

Cannabis Use and Mental Health

Partners in Prevention (PIP) is Missouri's higher education substance misuse consortium dedicated to creating healthy and safe college campuses. The coalition is comprised of 24 public and private colleges and universities in the state working to prevent high-risk behaviors by implementing evidence-based strategies. To measure progress and obtain data needed for the implementation of programs, PIP created the Missouri Assessment of College Health Behaviors (MACHB) Survey. The MACHB is an annual, online survey that has been implemented each spring since 2007. The survey assesses the roles that alcohol, drugs (illegal and prescription), tobacco/nicotine, interpersonal violence, and mental health have on student health and wellness. This brief will focus on the intersection of cannabis use and mental health concerns among Missouri college students. The MACHB survey asks students about their marijuana/cannabis use, as marijuana may be a more recognizable name for students, however in this brief, only the term 'cannabis' will be used.

National Data

Cannabis is the most commonly used illicit drug among college students in the United States with 43% of students reporting that they had used cannabis in the past year in 2019.¹ Multiple studies have linked cannabis use to mental health concerns such as anxiety, depression, psychosis, and schizophrenia, though cause has not been determined.² A recent analysis of survey data of young adults ages 18-35 indicated that cannabis use was associated with increased risk of thoughts of suicide and suicide attempts.³

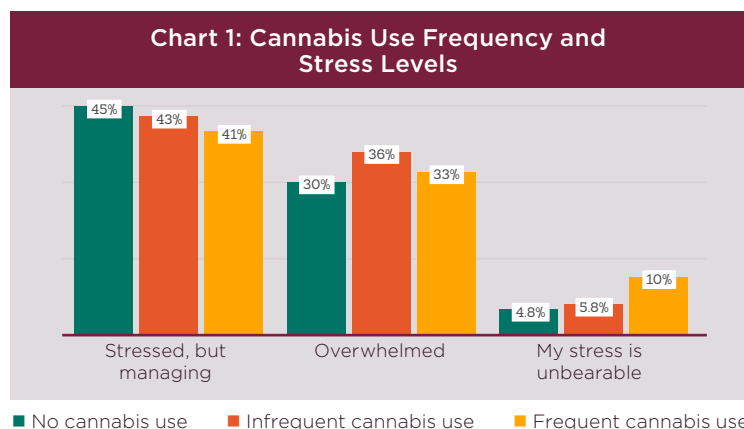
Missouri Data

According to the 2021 MACHB, 28% of Missouri college students reported using any type of cannabis at least once in the past year. Approximately 9.9% of Missouri college students reported using cannabis one or more times per week and will be referred to in this brief as students who frequently use cannabis. Around 18% of Missouri college students use cannabis 1-2 times per month or less and will be referred to as students who infrequently use cannabis.

Cannabis Use and Stress

The MACHB asks students to report how stressed they have felt in the past 2 weeks using a likert scale ranging from experiencing no stress up to experiencing unbearable stress. Overall, there appears

to be a positive correlation between cannabis use and higher stress levels, with students who frequently use cannabis reporting the highest levels of unbearable stress (shown in chart 1).



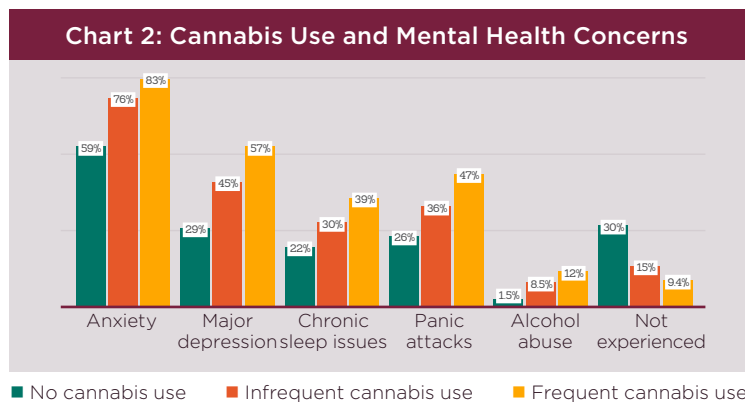
The MACHB also asks students to report ways that they have relieved stress in the past 2 weeks. Students who use cannabis (whether frequently or infrequently) were more likely to report using substances such as tobacco/nicotine, alcohol, and cannabis to relieve their stress*.

Table 1: Which of the following have you done in the past two weeks to relieve stress?

	No cannabis use	Infrequent cannabis use (1-2 times per month or less)	Frequent cannabis use (1 or more times per week)
Drank alcoholic beverages	4.6%	14%	11%
Smoked tobacco/nicotine products	2.4%	7.7%	10%
Used cannabis	0%	5.3%	49%

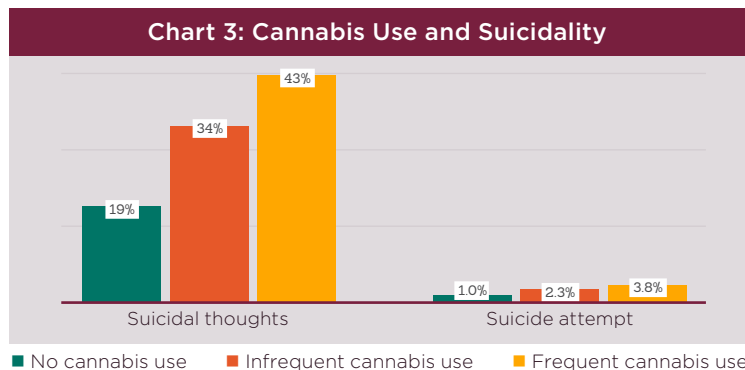
Cannabis Use and Mental Health

Missouri college students are also asked to report if they have experienced various mental health concerns in the past year. As shown in chart 2, past year experiences of mental health concerns are higher among both students who frequently and infrequently use cannabis compared to students who do not use. Additionally, while 30% of students who do not use cannabis reported that they had not experienced a mental health concern in the past year, only 15% of students who infrequently use cannabis and 7.9% of students who frequently use cannabis reported that they had not experienced a mental health concern.



Cannabis Use and Suicide

Questions about thoughts of suicide or attempted suicide in the past year are also included on the MACHB in the section of questions related to mental health. Past year rates of suicidal thoughts and suicide attempts by cannabis use frequency are shown in chart 3. Again, there is a positive correlation between frequency of cannabis use and both suicidal thoughts and attempts in the past year.



Summary

While causation cannot be determined from this data, a correlation exists between cannabis use frequency and stress, experiences of mental health concerns, and suicidality. It is important to note that students may be using cannabis as a coping mechanism or to self-medicate to deal with stress and mental health concerns. A best practice recommendation is to include cannabis use screening (such as the **CUDIT-R**) and brief intervention in counseling and health clinic settings. Additionally, the strong correlation between frequent cannabis use and suicidality indicates that students who screen positive for cannabis use should be asked about suicidal ideation, and vice versa. See below for other resources related to cannabis use prevention.

Resources

- [CADE Higher Education Cannabis Prevention Toolkit](#)
- [Michigan Collegiate Cannabis Prevention Toolkit](#)
- [Partners in Prevention Cannabis Toolkit](#)

Contact Partners in Prevention at (573) 884-7551.

*The question about ways to relieve stress is select up to 3 choices, with a total of 15 pre-defined options, an 'other' open text option, and an 'I did nothing to relieve stress' option.

Report prepared by Margo Leitschuh, Communications Coordinator. Data prepared by Dong Ding, Research Coordinator. Published August 2021, Updated December 2021.

1. Schulenberg et al. (2019). Monitoring the Future: National Survey Results on Drug Use, 1975-2019: Volume 2. National Institute on Drug Abuse and National Institutes of Health.
2. Marijuana Research Report (2020). National Institute on Drug Abuse.
3. B. Han, W.M. Compton, E.B. Einstein, N.D. Volkow (2021). Associations of Suicidality Trends with Cannabis Use as a Function of Sex and Depression Status.