

# Cannabis Use and Frequent Use on Missouri Campuses

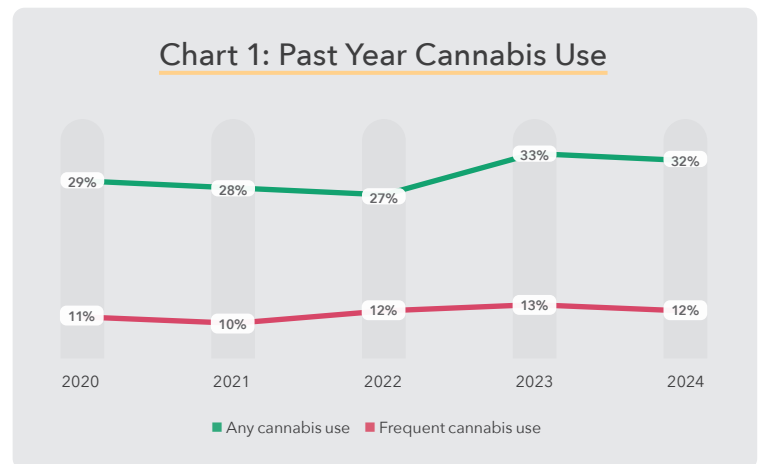
Partners in Prevention (PIP) is Missouri's higher education substance misuse consortium dedicated to creating healthy and safe college campuses. The coalition is comprised of 26 public and private colleges and universities in the state working to prevent high-risk behaviors by implementing evidence-based strategies, including education, social norming campaigns, policy review, enforcement, and more. This brief includes data for the 23 4-year institutions in the coalition; 2-year campuses participate in a separate version of the survey, and their data is not included in this statewide aggregate. 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 cannabis use among Missouri college students, including prevalence, cannabis use trends, motivations for and consequences from use, policy awareness, student attitudes towards use, and how to move forward with Partners in Prevention.

## Introduction/Prevalence

Each year on the MACHB, students are asked to self-report their behaviors related to cannabis use. Following the legalization of cannabis for adult/recreational use in Missouri in late 2022, the percentage of students on 4-year campuses who reported using cannabis in the past 12 months peaked at 33% in 2023. This year's survey results indicate that overall cannabis use has since declined slightly, with 32% of students reporting using within the past 12 months.

The survey also asks users to report their frequency of use, with response options ranging from 1-6 times per year (14%), 1-2 times per month (6.3%), 1-2 times per week (4.2%), 3 or more times per week (3%), and daily (5%). In this brief, frequent users are defined as those who reported using any form of cannabis 1 or more times per week. In 2024, approximately 12% of all students (38% of past-year cannabis users) were

identified as frequent users. Chart 1 depicts the trends in both overall and frequent cannabis use since 2020.



The MACHB not only asks students to report their frequency of cannabis use, but the various types or forms of cannabis used. The 2024 survey indicated that 24% of students smoked cannabis, 25% consumed edible products, 20% used vaporized forms, 8.0% reported using in a derivative or concentrated form (the 2024

survey provided wax, oil, dabs, and shatter as examples of derivative cannabis forms), and 2% indicated that they consumed cannabis in some other way. Notably, in 2024, edible forms replaced smoked forms as the predominant method of cannabis consumption, while vaporized use remains the third most popular form of cannabis. The statewide average usage rates since 2020 for each form of cannabis are shown in Table 1. Among frequent cannabis users, the most frequently endorsed forms of cannabis used one or more times per week included smoked forms (64%), vaporized forms (57%), and edibles (28%), while derivatives (14%) and other forms (4.6%) were less common.

**Table 1: Forms of Cannabis Used from 2020-2024**

	2020	2021	2022	2023	2024
Smoked	26%	24%	24%	27%	24%
Edible	18%	20%	21%	27%	25%
Vaporized	15%	16%	18%	21%	20%
Derivative	11%	9.3%	12%	12%	8.0%
Other	2.3%	2.0%	5.0%	5.0%	2.2%

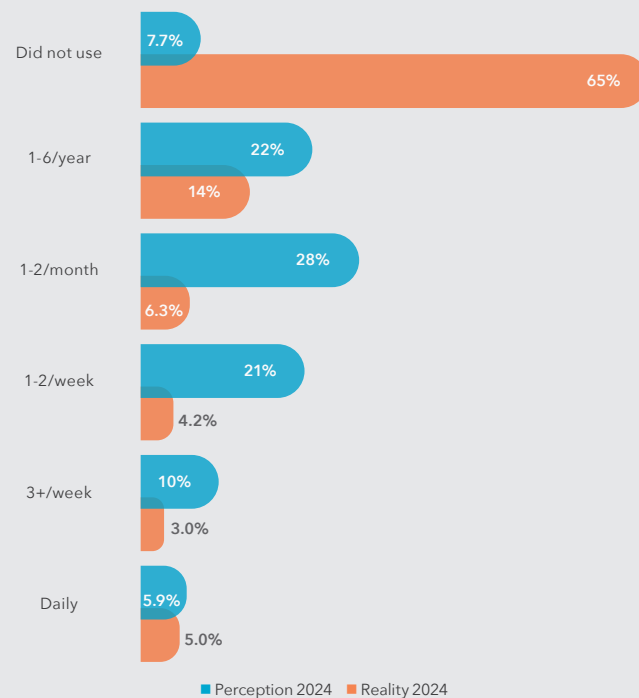
In addition to being prompted to report their own frequency of use, students are also asked about their perception of how often the typical student uses cannabis. This allows the comparison between perceived frequency versus actual frequency of use, with perception often exceeding reality. The 2024 survey revealed that although nearly 87% believe that the typical student on their campus uses cannabis at least once per year, in actuality, 65% of students reported not using in the past 12 months. Chart 2 illustrates this discrepancy in perception and reality in the past year.

## Cannabis Use Among Subpopulations

The prevalence of cannabis use varies between different student subpopulations. Across all identified subgroups, those who reported using tobacco products in the past year exhibited the highest rates of cannabis use, with 65% reporting any use and 29% categorized as frequent users. Another subpopulation with use and frequent use rates exceeding the statewide average included

students who identify as lesbian, gay, bisexual, queer, questioning, asexual, or pansexual (LGBQQAP); 49% of these students indicated past-year use and 20% were identified as frequent users. Conversely, students under the age of 21 used cannabis less frequently compared to other subgroups and the statewide average, with 28% reporting any use and 9.5% reporting frequent use. Chart 3 displays any and frequent use in the past year by subgroup in 2024.

**Chart 2: Cannabis Use Perception vs. Reality**



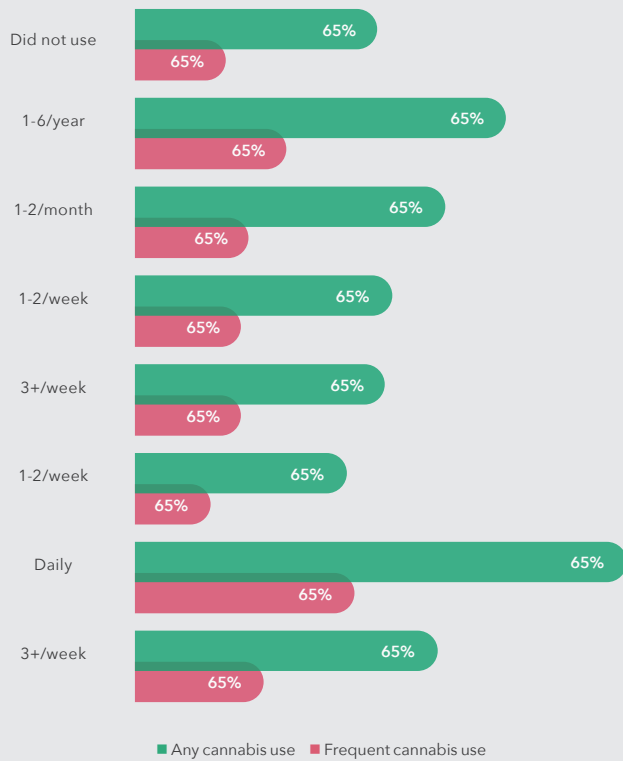
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dropping out of college, experiencing interruptions in their enrollment, attending class less frequently, and, as a result, achieving lower grades.<sup>1,2</sup>

**Chart 3: Cannabis Use Among Subpopulations**



Moreover, students who used cannabis in 2024 were more likely to report experiences of interpersonal violence (IPV) throughout their lifetime, mental health concerns, and thoughts of quitting their education. Specifically, 40% of past-year cannabis users reported having experienced any IPV in their lifetime, compared to 41% of frequent users and 26% of all surveyed students. While 73% of all students reported experiencing any mental health concern, cannabis users displayed a higher prevalence, with 86% of past-year users and 92% of frequent users reporting experiencing at least one mental health concern in the past year. These high rates of mental health challenges among users and frequent users suggest that students may be using cannabis as a coping mechanism for trauma or mental health concerns. Furthermore, 24% of users and 28% of frequent users indicated considering quitting school entirely, compared to 18% of overall students. These associations are of particular concern as previous studies have indicated that individuals who experience cannabis use disorder or heavy use are more prone to

## Motivations for and Consequences of Cannabis Use

The 2024 survey also asks students to report their motivations for cannabis use. In 2024, cannabis users most frequently endorsed using cannabis to relax (72%), to have fun with friends (59%), because they like how it feels (46%), and to get high (44%). Frequent cannabis users expressed differing motivations for use, with 92% reporting using to relax, 68% using to help with anxiety or other mental health concerns, 68% using to help them sleep, and 64% using because they enjoy how it feels. Students who were identified as frequent users were also more likely to report using because they perceived cannabis as safer than alcohol or other substances (51%) or for pain relief or medical purposes (40%) compared to all cannabis users. A more thorough examination of the differences in motivations for use between all cannabis users and frequent users in 2024 is displayed in Table 2.

**Table 2: Motivations for Cannabis Use Among All and Frequent Cannabis Users**

	All Cannabis Users	Frequent Cannabis Users
To relax	72%	92%
To have fun with friends	59%	50%
To get high	44%	56%
The consequences of my cannabis use are minimal	26%	36%
Because my friends are using marijuana/cannabis	19%	18%
I have nothing better to do	13%	18%
I like how it feels	46%	64%
To escape/so I can forget my problems	20%	30%

Table 2 continued	All Cannabis Users	Frequent Cannabis Users
It helps me to relieve pain/for medical purposes	21%	40%
It is now legal for me use marijuana/cannabis	22%	36%
To help with anxiety and other mental health concerns	41%	68%
To help me sleep	44%	68%
I feel like it is safer to use than alcohol/other substances	31%	51%

In addition to the various behaviors and motivations associated with cannabis use, the MACHB asks students to disclose any consequences experienced due to their cannabis use. In 2024, 1 out of 4 cannabis users (25%) reported driving after using cannabis and 21% indicated that they had attended class after using cannabis. Students also reported several physical symptoms, with 47% reporting feeling in a fog, sluggish, tired, or dazed the following morning, 19% experiencing nausea or vomiting, and 26% needing to increase their cannabis intake due to developing a higher tolerance. Frequent cannabis users were more likely to experience adverse consequences related to cannabis use, with 55% feeling foggy or sluggish the next day, 24% experiencing feeling sick to their stomach or vomiting, 40% attending class after using, and 58% indicating they needed to use more because of an increased tolerance. Additionally, frequent users were nearly twice as likely to report driving after using cannabis, with 47% acknowledging that they had driven after using in the past year, and 24% admitting to doing so five or more times within that period.

## Intentions to Change

The 2024 survey also explores students' intentions to change their cannabis use habits following the 2022 change in Missouri state law legalizing cannabis. Among non-users, 90% reported that they do not plan to start using cannabis, though 7.9% indicated that they do not currently use but are "curious to try

it or start using". When asked about their intentions to change the way they use cannabis, 20% of current users reported currently trying to use less often or quit, 4.1% indicated that they were ready to try to use less frequently or quit, and 11% reported thinking about using less or quitting, and 62% endorsed seeing no need to change their cannabis use. Conversely, frequent users were more likely to report currently attempting to decrease their cannabis intake or quit; 25% indicated that they were currently trying to lower their use or quit, 6.5% noted that they were ready to try to use less or quit, 21% reported thinking about decreasing use, and 45% saw no need to change their current frequency of use. These findings suggest that a notable portion of users, frequent users, and non-users are considering either experimenting with or adjusting their use moving forward.

## Summary

Despite the initial surge in cannabis use following legalization in Missouri, the 2024 MACHB suggests that the prevalence of use may be stabilizing with the slight decline observed in this year's survey. This stabilization indicates a potential adjustment period where students are settling into new patterns of cannabis consumption amidst the shifting legal and social landscape surrounding cannabis. Nevertheless, the persistence of frequent use and the ongoing negative consequences reported by students highlight the need for continued research and targeted prevention efforts. This particularly important for subgroups such as tobacco users and LGBTQQAP students, who exhibit increased rates of cannabis use and may face unique challenges and risks. While the survey reveals that some students are not planning to alter their cannabis use significantly, there remains a considerable portion contemplating changes in their consumption habits. This presents an opportunity to influence future cannabis-related behaviors and attitudes by tailoring educational and support programs to address the specific needs and motivations of diverse student populations. With students' perception of cannabis use on Missouri campuses far exceeding the true usage rates, campuses must couple prevention

efforts with social norm campaigns to influence the narrative surrounding student cannabis use. Partners in Prevention provides numerous resources in the PIP Cannabis Toolkit, which includes evidence-based strategies, educational resources, and further

## **Resources**

### **Time to Change? Assess your Substance Use**

PIP provides the Time to Change? website, which includes assessment and screening tools, educational materials, and resources for both students and campus professionals. This website is host to the CUDIT-R Screening Tool (Cannabis Use Disorder Identification Test – Revised). [Learn more here.](#)

### **Partners in Prevention Cannabis Toolkit**

PIP research, briefs, and educational resources related to cannabis, including numerous evidence-based practices and interventions. [Learn more here.](#)

## **Michigan Collegiate Cannabis Prevention Toolkit**

[Learn more here.](#)

## **Substance Abuse and Mental Health Services Administration (SAMHSA)**

Resources offered by the Substance Abuse and Mental Health Services Administration, including educational materials, assessments, and multimedia resources. SAMHSA also provides a national helpline at 1-800-662-HELP (4357). [Learn more here.](#)

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

Brief and Research prepared by Partners in Prevention Research Team Intern, Amy Dobrzycki. Published in October of 2024.

#### Citations

1. Hunt J, Eisenberg D, Kilbourne AM. Consequences of receipt of a psychiatric diagnosis for completion of college. *Psychiatry Serv.* 2010;61(4):399-404. doi:10.1176/ps.2010.61.4.399
2. Arria AM, Caldeira KM, Bugbee BA, Vincent KB, O'Grady KE. The academic consequences of marijuana use during college. *Psychol Addict Behav.* 2015;29(3):564-575. doi:10.1037/adb0000108