Clinical Quicknotes
on Substance Use Disorders

Substance Use Disorders
Center of Excellence

Cannabis and Mental Health: Navigating Clinical Realities in Ohio

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Quick Takes

- Clinicians are encountering more patients who use cannabis regularly or want guidance on using it to treat psychiatric conditions.
- Patients increasingly view cannabis as a natural or low-risk option for mental health treatment, especially those frustrated with conventional approaches.
- Evidence on the efficacy and tolerability of cannabis for mental health disorders is minimal, and high-quality studies are lacking.
- Repeated cannabis use—recreational or medical—can worsen mental health and lead to cannabis use disorder (CUD) in vulnerable individuals.
- Certain individuals, particularly those with underlying mental illness or a family history of psychosis or substance use disorder (SUD), are at higher risk for adverse outcomes with cannabis use.
- Clinical care must include honest, informed conversations about what is known—and not known—regarding the effects and potential problems with cannabis use, including its effects in psychiatric disorders.

Case History:

> *Marissa is a 25-year-old woman presenting to a community mental health clinic with generalized anxiety disorder (GAD). Over the past few years, she has tried multiple treatments—including SSRIs, SNRIs, and ongoing psychotherapy—but continues to struggle with anxiety that disrupts her work, social life, and daily functioning. When a friend suggested cannabis as a "natural" alternative to medication, Marissa was intrigued—especially given her frustration with conventional treatments. She recalls trying cannabis with friends in high school and using it occasionally from ages 19 to 24. Now, sitting across from you, she asks: "Could cannabis be a viable treatment for my anxiety?"*

Cannabis is the third most used psychoactive substance in the U.S., ranking behind only nicotine and alcohol. In 2023, 21.8% of individuals aged 12 and older reported past-year use, including 11.2% of adolescents.[1] These rates increased across all age groups from 2013 to 2021, except in those under age 18, where rates remained relatively stable.[2]

Cannabis use in the U.S. has grown dramatically in both public acceptance and legal access. As of February 2024, 74% of the U.S. population has access to medical cannabis, recreational cannabis, or both.[3] Ohio legalized cannabis for medical purposes in 2016, and for recreational use in adults 21 and over in 2023.[4] However, states' legalization efforts are inconsistent with federal laws that prohibit the possession and sale of cannabis, creating a conflict which has yet to be tested or resolved.

Cannabis normalization appears most clearly among young adults. While many view cannabis as low-risk, data suggest that about 9% of individuals who use cannabis may develop cannabis use disorder (CUD)—a figure that rises to 17% when use begins before age 17.5.

Ohio mirrors these national shifts. Though the effects of legalization in Ohio are not yet clear, marijuana use among Ohioans over 12 years old has increased in recent years.[1,6,7,8,9] Some people who are using cannabis are curious about incorporating it into their mental health care, and clinicians need to be prepared to answer their questions.

Tetrahydrocannabinol (THC), the primary psychoactive component of cannabis, produces the effects most people associate with being "high." THC exerts its influence by interacting with the brain's endocannabinoid system, a network of receptors involved in mood regulation, memory functioning, pain perception, and appetite regulation. Specifically, THC binds to CB1 receptors in the brain, altering the normal balance of neurotransmitters—especially dopamine. In normal brain functioning, small, steady bursts of dopamine are released to promote survival-related activities—like eating, social connection, and exercise—and naturally motivate us to repeat them. Drugs like THC produce a sense of euphoria that far exceeds the brain's natural reinforcement signals through a more intense and unregulated release of dopamine. Over time, the brain begins to associate cannabis use with pleasure and stress relief, reinforcing the behavior through learned reward pathways.[10]

This reward-reinforcement loop may contribute to dependence (CUD). Although many people view cannabis as a low-risk substance, repeated use—especially with high THC concentrations—can alter mood, cognition, and motivation.[9] This is particularly relevant as cannabis potency has increased markedly in recent decades, with THC concentrations escalating from 3.96% in 1995 to 16.14% in 2022,[12] which corresponds to levels found in many commercially available cannabis products.[13] Higher concentrations of THC are also associated with other adverse effects, including increased risk of psychiatric symptomatology and CUD.[14] While not everyone who uses cannabis will develop CUD, multiple other risk factors—such as early initiation, life stress, adverse childhood events, and underlying mental health conditions (as well as higher THC concentrations)—increase the likelihood of problematic use.[11]

> *Marissa comes in for a three-month follow-up appointment and informs the provider she is now using cannabis 2x a day. She states that she feels better after she uses it, but whenever she runs out of supply, the anxiety comes back more intensely than before. She is having difficulty focusing at work and wonders if she might have attention-deficit/hyperactivity disorder (ADHD). She has not seen a physician certified to recommend cannabis and is not sure what kind or strength of cannabis she is using. She used to buy smokable cannabis in college from a friend who had a medical marijuana card, and now she has been experimenting with different products available at the dispensary in her community. She wants your direction on how to use cannabis to treat her anxiety. You indicate that evidence does not support cannabis as an effective treatment for anxiety, and in the end may make it worse. You suggest treatment with medications she has not received before and specific anxiety-focused psychotherapy. She indicates that she will consider what you say.*

The short-term effects of cannabis use are well established and include impaired memory, motor coordination, and judgment. At higher doses, cannabis can also induce paranoia or transient psychosis. These acute effects are particularly concerning for adolescents and young adults, as they can interfere with academic performance, social functioning, and personal safety. Long-term cannabis use is associated with a range of negative outcomes, including CUD, altered brain development, poor educational achievement, diminished life satisfaction, chronic bronchitis (with smoked products), and increased risk of developing psychotic disorders.[15] More recent research reinforces these findings, linking heavy cannabis use in young adults to impaired performance, working memory, and motor task functioning.[16] Additionally, individuals hospitalized for CUD are at elevated risk of death compared to the general population.[17]

For women of childbearing age, cannabis carries specific risks. Cannabis use during pregnancy is associated with higher rates of gestational diabetes, preeclampsia, weight gain outside of clinical guidelines (both below and above), and placental abruption.[18] Evidence on the effects of prenatal cannabis exposure on the child is mixed but also indicates cause for concern. Prenatal cannabis exposure is consistently associated with low birth weight and preterm birth,[19,20] but findings on neurodevelopmental outcomes are less clear. One study found that children exposed to cannabis in utero showed poorer task planning abilities by age 5,[21] while another found no clear link to early childhood developmental delays.[22] Yet another study found that exposure to secondhand cannabis smoke early in life is associated with an increased risk of behavioral problems in children by age 2.[23] These discrepancies point to the need for further research, but also that the most cautious approach is to avoid cannabis exposure during and after pregnancy.

While public perception of cannabis as a therapeutic tool has grown, meaningful scientific support of benefit is lacking except for a few medical conditions. The synthetic cannabinoids dronabinol and nabilone are FDA-approved for chemotherapy-related nausea and vomiting, and dronabinol for anorexia and weight loss due to HIV/AIDS. Cannabidiol (CBD)—a constituent of whole-plant cannabis that lacks psychoactive properties—is approved for the treatment of certain types of seizures.[24] All three of these drugs (dronabinol, nabilone, and cannabidiol) are single-component cannabinoids and differ greatly from the multi-component cannabis that is procured from dispensaries or illicit sources, so no direct inference between their effects and cannabis can be made.[25]

Meaningful data also finds efficacy for cannabis in spasticity due to multiple sclerosis and in pain syndromes, though there is no FDA approval for either condition.[26] There is continuing research on the effectiveness of individual cannabinoids and multi-component cannabis in various other medical conditions.[25] Few rigorous studies have examined cannabis' effectiveness in psychiatric disorders, and although some anecdotal reports and small, uncontrolled trials report symptom relief, current evidence does not support its use for these conditions.[26,27,28]

When discussing cannabis with patients, clinicians must ensure that all information provided follows clinical and ethical standards of practice and is substantiated in the clinical literature, even if it conflicts with cultural norms. Although anyone over the age of 21 may procure recreational cannabis from licensed dispensaries in Ohio, only physicians who have obtained a "certificate to recommend" (CTR) from the State Medical Board of Ohio may recommend the use of medical cannabis, and only for conditions deemed "qualifying conditions." Any clinician who feels that cannabis is an important treatment consideration for a patient should make a referral to a clinician with this credential, unless they have the credential themselves. Credentialed providers should have sufficient training and expertise to determine whether it is appropriate to treat an individual with cannabis, based upon history, physical examination, and laboratory assessment, while considering potential benefits and risks of cannabis compared to conventional treatments (or no treatment), side effects, drug interactions, and other relevant medical and pharmacological information.[29] Clinicians may consider using the decision-making framework in the table below (Table 1) for guidance based on perceived benefit and clinician willingness to recommend.[30]

TABLE 1: RECOMMENDING MEDICAL MARIJUANA: A DECISION-MAKING FRAMEWORK[30]

Willing to Attest/ Recommend	Benefit Exists	No Benefit
Yes	Analogous to a physician's evidence-based decision to recommend any medication. Informed consent including education on: • Risks and benefits • Burdens of treatment • Other treatment options • Declining treatment	Analogous to requests for experimental or homeopathic treatment. If science is ambiguous, ethical obligation to provide usual education on topics covered in informed consent, and additional education about why the lack of evidence may increase risk. If harms clearly exceed benefits, decline to offer requested treatment and inform that it would be medically inappropriate to do so.
No	Ethical obligation to be transparent with patient. May have obligation to refer the patient to a provider who does not have objection to recommending.	Ethical obligation to be transparent with patient. Inform patient of reasons to decline this form of treatment, such as: • Institutional/personal/professional objections • Lack of scientific evidence
(Modified from Redinger, 2020)[30]		

Marissa opted to continue using cannabis despite the presentation of the risks and did not return for treatment for the next several years. The next time you see her, she is in your clinic for a follow-up after admission to the inpatient psychiatric unit for acute psychosis, where she was successfully treated with oral Abilify (aripiprazole). She reports a previously undisclosed family history of schizophrenia on her mother's side and reveals that after visiting you, her cannabis use increased, both in frequency and amount. After a few years, she started to exhibit bizarre behavior and developed paranoid delusions about her neighbors. Her hospitalization followed an assault on a neighbor, whom she believed—erroneously—was trying to abduct her. After hospitalization and initial treatment, Marissa reached out to her family, who have accompanied her to the appointment today for support. She feels the aripiprazole is working for her paranoia, but since stopping the marijuana, her anxiety is worse than ever, and she asks about treatment for anxiety and ways to reduce her cravings for cannabis.

Patients ready to reduce or quit cannabis should have a comprehensive assessment—including obtaining collateral input when possible. Co-occurring conditions like anxiety, ADHD, post-traumatic stress disorder (PTSD) or depression should be considered, and, if present, treated using FDA-approved/standard of care medications, as well as evidence-based psychotherapies. For cravings, medications like N-acetylcysteine, bupropion, and low-dose naltrexone may be considered, although none are FDA-approved for this use and the data is not robust. Withdrawal symptoms are self-limited and not physiologically problematic, but if desired can often be managed with non-addictive agents such as hydroxyzine, gabapentin, or buspirone for anxiety, and mirtazapine or quetiapine for insomnia.[31]

Research on the health impact of cannabis legalization is mixed. Medical cannabis laws (MCLs) have been associated with increases in CUD and cannabis poisoning but show little effect on youth cannabis use. Recreational cannabis laws (RCLs) have shown increases in cannabis poisoning among adults aged 18–24, increases in cannabis-related emergency department admissions and hospitalizations, and modest increases in past-month use in youth.[32,33] Effects of cannabis legalization on motor vehicle accidents, opioid use, alcohol-related harms, intentional injury, and mental health outcomes are less clear and vary state-to-state.[34] Despite the increased cannabis use seen with legalization, treatment for CUD has declined in recent years, underscoring the urgent need for targeted outreach, treatment, and education.[35]

Treatment options are discussed with Marissa. You indicate that it is important to address her psychosis, her cannabis use, and her anxiety. You mention that aripiprazole, while helpful for her psychosis, can be stimulating and exacerbate her anxiety and recommend a transition to oral quetiapine, which is less stimulating. She successfully commences treatment with quetiapine and tapers off the aripiprazole, with continued remission of her psychosis and much improvement in anxiety. She recognizes the relationship between her use of cannabis and psychotic symptoms and intends to remain abstinent from cannabis.

> *"Marijuana is a drug and should be treated as such. While there may be some beneficial therapeutic effects of marijuana, the public and particularly marijuana users themselves must understand the real harms that can occur when taking the substance."* [36]

Cannabis use has been a contentious issue for generations. Though in many states it is legal for medical use, recreational use, or both, it remains a drug that is addictive in vulnerable individuals and is illegal at the federal level. Regardless of the rationale for use or its legality, all individuals who use cannabis should be educated about its potential effects and potential harms based on current medical knowledge. Clinicians are advised to remain abreast of the evolving literature on medical and recreational cannabis to provide current and accurate information to those they treat.

For Additional Information on This Topic

- Cannabis (Marijuana): National Institute on Drug Abuse. Research Topic.
- Cannabis: American Society of Addiction Medicine. Online Continuing Education.
- Cannabis Use Disorder: Science, Trends and Clinical Implications: American Society of Addiction Medicine. Online Training.
- Cannabis-Related Disorders: Medscape Online. Online article.
- Medical Marijuana: State Medical Board of Ohio. Website.
- Medical Marijuana Course Bundle: Ohio State Medical Association. Online Continuing Education.
- Marijuana Toolkit: Prevention Action Alliance. Toolkit.
- Adult-Use Marijuana in Ohio: What You Need to Know: Ohio State University Moritz College of Law Drug Enforcement and Policy Center. Cannabis Fact-Sheet.

Upcoming Training on Substance Use Disorders

- Ohio Substance Use Disorders Center of Excellence: We provide multiple trainings on various topics in the coming months, throughout Ohio and online.
- Ohio Alcohol and Substance Use (AUD/SUD) ECHO: The Northeastern Ohio Medical University hosts virtual sessions on the first and third Fridays of each month.
- Considerations for Benzodiazepine Tapering: The American Society of Addiction Medicine provides on-demand eLearning.

At the SUD COE, we are committed to bringing you resources and trainings that meet your needs in providing care to patients with substance use disorders. Please let us know what suggestions you have for improving Clinical QuickNotes, or topics that you would like addressed by clicking here: QuickNotes Feedback Survey.

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References

1. Substance Abuse and Mental Health Services Administration. (2024). *Key substance use and mental health indicators in the United States: Results from the 2023 National Survey on Drug Use and Health* (HHS Publication No. PEP24-07-021, NSDUH Series H-59). Center for Behavioral Health Statistics and Quality, Substance Abuse and Mental Health Services Administration. https://www.samhsa.gov/data/sites/default/files/reports/rpt47095/National%20Report/National%20Report/2023-nsduh-annual-national.pdf
2. Mattingly, D. T., Richardson, M. K., & Hart, J. L. (2024). Prevalence of and trends in current cannabis use among US youth and adults, 2013-2022. *Drug and Alcohol Dependence Reports*, 12, 100253. https://doi.org/10.1016/j.dadr.2024.100253
3. Chapekis, A., & Shah, S. (2024). Most Americans now live in a legal marijuana state—and most have at least one dispensary in their county. *Pew Research Center.* Retrieved February 29, 2024, from https://pewrsr.ch/3uJfiBR
4. Hrdinova, J. (2024). *Ohio Medical Marijuana Control Program at six years: Evaluating satisfaction and perception.* Ohio State Legal Studies Research Paper No. 883, Drug Enforcement and Policy Center. https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4969788
5. Page, R.L., Allen, L.A., Kloner, R.A., Carriker, C.R., Martel, C., Morris, A.A., Piano, M.R., Rana, J.S. and Saucedo, J.F. (2020). Medical marijuana, recreational cannabis, and cardiovascular health: a scientific statement from the American Heart Association. *Circulation*, 142(10), pp.e131-e152. https://doi.org/10.1161/CIR.0000000000000883
6. Substance Abuse and Mental Health Services Administration. (2020). *Key substance use and mental health indicators in the United States: Results from the 2019 National Survey on Drug Use and Health* (HHS Publication No. PEP20-07-01-001, NSDUH Series H-55). Center for Behavioral Health Statistics and Quality, Substance Abuse and Mental Health Services Administration. https://www.samhsa.gov/data/sites/default/files/reports/rpt29393/2019NSDUHFFRPDFWHTML/2019NSDUHFFR1PDFW090120.pdf
7. Substance Abuse and Mental Health Services Administration. (2021). *Key substance use and mental health indicators in the United States: Results from the 2020 National Survey on Drug Use and Health* (HHS Publication No. PEP21-07-01-003, NSDUH Series H-56). Center for Behavioral Health Statistics and Quality, Substance Abuse and Mental Health Services Administration. https://www.samhsa.gov/data/sites/default/files/reports/rpt35325/NSDUHFFRPDFWHTMLFiles2020/2020NSDUHFFR1PDFW102121.pdf
8. Substance Abuse and Mental Health Services Administration. (2022). *Key substance use and mental health indicators in the United States: Results from the 2021 National Survey on Drug Use and Health* (HHS Publication No. PEP22-07-01-005, NSDUH Series H-57). Center for Behavioral Health Statistics and Quality, Substance Abuse and Mental Health Services Administration. https://www.samhsa.gov/data/sites/default/files/reports/rpt39443/2021NSDUHFFRRev010323.pdf
9. Substance Abuse and Mental Health Services Administration. (2023). *Key substance use and mental health indicators in the United States: Results from the 2022 National Survey on Drug Use and Health* (HHS Publication No. PEP23-07-01-006, NSDUH Series H-58). Center for Behavioral Health Statistics and Quality, Substance Abuse and Mental Health Services Administration. https://www.samhsa.gov/data/sites/default/files/reports/rpt42731/2022- nsduh-nnr.pdf
10. Popescu, A., Marian, M., Drăgoi, A. M., & Costea, R. V. (2021). Understanding the genetics and neurobiological pathways behind addiction. *Experimental and Therapeutic Medicine, 21*(5), 544. https://doi.org/10.3892/etm.2021.9976
11. Gorelick, D. A. (2023). Cannabis-related disorders and toxic effects. *New England Journal of Medicine, 389*(24), 2267-2275. https://doi.org/10.1056/NEJMra2212152
12. National Institute on Drug Abuse. (2024, July 16). *Cannabis potency data*. https://nida.nih.gov/research/research-data-measures-resources/cannabis-potency-data
13. Cash, M. C., Cunnane, K., Fan, C., & Romero-Sandoval, E. A. (2020). Mapping cannabis potency in medical and recreational programs in the United States. *PloS one, 15*(3), e0230167. https://doi.org/10.1371/journal.pone.0230167
14. Hines, L.A., Freeman, T.P., Gage, S.H., Zammit, S., Hickman, M., Cannon, M., Munafo, M., MacLeod, J. and Heron, J. (2020). Association of high-potency cannabis use with mental health and substance use in adolescence. *JAMA Psychiatry,* 77(10), pp.1044-1051. https://doi.org/10.1001/jamapsychiatry.2020.1035
15. Volkow, N. D., Baler, R. D., Compton, W. M., & Weiss, S. R. (2014). Adverse health effects of marijuana use. *New England Journal of Medicine, 370*(23), 2219–2227. https://doi.org/10.1056/NEJMra1402309
16. Gowin, J. L., Ellingson, J. M., Karoly, H. C., Manza, P., Ross, J. M., Sloan, M. E., Tanabe, J. L., & Volkow, N. D. (2025). Brain function outcomes of recent and lifetime cannabis use. *JAMA Network Open, 8*(1), e2457069. https://doi.org/10.1001/jamanetworkopen.2024.57069
17. Myran, D. T., Pugliese, M., McDonald, A. J., Xiao, J., Fischer, B., Finkelstein, Y., Tanuseputro, P., Firth, J., Pakpour, A., Hsu, C. W., Chang, W. C., & Solmi, M. (2025). Cannabis Use Disorder Emergency Department Visits and Hospitalizations and 5-Year Mortality. *JAMA Network Open, 8*(2), e2457852. https://doi.org/10.1001/jamanetworkopen.2024.57852
18. Young-Wolff, K. C., Adams, S. R., Alexeeff, S. E., Zhu, Y., Chojolan, E., Slama, N. E., Does, M. B., Silver, L. D., Ansley, D., Castellanos, C. L., & Avalos, L. A. (2024). Prenatal cannabis use and maternal pregnancy outcomes. *JAMA Internal Medicine 184*(9), 1083–1093. https://doi.org/10.1001/jamainternmed.2024.3270

19. Avalos, L. A., Adams, S. R., Alexeeff, S. E., Oberman, N. R., Does, M. B., Ansley, D., Goler, N., Padon, A. A., Silver, L. D., & Young-Wolff, K. C. (2024). Neonatal outcomes associated with in utero cannabis exposure: A population-based retrospective cohort study. *American Journal of Obstetrics and Gynecology, 231*(1). https://doi.org/10.1016/j.ajog.2023.11.1232

20. Metz, T. D., Allshouse, A. A., McMillin, G. A., Greene, T., Chung, J. H., Grobman, W. A., Haas, D. M., Mercer, B. M., Parry, S., Reddy, U. M., Saade, G. R., Simhan, H. N., & Silver, R. M. (2023). Cannabis exposure and adverse pregnancy outcomes related to placental function. *JAMA 330*(22), 2191–2199. https://doi.org/10.1001/jama.2023.21146

21. Keim, S. A., Fried, P., Yeates, K. O., Boone, K. M., Vrantsidis, D. M., Dean, A., Murnan, A. W., Rausch, J., & Klebanoff, M. A. (2024). Cannabis exposure and adverse pregnancy outcomes related to placental Function. *JAMA Pediatrics, 330*(22), 1316–1325. https://doi.org/10.1001/jamapediatrics.2024.4352

22. Avalos, L. A., Oberman, N., Alexeeff, S. E., Croen, L. A., Davignon, M. N., Adams, S. R., Ansley, D., Chambers, C. D., Steuerle, K., & Young-Wolff, K. C. (2024). Early maternal prenatal cannabis use and child developmental delays. *JAMA Network Open, 7*(10), e2440295. https://doi.org/10.1001/jamanetworkopen.2024.40295

23. Eiden, R. D., Zhao, J., Casey, M., Shisler, S., Schuetze, P., & Colder, C. R. (2018). Pre- and postnatal tobacco and cannabis exposure and child behavior problems: Bidirectional associations, joint effects, and sex differences. *Drug and Alcohol Dependence*, 185, 82–92. https://doi.org/10.1016/j.drugalcdep.2017.11.038

24. Kansagara, D., Hill, K.P., Yost, J., et al. (2025). Cannabis or cannabinoids for the management of chronic noncancer pain: best practice advice from the American College of Physicians. *Ann Internal Medicine, 178*(5):714-724. https://doi.org/10.7326/ANNALS-24-03319

25. Hill K. P. (2020). Medical cannabis. *JAMA, 323*(6), 580. https://doi.org/10.1001/jama.2019.17403

26. Solmi, M., De Toffol, M., Kim, J. Y., Choi, M.J., Stubbs, B., Thompson, T., et al. (2023). Balancing risks and benefits of cannabis use: umbrella review of meta-analyses of randomised controlled trials and observational studies. *BMJ 382*, e072348. https://doi.org/10.1136/bmj-2022-072348

27. Stanciu, C. N., Brunette, M. F., Teja, N., & Budney, A. J. (2021). Evidence for use of cannabinoids in mood disorders, anxiety disorders, and PTSD: a systematic review. *Psychiatric Services, 72*(4), 429–436. https://doi.org/10.1176/appi.ps.202000189

28. Bhuller, R., Schlage, W. K., & Hoeng, J. (2024). Review of the current ongoing clinical trials exploring the possible anti-anxiety effects of cannabidiol. *Journal of Cannabis Research, 6*(1), 40. https://doi.org/10.1186/s42238-024-00250-y

29. State Medical Board of Ohio. *Medical marijuana.* Retrieved July 1, 2025, from. https://med.ohio.gov/for-the-public/medical-marijuana/overview.

30. Redinger, M., Fledderman, N., & Crutchfield, P. (2020). An ethical framework to manage patient requests for medical marijuana. *The Journal of the American Board of Family Medicine, 33*(1), 147–151. https://doi.org/10.3122/jabfm.2020.01.190216

31. Williams, A. R., & Hill, K. P. (2019). Cannabis and the Current State of Treatment for Cannabis Use Disorder. *Focus, 17*(2), 98–103. https://doi.org/10.1176/appi.focus.20180038

32. Jayawardhana, J., Hou, J., Freeman, P., & Talbert, J. C. (2025). Association of state cannabis legalization with cannabis use disorder and cannabis poisoning. *JAMA Psychiatry, 82*(3), 228. https://doi.org/10.1001/jamapsychiatry.2024.4145

33. Pawar, A. K. S., Firmin, E. S., Wilens, T. E., & Hammond, C. J. (2024). Systematic review and meta-analysis: medical and recreational cannabis legalization and cannabis use among youth in the United States. *Journal of the American Academy of Child & Adolescent Psychiatry, 63*(11), 1084–1113. https://doi.org/10.1016/j.jaac.2024.02.016

34. Walker, M., Carpino, M., Lightfoot, D., Rossi, E., Tang, M., Mann, R., Saarela, O., & Cusimano, M. D. (2023). The effect of recreational cannabis legalization and commercialization on substance use, mental health, and injury: a systematic review. *Public health, 221*, 87–96. https://doi.org/10.1016/j.puhe.2023.06.012

35. Graves, B. D., Mowbray, O., Aletraris, L., & O'Shields, J. (2025). An analysis of 16-year trends in cannabis use disorder treatment: predictors, barriers, and utilization patterns. *Substance Use & Misuse, 60*(10), 1540–1549. https://doi.org/10.1080/10826084.2025.2505773

36. Awan, O. (2025, March 25). Marijuana continues to harm more and more Americans. *Forbes*. https://www.forbes.com/sites/omerawan/2025/03/25/marijuana-continues-to-harm-more-and-more-americans/

This QuickNote is an overview only and is not intended to be the sole resource for addressing cannabis use. The reader is encouraged to seek additional information from sources listed in "For Additional Information on This Topic."

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Department of Mental Health & Addiction Services

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