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Marijuana Use Prevention

High Risk Populations: First-Year College Students

What is the prevalence of marijuana use among first year students?

- A large cohort study of first-year college students attending a mid-Atlantic school showed nearly one-in-ten (9.4%) first year students met the clinical definition of cannabis use disorder (CUD). Additionally, of those that used cannabis during the past year, nearly one-in-four (24.6%) met CUD criteria.¹
- Studies show cannabis use increases during the transition from high school to college and that the rate of the increase is faster among college-bound young people, than their non-college peers.^{3, 4}

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

What are the consequences of cannabis use among first year students?

Evidence suggests the use of cannabis is associated with an increased likelihood of the following problems:

- **Poor academic performance and school attendance.** One study showed 14% of first-year students that used marijuana five times or more during the past year reported oversleeping and missing class as a result of their use.¹ Another study of incoming first year college students found among students with any lifetime marijuana use, 42.6% reported at least one academic consequence from their use.³
- **Reduced cognitive functioning.** In one study of first-year students, 40% of those who used cannabis five times or more during the past reported having trouble concentrating.¹
- **Increased risk of using tobacco.** There is evidence of a strong association between marijuana and tobacco use. See *High Risk Population Tip Sheet No. 11: Tobacco Users* for more information.
- **Driving a vehicle after using cannabis.** Nearly one-in-five (18%) first year students that used cannabis five times or more during the past year reported driving a motor vehicle after using cannabis.¹

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First-Year College Students, *continued*

“College bound students use marijuana less in high school than their non-college bound peers; however use among college students between ages 18 – 22 increases faster than same age non-college peers and becomes similar in young adulthood.”
Kilmer, et al., 2007

Consequences continued...

- **Adverse health effects of marijuana use.** Health effects of marijuana use include increased heart rate, respiratory problems, reduced cognitive and functioning.⁴ See *Guidance Tip sheet No. 4: Adverse Health Effects* for more information.

What explains the relationship between first year students and cannabis use?

- **Transition out of high school.** As students transition out of high school they are met with a new set of challenges including identity formation, developing mature interpersonal relationships, increased independence and in many cases, increased responsibility.⁴ White and colleagues argue the transition out of high school (also called “emerging adulthood”), rather than transition into college, puts individuals at greater risk for substance use and related problems.⁴
- **Time-limited period of increased use as students enter college.** Similar to transitioning out of high school, transitioning into college presents new stressors for students such as leaving their old social support network and developing a new one, anxiety about forming relationships, increased academic expectations, and little to no adult supervision. Studies suggest these stressors lead to a period of accelerated substance use that for many, decrease into young adulthood.⁴
- **Students’ perception of the consequences of marijuana use.** Kilmer and colleagues found first year college students that did not use marijuana had higher perceptions of negative academic (e.g., getting good grades) and social (e.g., ability to make new friends) consequences than students that were using. The same study found no difference in perception of negative consequences between less frequent (i.e., used marijuana on 1 to 4 days in the past 90 days) and more frequent (i.e., used marijuana on 5 or more days in the past 90 days) first year college marijuana users.³
- **Housing arrangements.** Some studies show group living arrangements (e.g., dorms, apartments, etc.) increases the risk of using substances and heavy drinking.⁴

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First-Year College Students, *continued*

“That abstainers perceive greater risks related to marijuana use than users suggests that perceived risks may be particularly relevant with respect to initiation of use.”

Kilmer, et al., 2007

Potential Prevention Strategies

Little research exists on strategies for addressing cannabis use among first year students; however, the following may provide ideas for potential prevention efforts:

- Improve systematic universal screening, educational and early intervention of first-year college students.¹
- Broaden definitions of problem cannabis use beyond CUD criteria. Calderia and colleagues argue against limiting diagnostic criteria to cannabis use disorders (CUD) as defined in the DSM-IV as a large proportion of first-year students that use cannabis experience problems without meeting CUD criteria. In their study of first-year students, one-third of those reporting cannabis-related problems failed to meet CUD criteria.¹
- Develop comprehensive and multi-dimensional prevention approaches for working with students using cannabis. Schools should consider strategies focused on addressing wellness and psychosocial aspects of a student’s life.¹
- Kilmer and colleagues focused on perceived risk of cannabis use on academic and social outcomes suggest that student perception of the risks of cannabis use may be relevant with respect to initiation of use. The authors argue, “...highlighting the potential consequences of marijuana use to students who have never tried marijuana may contribute to continued abstinence.”³

Citations

1. Calderia, K.M., Arria, A.M., O’Grady, K.E., Vincent, K.B. and Wish, E.D. (2008). The occurrence of cannabis use disorders and other cannabis-related problems among first-year college students. *Addictive Behaviors*, 33:397-411.
2. Degenhart, L., Hall, W. and Lynskey, M. (2003). Exploring the association between cannabis use and depression. *Addiction*, 98: 1493-1504.
3. Kilmer, J.R., Hunt, S.B., Lee, C.M, and Neighbors, C. (2007). Marijuana use, risk perception, and consequences: Is perceived risk congruent with reality? *Addictive Behaviors*, 32:3026-3033.
4. White, H.R., Labouvie, E.W., and Papadaratsakis, V. (2005). Changes in substance use during the transition to adulthood: A comparison of college students and their noncollege age peers. *Journal of Drug Issues*, 35(2): 281-305.