

# CBD Use Among Missouri College Students

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 23 public and private colleges and universities in the state who work to lower high-risk behaviors by implementing strategic plans for prevention utilizing 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. In the 2020 MACHB survey, two new questions were added to ask students about Cannabidiol (CBD) use and reasons contributing to use. This brief will focus on CBD use in relation to substance use, mental health concerns, stress, and suicidal ideation.

## Background

CBD is one of the naturally occurring cannabinoids found in cannabis plants. CBD based products, such as oils, supplements, gums, and high concentration extracts are available online for the treatment of many ailments, although these are not medically sanctioned. CBD and tetrahydrocannabinol (THC) are both psychoactive, but CBD does not produce the high associated with THC. Although laws vary by state regarding use of cannabis and THC products, CBD is currently legal in all states<sup>1</sup> and thus the use of CBD products has become more prevalent in recent years<sup>2</sup>. Seventeen percent (17%) of Missouri college students report using CBD products in the past year. The table below shows the most common reasons contributing to students' CBD use.

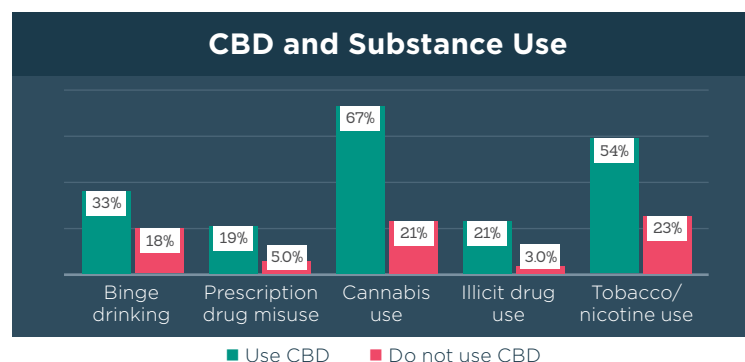
Reasons Contributing to CBD Use	
To treat anxiety	67%
To reduce physical pain	48%
Other reasons*	14%
To help with smoking cessation and drug withdrawal	5.0%
To treat diseases	4.6%

\* Other reasons include: "to try it", "curious", "want to see what it is like", or "sleep aid"

## CBD Use and Other Substances

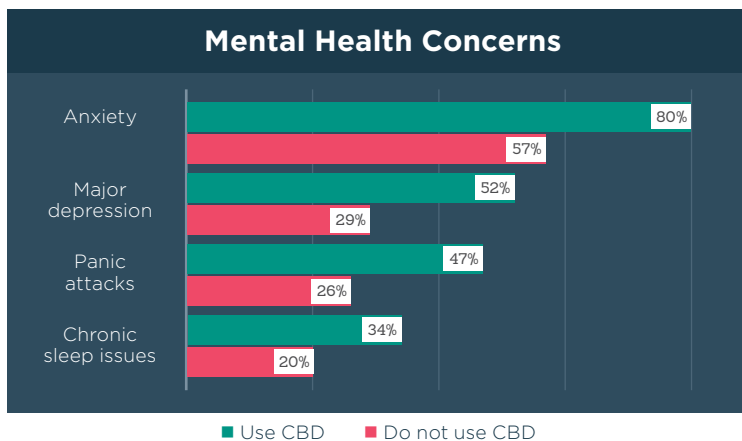
Students who report using CBD products in the past year report higher rates of other substance use than

students who do not use CBD. Among students who use CBD, 33% report binge drinking (defined as consuming 5+ drinks in a 2-hour period), while 18% of students who do not use CBD report binge drinking. Students also report rates of prescription drug misuse, which is defined as either misusing their own prescription or misusing medications for which they do not have a prescription. Rates of prescription drug misuse are higher among students who use CBD than students who do not use CBD (19% and 5.4%, respectively). The most significant difference is for cannabis use in the past year: 67% of students who use CBD report using cannabis while only 21% of students who do not use CBD report using cannabis. Twenty-one percent (21%) of students who use CBD report illicit drug use and 3.4% of students who do not use CBD report illicit drug use in the past year. Additionally, 54% of students who use CBD report tobacco/nicotine use, while 23% of students who do not use CBD report tobacco/nicotine use.



## CBD Use and Mental Health

Students who use CBD experience mental health concerns at higher rates than students who do not use CBD. Eighty percent (80%) of students who report using CBD products also experienced anxiety in the past year, while 57% of students who do not use CBD experienced anxiety in the past year. The most common reason students reported for using CBD is to treat anxiety, so this data may be related. Students who use CBD experienced major depression at twice the rate of students who do not use CBD (52% and 29%, respectively). The same is true for students reporting panic attacks in the past year (47% of students who use CBD and 26% of students who do not use CBD). Students who use CBD also report experiencing chronic sleep issues in the past year at a higher rate than students who do not use CBD (34% and 20%, respectively).



## CBD Use and Stress

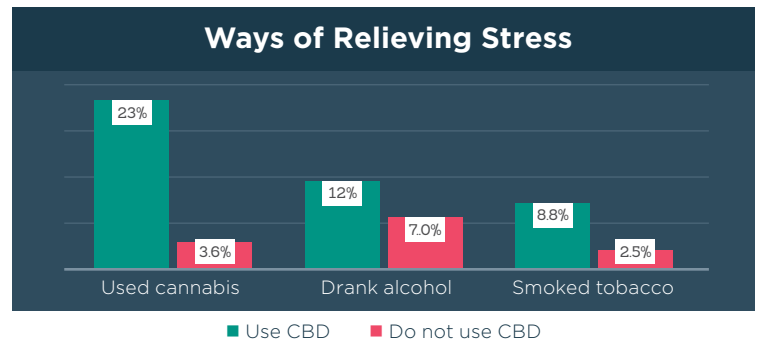
Students who use CBD report experiencing stress at higher rates than students who do not use CBD. The MACHB survey this year asked students about their stress levels in the past two weeks; students who use CBD reported feeling overwhelmed or that their stress was unbearable (45%) more often than students who do not use CBD (31%). Forty-three percent (43%) of students who use CBD report that their stress has impacted their academic life 'considerably' or 'a great deal', compared to 28% of students who do not use CBD. Students who use CBD also report stress impacting their personal life 'considerably' or 'a great

deal' at a higher rate than students who do not use CBD (54% and 37%, respectively).

The main sources of stress are similar for students who use CBD and students who do not use CBD, but students who use CBD report most sources of stress at higher rates. There is an especially large difference among students who report mental health issues as a source of stress (54% of students who use CBD and 30% of students who do not use CBD).

Sources of Stress	Use CBD	Do not use CBD
School/academics	89%	90%
Financial concerns	64%	55%
Future plans	61%	52%
Time management	57%	52%
Mental health issues	54%	30%

Students who reported using CBD also reported using substances to relieve their stress at higher rates than students who do not use CBD. The figure below compares students who use CBD and students who do not use CBD for the usage rates of cannabis, alcohol, and smoked tobacco.



## CBD Use and Suicidal Ideation

On the MACHB survey, students are asked about suicidal thoughts in the past year: students who use CBD report suicidal thoughts at higher rates than students who do not use CBD. The rate of students who use CBD who reported suicidal thoughts in the past year is nearly twice that of students who do not use CBD who reported suicidal thoughts in the past year (41% and 21%, respectively). As previously mentioned in this brief, rates of anxiety and major depression are higher among students who use CBD; both of these mental health concerns may be related to suicidal ideation.

## Summary

This data shows the extent to which CBD use is a growing concern. Students who use CBD have higher rates of substance use, mental health concerns, stress, and suicidal ideation than their peers who do not use CBD products. It is important to note that CBD does not cause these higher rates, but rather students may use CBD to mitigate mental health or other concerns. Future implementations of the Missouri Assessment of College Health Behaviors may further examine students' CBD use. Limited research is available regarding the safety and effectiveness of CBD products<sup>3</sup>, however, the data in this brief

demonstrates the need for educational efforts on campuses to address this growing concern. For more information about Partners in Prevention and to explore our research, visit [pip.missouri.edu](https://pip.missouri.edu).

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

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Published November 2020.

1. <https://www.who.int/medicines/access/controlled-substances/CannabidiolCriticalReview.pdf>

2. <https://www.health.harvard.edu/blog/cannabidiol-cbd-what-we-know-and-what-we-dont-2018082414476>

3. <https://www.health.harvard.edu/blog/cannabidiol-cbd-what-we-know-and-what-we-dont-2018082414476>

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Funded by the Missouri Department of Mental Health, Division of Behavioral Health