



Marijuana Use Prevention

Prevention Strategies: Tiers of Effectiveness

Background

The Task Force of the National Advisory Council on Alcohol Abuse and Alcoholism published a report in 2002, recommending a set of tiered strategies for alcohol use prevention on college campuses.¹ The tiers rank strategies according to effectiveness in the college population. The marijuana use prevention strategies presented here use a similar format.

It's important to note that very little evidence-based research specifically focusing on cannabis prevention in college populations exists in the literature. A recent meta-analysis of marijuana prevention programs found no statistically significant results from programs targeting college students. However, they did find that programs with universal multi-modal plans, utilizing booster sessions, and with multiple facilitators, were most effective.²

This document is part of a series designed to support Minnesota's Partnership For Success grantees working on marijuana use prevention on college campuses. More resources from this series can be found in the Toolbox at SUMN.org

Tier 1: Evidence of Effectiveness among College Students

Strong research evidence (two or more favorable studies available) supports the strategies that follow. All strategies target at-risk individuals, or marijuana-dependent users. Their efficacy as part of a campus-wide strategy has not been tested.

1. Marijuana Screening and Intervention

A. CUDIT-R (Cannabis Use Disorder Identification Test-Revised)

Definition: Validated screening tool for identifying problem marijuana use
Potential Use: –Combine with existing screening or diagnostic efforts
–Combine with conduct processes
Evidence: Adamson, S. J., Kay-Lambkin, F. J., Baker, A. L., Lewin, T. J., Thornton, L., Kelly, B. J., & Sellman, J. D. (2010). An improved brief measure of cannabis misuse: the Cannabis Use Disorders Identification Test-Revised (CUDIT-R). *Drug and Alcohol Dependence, 110*(1), 137-143.

B. CASICS (Cannabis Screening and Intervention for College Students)

Definition: Validated screening tool for identifying problem marijuana use
Potential Use: –Combine with existing screening or diagnostic efforts
–Combine with conduct processes
Evidence: Lee, C. M., Neighbors, C., Kilmer, J. R., & Larimer, M. E. (2010). A brief, web-based personalized feedback selective intervention for college student marijuana use: a randomized clinical trial. *Psychology of Addictive Behaviors, 24*(2), 265.



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Marijuana Use Prevention Strategies, *continued*

“The evidence supporting the substance abuse prevention strategies in the literature varies widely. These differences do not always mean that one strategy is intrinsically better than another.”¹

C. e-CHECKUP To-Go: e-TOKE (electronic THC Online Knowledge Experience)

Definition: Validated screening tool for identifying problem marijuana use

Potential Use: –Combine with conduct processes
–Targeted for incoming first-year students, athletes, heavy drinkers

Evidence: Palfai, T. P., Saitz, R., Winter, M., Brown, T. A., Kypri, K., Goodness, T. M., ... & Lu, J. (2014). Web-based screening and brief intervention for student marijuana use in a university health center: Pilot study to examine the implementation of eCHECKUP TO GO in different contexts. *Addictive Behaviors, 39*(9), 1346-1352.

2. Marijuana Targeted Prevention and Reduction Strategy

A. In-Person Brief Motivational Interviewing

Definition: –Brief intervention based on motivational interviewing (MI) principles designed to discuss students’ marijuana use and provide personalized feedback.
–MI can be combined with other elements, such as mindfulness meditation, psychological follow-up, written information, or referrals to other campus resources.
–MI can be targeted to incoming students; visitors to university emergency departments; students utilizing primary health care; groups such as athletes or fraternity/sorority members; students requesting academic assistance; students seeking assistance for alcohol or drug use disorders; students who have violated university guidelines on alcohol or drug use.

Potential Use: Intervention used with frequent college-age marijuana smokers

Evidence: Lee, C. M., Kilmer, J. R., Neighbors, C., Atkins, D. C., Zheng, C., Walker, D. D., & Larimer, M. E. (2013). Indicated prevention for college student marijuana use: a randomized controlled trial. *Journal of Consulting and Clinical Psychology, 81*(4), 702.

B. InShape Prevention Plus Wellness

Definition: InShape is a program developed with the Behavior-Image Model (BIM), which motivates college students through positive current and future self-imaging, and through managing health behaviors such as exercise, nutrition, sleep, and stress management.

Potential Use: The intervention is a one-on-one session, used alone or in conjunction with other programs.

Evidence: Werch, C. E., Moore, M. J., Bian, H., DiClemente, C. C., Ames, S. C., Weiler, R. M., ... & Huang, I. C. (2008). Efficacy of a brief image-based multiple-behavior intervention for college students. *Annals of Behavioral Medicine, 36*(2), 149-157.

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Marijuana Use Prevention Strategies, *continued*

“It may be that utilizing a multi-modal strategy which facilitates a broad-spectrum approach is necessary for universal programs which endeavor to reach a widely varied population. Conversely, targeted programs which are designed to address an identified high-risk population may not similarly necessitate a multi-modal approach and perhaps a multi-modal strategy, in targeting multiple domains, may actually dilute and offset important messages.”²

Tier 2: Evidence of Success with General Populations That Could Be Applied to College Environments, or to Marijuana

These strategies recommended for exploration, as they have been successful with similar populations, although they have not yet been comprehensively evaluated with college students. Such environmental strategies are not guaranteed to alter the behavior of every college student, but they can help change those aspects of the campus and community culture that support marijuana use.

1. Marijuana Universal Prevention and Reduction Strategies

A. Project SUCCESS

Definition: Four-component program including informational presentations; campus-wide media campaign to change social norms, publicize campus policies, and increase enforcement; parental involvement; and individualized and group counseling

Potential Use: Used in middle and high schools. Could be adapted to college campuses.

Evidence: Morehouse, E. R., & Tobler, N. S. (2000). Project SUCCESS final report: Grant number 4 HD1 SP07240. Report submitted January 26, 2000, to the Center for Substance Abuse Prevention, U.S. Department of Health and Human Services.

Vaughan, R., & Johnson, P. (2007). The effectiveness of Project SUCCESS (Schools Using Coordinated Community Efforts to Strengthen Students) in a regular secondary school setting. Unpublished manuscript.

B. Social Norms Campaign: Project ALERT

Definition: Media campaign and social influence model to correct students' assumptions of peer use and build refusal skills

Potential Use: Project ALERT is used in middle schools. Could be adapted to college campuses.

Evidence: Ellickson, P. L., McCaffrey, D. F., Ghosh-Dastidar, B., & Longshore, D. L. (2003). New inroads in preventing adolescent drug use: Results from a large-scale trial of Project ALERT in middle schools. *American Journal of Public Health, 93*(11), 1830-1836.

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Marijuana Use Prevention Strategies, continued

Tier 3: Evidence of Logical and Theoretical Promise, but Require More Comprehensive Evaluation

Strategies recognized as they make sense intuitively or have strong theoretical support. Such strategies also raise researchable questions that may be crucial in reducing the consequences of college student marijuana use. Although campus leaders and community members may be eager to see these strategies implemented and evaluated, program managers/teams should assemble a team of experienced researchers to assist them in the process. These strategies should incorporate a strong evaluation component to test their viability in actual practice.

1. Environmental Components of Marijuana Prevention and Reduction Strategies

A. Development of campus marijuana policies and enforcement

Definition: Development of comprehensive policies regarding marijuana use policies and consequences, with informational campaigns involving first-years' parents, supervision in dorms, and increased enforcement

Potential Use: Use in conjunction with individual-level strategies.

Evidence: Fromme, K., Corbin, W. R., & Kruse, M. I. (2008). Behavioral risks during the transition from high school to college. *Developmental Psychology, 44*(5), 1497.

B. Implementation of substance-free alternative activities

Definition: Structured nighttime substance-free activities; alternative relaxation groups for stress management

Potential Use: Use in conjunction with broader strategies.

Evidence: Murphy, J. G., Barnett, N. P., & Colby, S. M. (2006). Alcohol-related and alcohol-free activity participation and enjoyment among college students: A behavioral theories of choice analysis. *Experimental and Clinical Psychopharmacology, 14*(3), 339.

Citations

1. Saltz, R. F. (2004). Preventing alcohol-related problems on college campuses: Summary of the final report of the NIAAA Task Force on College Drinking. *Alcohol Research, 28*(4), 249.
2. Norberg, M. M., Kezelman, S., & Lim-Howe, N. (2013). Primary prevention of cannabis use: a systematic review of randomized controlled trials. *PloS One, 8*(1), e53187.