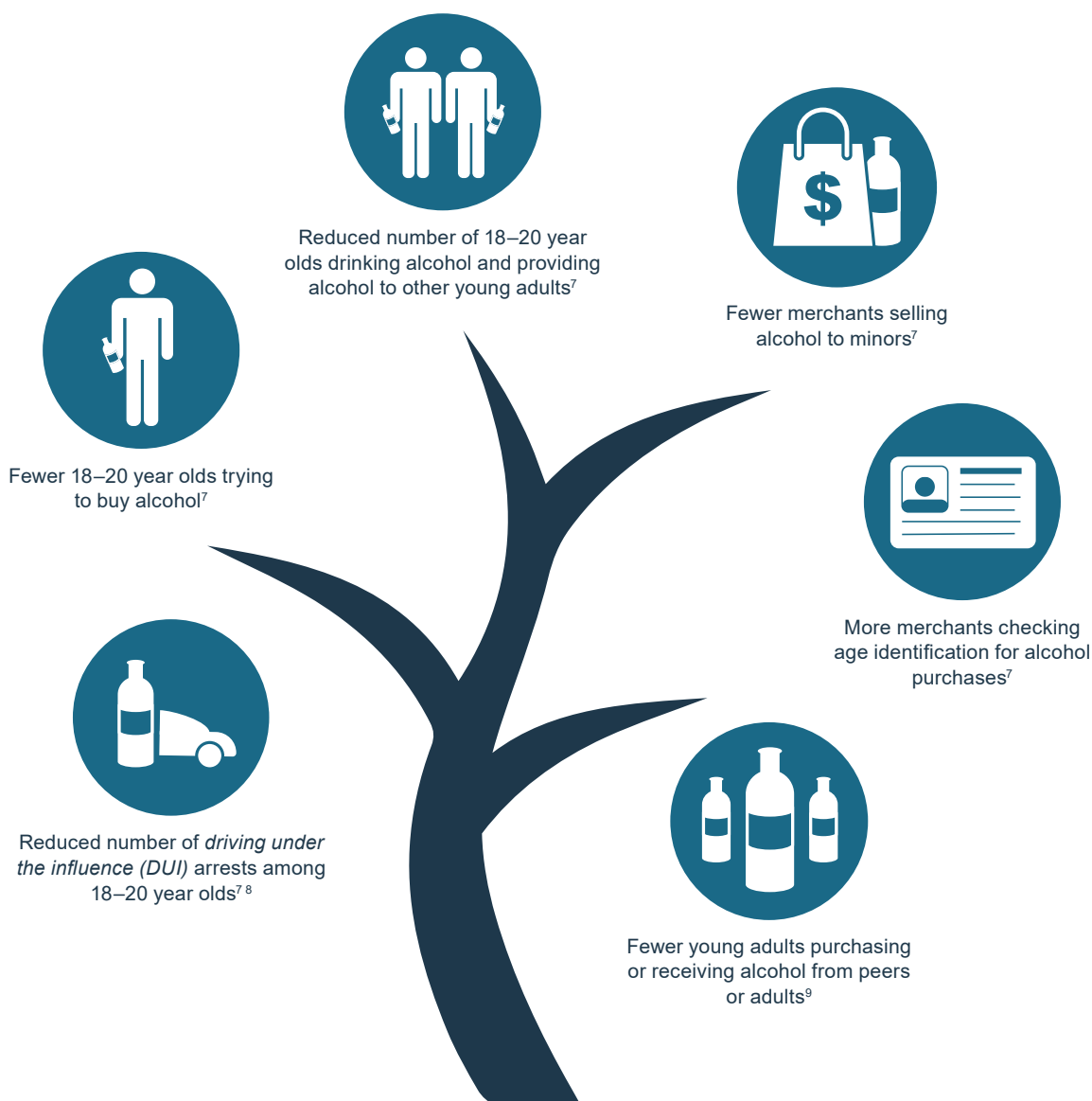
CMCA program developers have created an [implementation guide](#).

Youth Leadership Institute provides [training and consultation](#) on the CMCA program.

CMCA developers have produced numerous resources that are freely available to all communities through the [University of Minnesota Alcohol Epidemiology Program website](#).

Outcomes

Compared to matched comparison communities, CMCA communities experience greater positive outcomes.⁷⁻¹⁰



Substances Targeted

Alcohol, tobacco, and marijuana use

Target Population

Early adolescents with emotional, behavioral, and academic problems

Risk Factors Addressed

- Coercive parenting practices
- Adolescent adjustment or socialization problems

Protective Factors Promoted

- Parents support of adolescents' positive behaviors
- Parents setting healthy limits
- Parents monitoring adolescents' activities
- Close parent-adolescent relationships

Setting

Public middle schools

Duration

The initial three sessions are brief. Follow-up with referrals to community resources and services varies in duration from three to fifteen direct contact hours depending on resources utilized (e.g., individual counseling, support groups, skills classes, family counseling, etc.)

Family Check-Up

Description

Family Check-Up (FCU) is a family-centered program that provides parents with the tools they need to manage their children's behaviors effectively and to build strong relationships with their children. Originally designed for parents of young children, FCU was later adapted for parents of adolescents. The adolescent version takes a phased approach. A trained parent consultant staffs the school's family resource center and screens all students for behavioral, emotional and academic problems. The consultant invites families of students who are determined to be at risk for behavioral problems via a screening process to participate in a three-session intervention.

- **Session one:** the parent consultant meets with the parents and adolescents for one hour and interviews parents and adolescents about family needs. This includes a parent management training, which focuses on supporting positive behavior, setting healthy limits, supervision, and building relationships.
- **Session two:** the parent consultant assesses the parent, child, and teacher, and videotapes a family interaction.
- **Session three:** the parent consultant summarizes results of the videotaped assessment using motivational interviewing techniques and presents families with a list of intervention options tailored to their needs. The parent consultant encourages families to select the interventions that they think will be most helpful to them, and the consultant may either provide those additional services or help the family access them.

Mechanism of Change

FCU is a relationship-based intervention that focuses on family management and child socialization activities. It is based on the social-ecological model of youth development, which posits that environmental stressors and parenting behaviors may be associated with adolescents' problem

behaviors including substance misuse, and that environmental stressors may predict the effectiveness of family management practices.

FCU is also informed by social learning theory and coercive family processes that may emerge in response to children's problem behaviors, as well as external pressures (e.g., job loss, illness, discrimination) on parents. Over time, continued use of coercive strategies results in exacerbated youth problem behaviors. Interventions that help parents or caregivers recognize and reduce the coercive interactions they have with their children, especially by strengthening family management skills, will result in reduced youth behavior problems.¹¹

Implementation Requirements

Parent consultants (i.e., masters-prepared therapists, social workers, program developers, and psychologists) trained in both risk- and needs- assessment must complete the necessary requirements to assess families.

Implementation Resources

[Arizona State University Reach Institute](#) offers training and certification to become a Family Check Up provider. Training and certification can be done in-person, online, or hybrid. Paraprofessionals may be trained as providers; however, this requires more intensive post training consultation.

NIDA is funding the development and evaluation of an online version of the Family Check Up for middle school students and their families. More information is available: [The Family Check-Up online program for parents of middle school students: Protocol for a randomized controlled trial.](#)

Outcomes

Families who engaged in Family Check-Up experienced long-term positive outcomes for their youth into young adulthood compared to families who did not receive the intervention.



Three years after participation in the program, youth reported:

- < lower rates of alcohol use
- < lower rates of tobacco use
- < lower rates of marijuana use¹²

At age 23, individuals who voluntarily participated in the program during their youth had:

- < lower rates of alcohol use
- < lower rates of tobacco use
- < lower rates of marijuana use¹³

Substance Targeted

Alcohol

Target Population

Students attending California colleges and universities

Risk Factors Addressed

- College attendance
- Social access to alcohol at off-campus parties
- Retail sales of alcohol to minors
- Lack of enforcement of drinking and driving laws

Protective Factors Promoted

- Expectation of getting caught and punished for illegal or inappropriate behavior
- Limiting minors' commercial access to alcohol
- Controlling situations where college minors are likely to drink

Settings

Eight campuses of the University of California and six in the California State University system as well as their surrounding communities

Duration

One year of planning followed by 6-8 weeks of implementation beginning in the first week of fall semester

Safer California Universities Study

Description

Safer California Universities (SAFER) targets heavy alcohol use by college students in off-campus settings by enforcing laws to encourage responsible hosting and service of alcohol in private and commercial settings. A collaborative group composed of student health services, campus and city police departments, student groups, and municipal representatives carry out implementation.

Key program elements include:

- nuisance party enforcement operation;
- minor decoy operations;
- driving-under-the-influence checkpoints;
- social host ordinances; and
- use of campus and local media to increase the visibility of environmental strategies.

Mechanism of Change

SAFER is a community-based environmental alcohol risk management and prevention strategy applied to college campuses. It combines elements of population-level alcohol control based on deterrence theory and reduced availability of alcohol. Risk management components work by punishing (or threatening to punish) inappropriate behavior, limiting the availability of alcohol to minors, and reducing the number and size of off-campus parties where college students are likely to drink.

Implementation Requirements

- Police “party patrols” to enforce laws of underage drinking and disturbing the peace
- Police use of underage decoys to enforce laws prohibiting sales to minors
- Police roadside checkpoints for driving under the influence of substances
- Media outlets to provide publicity about the alcohol control efforts
- Campus coordinator to recruit members and facilitate activities of the collaborative group of key stakeholders responsible for implementation

Implementation Resources

The [Safer Universities Toolkit](#) provides a range of tools and resources to help implement the evidence-based interventions tested in the research project. These tools and resources reflect the actual experiences of campuses and surrounding communities over the course of five years. The materials are provided as examples that can be adapted for use on a campus and in a community to reflect specific needs.

Outcomes

Communities that implemented SAFER experienced improved alcohol-related outcomes on and off campus.¹⁴



Reduced number of students intoxicated at off-campus parties



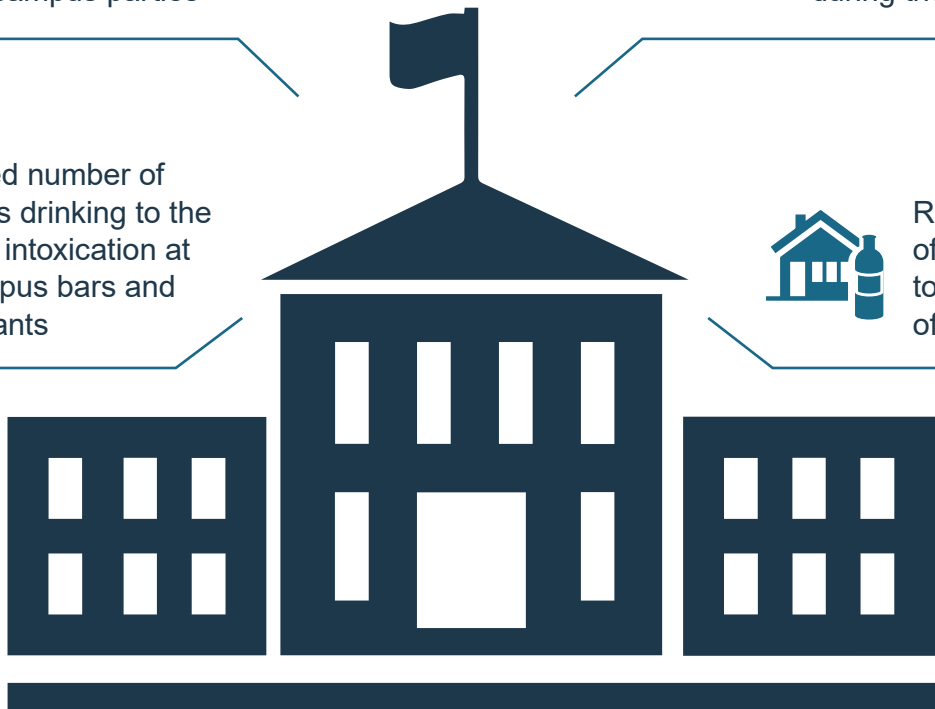
Reduced portion of students getting drunk at off-campus settings during the school semester



Reduced number of students drinking to the point of intoxication at off-campus bars and restaurants



Reduced relative risk of students drinking to intoxication at off-campus settings



Substance Targeted

Alcohol

Target Population

Municipal employees

Risk Factors Addressed

- Occupations that involve safety risks
- Enabling problem substance use
- Workplace norms that support drinking
- Exposure to coworker use

Protective Factors Promoted

- Workplace wellness
- Social integration
- Teamwork or group cohesion
- Support for workplace substance misuse prevention policies

Settings

Large municipal organizations

Duration

Training delivery consists of two four-hour sessions, occurring two weeks apart

Team Awareness

Description

Team Awareness is a customizable workplace-training program that addresses behavioral risks associated with substance misuse among employees, their coworkers and, indirectly, their families by:

- Promoting social health
- Promoting increased communication between workers
- Improving knowledge and attitudes toward alcohol- and substance-related protective factors in the workplace (such as company policy or Employee Assistance Programs)
- Increasing peer referral behaviors

The Team Awareness training consists of six modules conducted across two four-hour sessions with a company or business of any size. Team Awareness training uses group discussion, communication exercises, a board game, role-play, and self-assessments. Modules cover policy ownership, enabling behaviors, stress management, listening skills, and peer referral.

Mechanism of Change

Team Awareness is a workplace program that focuses on contextual factors, such as support for training transfer, co-worker reactions to substance use, teamwork, and policy attitudes.¹⁵ Team Awareness works by promoting group cohesiveness and social integration. A cohesive group is one that sticks together and remains united in its pursuit of specific goals and objectives.¹⁶ Cohesion is always changing and needs to be encouraged through team-building activities, especially if the group coalesces around unhealthy norms such as those that enable or support risky substance use.

Social integration theories explain the processes by which individuals are included in or encouraged to belong to groups. In the workplace, social integration refers to social support, job involvement, and the absence of estrangement

from work.¹⁵ Group cohesiveness and social integration may protect against substance misuse when workplace staff unite around goals and objectives that favor help-seeking, healthy coping skills, and responsible substance use, as well as by providing social support to those who may feel isolated.

Implementation Requirements

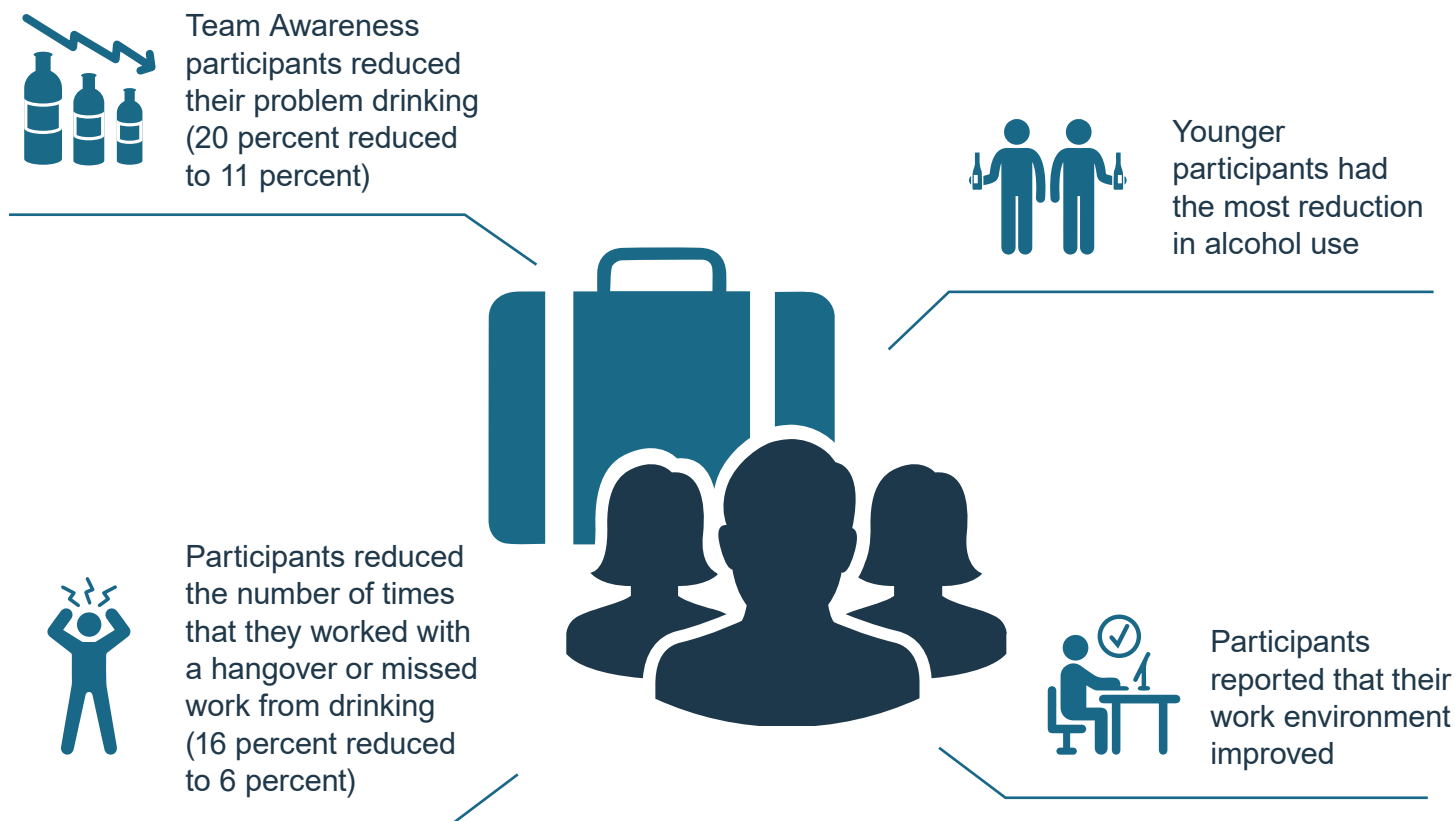
Six to eight weeks prior to training delivery, facilitators conduct focus groups with employees and interviews with key personnel, and they obtain copies of relevant documents (e.g., substance use policies, EAP promotional materials) for use in the training. In addition to the two, four-hour sessions, there is a supervisory module.

Implementation Resources

The Texas Christian University Institute of Behavioral Research developed a training manual *Team Awareness: Training for Workplace Substance Abuse Prevention*, which is available at the [IBR website](#).

Outcomes

Six months after completing the Team Awareness program, employees were less likely to experience negative consequences of alcohol, compared to those who did not enroll.¹⁷



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