

9

Marijuana Use Prevention

High Risk Populations: Tobacco Users

What does the population look like?

The 2013 College Student Health Survey (CSHS) Report, which summarizes findings from 29 Minnesota two- and four-year postsecondary schools, showed the current tobacco use rate for students who completed the survey as 23.1%.

What is the prevalence of marijuana use among tobacco users?

- One study using nationally representative data found that 74% of current marijuana users smoked cigarettes, compared to 30% of non-users. The study also found the odds of becoming a tobacco smoker increased with the *frequency* of marijuana use, with current marijuana users being 5 times more likely, past year marijuana users 3.5 times more likely, and former marijuana users twice as likely to use tobacco.⁷ Daily cannabis users in another study who were not tobacco dependent at age 20 were 3.5 times more likely to develop nicotine dependence by age 24.³
- A systematic review of the literature found that young people who use marijuana were 2 to 5 times more likely to use tobacco, as compared to their peers who do not use marijuana. Similarly, compared to their peers that did not use tobacco, young people that use were 3 to 6 times more likely to use marijuana.⁶
- The 2009 National Survey on Drug Use and Health data showed 58% of cigarette smokers, compared to 12% of non-smokers, reported lifetime marijuana use. Similarly, 90% of marijuana users, compared to 47% of non-users, reported using tobacco at some point in their lives.²

What are the consequences of co-using tobacco and marijuana among young people?

Evidence suggests the co-use of tobacco and marijuana is associated with an increased likelihood of the following problems:

- **Becoming a first-time smoker.** Marijuana use, particularly smoking, may cause students to initiate tobacco use. One study showed students learned inhalation of vapors by first smoking marijuana, which subsequently taught them how to smoke cigarettes.⁸ Students in the same study started smoking marijuana first because they perceived marijuana to be safe, while they viewed cigarettes as dangerous.⁸

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

9

Tobacco Users, continued

“...growing evidence suggests that nicotine dependence and persistent cigarette smoking may be the leading, and most alarming, public health consequence of cannabis use.”
Agrawal et al., 2008

- **Becoming a frequent smoker.** Studies show early, frequent, and recent cannabis use increased the odds of transitioning to daily smoking and nicotine dependence.^{2,7}
- **Inability to quit smoking.** Smoking marijuana has been shown to be a hindrance for quitting tobacco for some people. Young people using tobacco report smoking marijuana makes it more difficult to follow through on their intention to quit smoking cigarettes.^{1,4}

What helps explain the relationship between tobacco and marijuana use among young adults?

- **Marijuana and tobacco have an unclear “gateway” relationship.** While tobacco use is significantly and directly correlated with marijuana use, the causal relationship is unclear. Evidence suggests both substances act as gateway substances for one another. That is, marijuana use can act as gateway for cigarette smoking and cigarette smoking (particularly early onset cigarette use) can act as a gateway for marijuana use.^{1,3,6,7} It is important to note the sequencing of use varies across cultural groups.⁶
- **Marijuana and tobacco use the same delivery methods.** Marijuana and cigarettes share the same delivery systems including vaping, rolling and the use of blunts (i.e., rolling marijuana in cigar or cigarillo shells), which may support co-use.⁶ Marijuana and tobacco can also be administered together (e.g., marijuana cigarettes).⁶
- **Marijuana and tobacco may have a mutually-reinforcing relationship.** There is evidence that suggests marijuana and tobacco are complimentary markets. When the price for marijuana goes up and use decreases, tobacco use also decreases.² Additionally, the level of cigarette smoking has been shown to be directly associated with frequency of marijuana use.⁶ Anecdotally, students may perceive tobacco as helpful in counteracting the effects of marijuana and helping them wake up to attend class and take notes, as well as helping prolonging the “euphoric effects of marijuana.”⁸
- **Marijuana and tobacco are associated with poor mental health problems.** One systematic review of the literature found young people (ages 13 to 25) diagnosed with mental health problems, alcohol use disorders or behavioral problems were at higher risk for using tobacco and marijuana, compared to young people with no such problems. The same study found co-use of tobacco and marijuana was related to greater depressive symptoms and likelihood of a depression diagnosis.⁶



Tobacco Users, *continued*

Potential Prevention Strategies

Little research exists on strategies for addressing dual use; however, the following directions may provide potential prevention strategies:

- Incorporating marijuana prevention into existing tobacco cessation programs.
- Developing and enforcing tobacco-free residence hall policies. One study showed enforcement of tobacco-free residence hall policies eased enforcement of illegal marijuana use on campus.⁵
- Offering motivational interviewing-based interventions on alcohol, tobacco and marijuana.

Citations

1. Amos, A., Wiltshire, S., Bostock, Y., Haw, S., and McNeill, A. (2004). 'You can't go without a fag...you need it for your hash' – a qualitative exploration of smoking, cannabis and young people. *Society for the Study of Addiction*, 99, 77-81.
2. Agrawal, A., Budney, A.J. and Lynskey, M.T. (2012). The co-occurring use and misuse of cannabis and tobacco: a review. *Society for the Study of Addiction*, 107, 1221-1233.
3. Agrawal, A., Madden, P.A.F., Bucholz, K.K., Heath, A.C., and Lynskey, M.T. (2008). Transitions to regular smoking and to nicotine dependence in women using cannabis. *Drug and Alcohol Dependence*, 95, 107-114.
4. Ford, D.E., Vu, H.T., and Anthony, J.C. (2002). Marijuana use and cessation of tobacco smoking in adults from a community sample. *Drug and Alcohol Dependence*, 67: 243-248.
5. Gearson, M., Allard, J.L., and Towvim, L.G. (2010). Impact of Smoke-Free Residence Hall Policies: the Views of Administrators at 3 State Universities. *Journal of American College Health*, 54:3, 157-165.
6. Ramo, D.E., Liu, H., and Prochaska, J.J. (2012). Tobacco and marijuana use among adolescents and young adults: A systematic review of their co-use. *Clinical Psychology Review*, 32: 105-121.
7. Richter, K.P., Kaur, H., Resnicow, K., Naxir, N., Mosier, M.C., and Ahluwalia, J.S.. (2005). Cigarette smoking among marijuana users in the United States. *Substance Abuse*, 25:2, 35-43.
8. Tullis, L.M., Dupont, R., and Frost-Pineda, K. (2003). Marijuana and Tobacco. *Journal of Addictive Diseases*, 22:3, 51-62.