

MICRODOSING

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INTRODUCTION

Psychotropic and psychedelic drugs fall within the overarching category of psychoactive drugs, which are any drugs that affect the brain including substances such as caffeine and nicotine in addition to the substances set forth in this fact sheet.¹ Psychotropic drugs include antidepressants, mood stabilizers, and antipsychotics and alter the user's "mood, emotional state, and behavior and work by targeting the limbic system, which is responsible for emotional regulation."² Psychotropic drugs are commonly used to treat ADHD, depression and anxiety disorders, act as mood stabilizers, or treat other mental health disorders including bipolar disorder.³

Psychedelic drugs, which can be natural or synthetic, are substances that "cause changes in mood, perception, and cognition," and are known to cause hallucinations and distort the user's sense of reality.⁴ Such drugs include: lysergic acid diethylamide (LSD), [psilocybin](#) (found in *Psilocybe* mushrooms, often referred to as "magic mushrooms"), peyote, mescaline, N,N-dimethyltryptamine (DMT), synthetic phenethylamines (such as 2C-B), *Salvia divinorum*, [ibogaine](#) (an extract from the root bark of the *Tabernanthe iboga* shrub found in Africa), and [ketamine](#).⁵ Psychedelic drugs are "generally considered physiologically safe and do not lead to dependence or addiction."⁶ However, as set forth below, some users report serious negative effects, and repeated use of some of these substances may cause tolerance, meaning that the individual must use higher amounts in order to achieve the same effect.⁷ Moreover, most psychedelic drugs are classified as controlled substances under state and federal law, although there has been renewed interest in these substances in recent years due to their possible ability to treat various mental health conditions such as anxiety, depression, and post-traumatic stress disorder (PTSD) and their growing mainstream acceptance.

Microdosing, in practice since at least the 1950s, is the practice of taking a small amount of a psychedelic drug, usually on a set schedule, to improve the user's mood, increase creative thinking, or self-treat for a mental health disorder.⁸ Typically, microdosing involves using one-fifth to one-tenth of the recreational dose every few days.⁹ For example, an average recreational dose of LSD is 100-200mcg, so a microdose would be 10-20mcg.¹⁰

¹ "Psychotropic vs. Psychedelics vs. Psychoactive: A Guide," Restore Mental Health, posted Aug. 30, 2022, <https://restore-mentalhealth.com/psychotropic-psychedelics-psychoactive/>.

² "Psychotropic vs. Psychedelics vs. Psychoactive: A Guide."

³ "Psychotropic vs. Psychedelics vs. Psychoactive: A Guide."

⁴ "Psychotropic vs. Psychedelics vs. Psychoactive: A Guide."

⁵ See "Psychotropic vs. Psychedelics vs. Psychoactive: A Guide," and Michelle Priest, Beau Kilmer, Ben Senator, and Claude Messan Setodji, "U.S. Psychedelic Use and Microdosing in 2025: Insights from a Probability-Based and Nationally Representative Survey," *RAND*, Jan. 21, 2026, https://www.rand.org/pubs/research_reports/RRA4334-1.html.

⁶ David E. Nichols, "Psychedelics," *Pharmacological Reviews* 68, no. 2 (April 2016): 264-355, <https://pmc.ncbi.nlm.nih.gov/articles/PMC4813425/>.

⁷ See Mary West, "Are Psychedelics Addictive?," *Medical News Today*, March 31, 2022, <https://www.medicalnewstoday.com/articles/are-psychedelics-addictive-side-effects-and-risks>.

⁸ See Michelle Priest, Beau Kilmer, Ben Senator, and Claude Messan Setodji, "U.S. Psychedelic Use and Microdosing in 2025: Insights from a Probability-Based and Nationally Representative Survey," *RAND*, Jan. 21, 2026, https://www.rand.org/pubs/research_reports/RRA4334-1.html (the RAND survey is a probability-based, nationally representative survey of 10,000 U.S. adults); "What is Microdosing? Effects & Dangers," Oxford Treatment Center (Dec. 6, 2024), <https://oxfordtreatment.com/substance-abuse/microdosing/>; Liam Browning and David Puder, MD, hosts, *Psychiatry Podcast*, episode 176, "Episode 176: Microdosing LSD & Psilocybin: The Future of Psychiatry or Placebo?," Psychiatry & Psychotherapy, April 19, 2023, 1 hour, 17 min., <https://www.psychiatrypodcast.com/psychiatry-psychotherapy-podcast/176-microdosing-lsd-psilocybin-the-future-of-psychiatry-or-placebo>.

⁹ See Kim P.C. Kuypers, "The Therapeutic Potential of Microdosing Psychedelics in Depression," *Therapeutic Advances in Psychopharmacology*, 10 (2020): 1-15; "What is Microdosing? Effects & Dangers," Oxford Treatment Center, Dec. 6, 2024, <https://oxfordtreatment.com/substance-abuse/microdosing/>;

¹⁰ See Kuypers, "Therapeutic Potential."

HISTORICAL USE OF PSYCHOACTIVE DRUGS

“Natural psychedelic substances (e.g., psilocybin, ayahuasca, peyote) have played a significant role in the development of philosophy and religion in many cultures. Many individuals have argued compellingly that it is the catalyst for many for [sic] human’s earliest cultures, philosophies, theologies, and creative developments.”¹¹

There is evidence that psychoactive drugs have been used for centuries around the world, including by indigenous people in Mexico, Peru, Western Africa, Japan, and North America.¹² In 2008, in a cave in the Bolivian Andes mountains, scientists discovered a “ritual bundle” more than 1,000 years old that contained, among other things, the residue from multiple psychotropic and psychedelic drugs.¹³ Scientists tested the residue, and the results revealed the presence of cocaine, benzoylecgonine (a metabolite of cocaine), psilocin (the psychoactive metabolite of psilocybin), and two of the active ingredients found in ayahuasca (a psychedelic tea consumed throughout South America).¹⁴ According to researchers, “[h]umans have a long history of using natural resources, especially plants, to induce nonordinary states of consciousness. Imbibing substances derived from plants have [sic] been linked to ancient and elaborate knowledge systems and rituals.”¹⁵

As of 2019, the oldest indirect evidence of the use of psilocybin was found in the Sahara Desert dating from around 9000 to 7000 BCE, while evidence found in Texas suggests that peyote has been in use for more than 5,000 years, dating to approximately 3200 BCE.¹⁶ One researcher at Harvard University posits that the use of mescaline may stretch back to 8600 BCE in Peru and 14,000 BCE in Mexico.¹⁷

In contrast to the modern practice of microdosing, ancient cultures likely used a dose that induced the full effects of the drug ingested. The term “microdosing” was popularized by Dr. James Fadiman in his 2011 book *The Psychedelic Explorer’s Guide: Safe, Therapeutic, and Sacred Journeys*.¹⁸ However, the practice of microdosing has been around for decades, with studies of low dose psychedelic use occurring as far back as 1955.¹⁹

¹¹ Nadav Klein, MD and David Puder, MD, hosts, *Psychiatry Podcast*, episode 104, “Episode 104: Psilocybin Therapy Part 1: History, Pop Culture, Safety and Side Effects, MDMA Studies, and Early Research,” *Psychiatry & Psychotherapy*, Dec. 8, 2020, 1 hour, 38 min., <https://www.psychiatrypodcast.com/psychiatry-psychotherapy-podcast/episode-104-psilocybin-therapy-part-1-history-pop-culture-safety-and-side-effects-mdma-studies-and-early-research>.

¹² See Browning and Puder, “Episode 176.”

¹³ Melanie J. Miller, Juan Albarracin-Jordan, Christine Moore, and Jose M. Capriles, “Chemical Evidence for the Use of Multiple Psychotropic Plants in a 1,000-Year-Old Ritual Bundle from South America,” *PNAS*, 116, no. 23 (June 4, 2019), <https://www.pnas.org/doi/10.1073/pnas.1902174116>.

¹⁴ See Melanie J. Miller et al., “Chemical Evidence for the Use of Multiple Psychotropic Plants” and Daniel R. George, Ryan Hanson, Darryl Wilkinson, and Albert Garcia-Romeu, “Ancient Roots of Today’s Emerging Renaissance in Psychedelic Medicine,” *Culture, Medicine, and Psychiatry* no. 46 (Sept. 2, 2021): 890-903, <https://link.springer.com/article/10.1007/s11013-021-09749-y>.

¹⁵ Melanie J. Miller et al., “Chemical Evidence for the Use of Multiple Psychotropic Plants.”

¹⁶ See Klein and Puder, “Episode 104”; Giorgio Samorini, “The Oldest Archeological Data Evidencing the Relationship of *Homo sapiens* with Psychoactive Plants: A Worldwide Overview,” *Journal of Psychoactive Studies* 3, no. 2 (June 1, 2019):63-80, <https://www.akjournals.com/view/journals/2054/3/2/article-p63.xml>; and David Cox, “What Western Medicine Can Learn from the Ancient History of Psychedelics,” *BBC.com*, Sept. 11, 2024, <https://www.bbc.com/future/article/20240910-the-ancient-history-behind-healing-trauma-with-psychedelics>.

¹⁷ David Cox, “What Western Medicine Can Learn from the Ancient History of Psychedelics,” *BBC.com*, Sept. 11, 2024, <https://www.bbc.com/future/article/20240910-the-ancient-history-behind-healing-trauma-with-psychedelics>.

¹⁸ See Browning and Puder, “Episode 176” and Vince Polito and Paul Liknaitzky, “The Emerging Science of Microdosing: A Systematic Review of Research on Low Dose Psychedelics (1955-2021) and Recommendations for the Field,” *Neuroscience and Behavioral Reviews* 139 (Aug. 2022), <https://www.sciencedirect.com/science/article/pii/S0149763422001956#ab0015>.

¹⁹ Vince Polito and Paul Liknaitzky, “The Emerging Science of Microdosing: A Systematic Review of Research on Low Dose Psychedelics (1955-2021) and Recommendations for the Field,” *Neuroscience and Behavioral Reviews* 139, (Aug. 2022), <https://www.sciencedirect.com/science/article/pii/S0149763422001956#ab0015>.

LEGAL STATUS AND CURRENT TRENDS IN MICRODOSING

Individuals microdose for myriad reasons including to self-treat mental health disorders including ADHD, obsessive compulsive disorder, bipolar disorder, treatment-resistant depression, anxiety, and PTSD, and to avoid the side effects associated with traditional psychotropic medications.²⁰ Other individuals microdose to treat chronic pain, including cluster headaches, or to treat some substance use disorders, or simply to increase their focus, creative thinking, and overall sense of well-being.²¹

The majority of the substances that individuals currently microdose are illegal under state and federal controlled substances acts. At the time of this writing, *Amanita muscaria* (also known as the fly agaric mushroom) is not scheduled under the federal Controlled Substances Act (CSA),²² though the U.S. Food and Drug Administration has classified it as not safe for use as a food additive.²³ Ketamine is classified under the CSA as a Schedule III non-narcotic substance and is used in medical settings as an anesthetic and for short-term sedation.²⁴ According to the Drug Enforcement Administration, ketamine “may lead to moderate or low physical dependence or high psychological dependence.”²⁵ DMT, LSD, MDMA, mescaline, peyote, and psilocybin are all categorized as Schedule I substances under the CSA, meaning that they do not have any accepted medical use, have a high potential for abuse, and have a lack of accepted safety for use under medical supervision.^{26,27}

Despite this, an increasing number of individuals are microdosing psychedelics, and it is becoming more accepted in mainstream society to use psychedelics both recreationally and as a treatment for various mental health disorders, especially as scientists continue to research the potential pharmaceutical uses of certain psychedelics.²⁸ Additionally, states and localities across the United States have begun taking steps to decriminalize the possession, use, and/or growth of certain psychedelics. For example, Oregon enacted legislation in 2020 that permits a licensed individual to supervise the consumption and use of psilocybin or psilocin by another person at an authorized “psilocybin service center.”²⁹ Similarly, Colorado passed legislation in 2023, set forth in the “Colorado Natural Medicine Code,” that allows a licensed individual to operate a “healing center” that permits a “facilitator” with the appropriate qualifications to supervise the provision of natural medicine to participants.³⁰ “Natural medicine” includes psilocybin, psilocin, and DMT, and potentially ibogaine and mescaline, if those two substances are recommended by the natural medicine advisory board and approved by the director of the board.³¹ Subject to

²⁰ See Yumin Kim, Rachel Bigley, Aubrey DeVinney, and Paul S. Nestadt, “The Many Faces of Psilocybin-Related Psychosis: A Case Series,” *Psychiatry Research Case Reports* 4 (2025).

²¹ See Kim et al., “The Many Faces.”

²² 21 U.S.C. § 812 and 21 C.F.R. § 1308.

²³ “Letter to Industry on the Use of *Amanita muscaria* or Its Constituents in Food,” U.S. Food and Drug Administration, Dec. 18, 2024, <https://www.fda.gov/food/post-market-determinations-use-substance-not-gras/letter-industry-use-amanita-muscaria-or-its-constituents-food>. For more information, see LAPP’s fact sheet on *Amanita muscaria* here: [Amanita Muscaria \(Fly Agaric\) | LAPP](#).

²⁴ “Ketamine Drug Fact Sheet,” DEA, Dec. 2024, <https://www.dea.gov/sites/default/files/2025-01/Ketamine-Drug-Fact-Sheet.pdf>.

²⁵ DEA, “Ketamine Drug Fact Sheet.”

²⁶ See “LSD Drug Fact Sheet,” DEA, April 2020, https://www.dea.gov/sites/default/files/2020-06/LSD-2020_0.pdf; “Ecstasy/MDMA Drug Fact Sheet,” DEA, Dec. 2024, <https://www.dea.gov/sites/default/files/2025-01/Ecstasy-MDMA-2024-Drug-Fact-Sheet.pdf>; “Peyote & Mescaline Drug Fact Sheet,” DEA, Dec. 2024, <https://www.dea.gov/sites/default/files/2025-01/Peyote-and-Mescaline-Drug-Fact-Sheet.pdf>; and “Psilocybin Drug Fact Sheet,” DEA, April 2020, <https://www.dea.gov/sites/default/files/2020-06/Psilocybin-2020.pdf>.

²⁷ The DEA does provide religious exemptions for certain substances including peyote and ayahuasca, but such exemptions are rare. See “Peyote Exemption for Native American Church,” Office of Legal Counsel, U.S. Dept. of Justice, Dec. 22, 1981, <https://www.justice.gov/olc/opinion/peyote-exemption-native-american-church>; Jason Adelstone, “DEA Gives Church Green Light on Ayahuasca,” *Harris Sliwoski*, May 20, 2025, <https://harris-sliwoski.com/psychlawblog/dea-gives-church-green-light-on-ayahuasca/>; and “Church Granted First Exemption for Ayahuasca through DEA Petition,” *Church of Gaia*, May 16, 2025, https://www.churchgaia.org/files/ugd/28fa63_b07a87cc206846eeb2bb6046f16ef954.pdf.

²⁸ See Haylee May, “Synthetic Psilocybin Nears FDA Review, Signaling a Potential Shift in American Mental Healthcare,” *CPR News*, July 20, 2025, <https://www.cpr.org/2025/07/20/synthetic-psilocybin-nears-fda-review/>.

²⁹ OR. REV. STAT. ANN. §§ 475A.200 to 475A.722 (West 2026).

³⁰ COLO. REV. STAT. ANN. §§ 44-50-101 to 44-50-1001 (West 2026). “Facilitator” is defined as a person who is 21 years of age or older, with “the necessary qualifications, training, experience, and knowledge to perform and supervise natural medicine services for a participant, and is licensed to engage in the practice of facilitation” by the division of professions and occupations.

³¹ COLO. REV. STAT. ANN. § 44-50-103 (West 2026).

certain limitations, Colorado also permits individuals to cultivate natural medicine for personal use.³²

On a smaller scale, the city council of Arcata, California passed a resolution in 2021 declaring that it would not be a “public safety priority” to investigate and arrest individuals engaged in “planting, cultivating, purchasing, transporting, distributing, engaging in practices with, or possessing Entheogenic Plants and Fungi or plant compounds” unless other code violations are also present.³³ Finally, Texas and Tennessee recently enacted legislation to fund studies related to psychedelics which could lead to more concrete evidence of the efficacy – or lack thereof – of microdosing as a treatment for certain mental health disorders.³⁴

Researchers trace the current popularity of microdosing to the 2011 book entitled, *The Psychedelic Explorer’s Guide*, by James Fadiman, PhD, which “led to a subsequent boom in anecdotal reports of psychedelic microdosing, media stories, and scientific research.”³⁵ Coincident with this is a “broader positive shift in attitudes” toward psychedelic use.³⁶ Beginning in 2015, the National Survey on Drug Use and Health (NSDUH), published by the Substance Abuse and Mental Health Services Administration, began collecting data on hallucinogen use including, among other drugs, LSD, peyote, mescaline, psilocybin, MDMA, ketamine, DMT, and *Salvia divinorum*.³⁷ According to the 2015 NSDUH survey, 635,000 individuals aged 12 or older reported lifetime use of any hallucinogen³⁸ compared to nearly 51 million reporting lifetime use in the 2025 NSDUH survey.³⁹ Note that, in contrast to the RAND survey mentioned below, the NSDUH survey does not distinguish between individuals who microdose and those individuals who ingest a “full” dose of the listed drug.

According to the 2025 *RAND Psychedelics Survey*, the five psychedelics most commonly used by adults in the United States during the year prior to the survey were: psilocybin, LSD, MDMA, ketamine, and *Amanita muscaria* mushrooms.⁴⁰ Individuals also reported using DMT (found in ayahuasca), mescaline, synthetic phenethylamines (such as 2C-B), *Salvia divinorum*, ibogaine, and 5-MeO-DMT (also known as 5 or toad).⁴¹

Psilocybin was the most commonly reported psychedelic used by those individuals responding to both the RAND and NSDUH surveys.⁴² Six and a half million individuals reported using psilocybin in the year prior to the 2025 NSDUH

³² COLO. REV. STAT. ANN. § 18-18-434 (West 2026). Unless county or municipal law expressly permits otherwise, a person may not cultivate natural medicine on a plot greater than 12’ x 12’. Further, the area where the natural medicine is being cultivated must be enclosed and locked unless the individual cultivating natural medicine is 21 years of age or older and the natural medicine is being cultivated on private property. If a person under age 21 enters the premises, the cultivation area must be reasonably restricted for the duration of the minor’s presence on the property.

³³ See “The U.S. Psychedelic Law & Policy Tracker,” Psychedelic Alpha, accessed Sept. 18, 2026,

<https://psychedelicalpha.com/resources/psychedelic-laws/>.

³⁴ See Psychedelic Alpha, “The U.S. Psychedelic Law & Policy Tracker,” Psychedelic Alpha; S.B. 2308, 2025 Reg. Sess. (Tex. 2025) (enacted June 11, 2025); and S.B. 2149, Reg. Sess. (Tenn. 2026) (enacted May 22, 2026).

³⁵ Polito and Liknaitzky, “The Emerging Science of Microdosing.”

³⁶ Polito and Liknaitzky, “The Emerging Science of Microdosing.”

³⁷ “Appendix A: Key Definitions for the 2019 National Survey on Drug Use and Health,” *Substance Abuse and Mental Health Services Administration*, accessed Sept. 22, 2026,

<https://www.samhsa.gov/data/sites/default/files/reports/rpt29394/NSDUHDetailedTabs2019/NSDUHDetTabsAppA2019.htm>. Although NSDUH collected information regarding hallucinogen use prior to 2015, ketamine, DMT, and *Salvia divinorum* were not added until that year.

³⁸ “2015 National Survey on Drug Use and Health: Detailed Tables,” Table 1.138C, *Substance Abuse and Mental Health Services Administration*, accessed Sept. 23, 2026, <https://www.samhsa.gov/data/sites/default/files/NSDUH-DetTabs-2015/NSDUH-DetTabs-2015/NSDUH-DetTabs-2015.pdf>.

³⁹ “2025 National Survey on Drug Use and Health: Detailed Tables,” Table 1.1A, Substance Abuse and Mental Health Services Administration, accessed Sept. 22, 2026, <https://www.samhsa.gov/data/sites/default/files/reports/rpt57152/2025-nsduh-detailed-tabs/2025-nsduh-detailed-tables-sect1pe.htm#tab1.1a>.

⁴⁰ Michelle Priest et al., “U.S. Psychedelic Use and Microdosing in 2025: Insights from a Probability-Based and Nationally Representative Survey.”

⁴¹ Michelle Priest et al., “U.S. Psychedelic Use and Microdosing in 2025: Insights from a Probability-Based and Nationally Representative Survey.”

⁴² See Michelle Priest et al., “U.S. Psychedelic Use and Microdosing in 2025: Insights from a Probability-Based and Nationally Representative Survey.” and “2025 National Survey on Drug Use and Health,” Table 1.118A, Substance Abuse and Mental Health Services Administration, accessed Sept. 22, 2026, <https://www.samhsa.gov/data/sites/default/files/reports/rpt57152/2025-nsduh-detailed-tabs/2025-nsduh-detailed-tables-sect1pe.htm#tab1.118a>.

survey, while researchers for RAND estimate that approximately 11 million adults consumed psilocybin in the year prior to its survey.⁴³ Of that number, RAND estimates that 69 percent microdosed psilocybin at least once during the previous year.⁴⁴ An additional 65 percent are estimated to have microdosed MDMA, and 59 percent are estimated to have microdosed LSD.⁴⁵

BENEFITS AND HARMS ASSOCIATED WITH MICRODOSING

Compared with other controlled substances, including opiates and stimulants, psychedelics are considered safe, do not lead to addiction or physical dependence, and are not considered to lead to reinforcement.⁴⁶ However, as their scheduling under state and federal law reflects, some serious adverse reactions, including psychosis, can occur after a single use.⁴⁷ In a case study review of psilocybin use by three patients admitted to an inpatient psychiatric unit, the patients each presented with different reactions after using psilocybin that included hallucinations, paranoia, delusions, psychosis, suicidal ideation, and aggressive behavior (leading to assault with a knife and the arrest of the individual).⁴⁸ Two of the patients examined in the case study reported initially microdosing psilocybin before consuming a larger dose, but they did not experience adverse effects until consuming the full dose.⁴⁹

In a review of eight microdosing trials, the authors of that review found that, although no serious adverse events were reported in any of the trials, participants microdosing LSD reported increased headaches and jitteriness.⁵⁰ In other trials included in the review, participants reported increased anxiety resulting in a titration protocol and withdrawal from the study.⁵¹ Another study conducted using an online survey and interview technique focused on individuals who used a psychedelic and were diagnosed with a mental health disorder following such use.⁵² Some of the negative effects reported by the participants included intrusive thoughts, anxiety, depression, suicidal thoughts, paranoia, and auditory hallucinations.⁵³ It is important to note that the participants were unaware of the doses that they had consumed due to questionable purity of the drugs, though the researchers stress that, “[a]s with all things consumed, higher dosages are likely to increase the risk of adverse events ... with different risks becoming more likely with different substances, e.g., psychological risks with classic psychedelics and toxicity risks with higher doses of MDMA.”⁵⁴

Although adverse physical reactions to using psychedelics are rare, psilocybin-related poison control calls in the United States increased by more than 30 percent during the period 2013 to 2022, with most of those calls occurring in 2019 and 2022 as psilocybin gained in popularity and acceptance.⁵⁵ Because the demand for psilocybin is so high,

⁴³ See Michelle Priest et al., “U.S. Psychedelic Use and Microdosing in 2025: Insights from a Probability-Based and Nationally Representative Survey”; SAMHSA, “2025 NSDUH,” Table 1.118A; and “Psilocybin (Magic Mushrooms),” National Institute on Drug Abuse, 24 Jan. 2024, <https://nida.nih.gov/research-topics/psilocybin-magic-mushrooms>.

⁴⁴ Michelle Priest et al., “U.S. Psychedelic Use and Microdosing in 2025: Insights from a Probability-Based and Nationally Representative Survey.”

⁴⁵ Michelle Priest et al., “U.S. Psychedelic Use and Microdosing in 2025: Insights from a Probability-Based and Nationally Representative Survey.”

⁴⁶ Nichols, “Psychedelics.” “Reinforcement” is the concept that a drug’s pleasant effects will increase the likelihood that an individual will use the drug again. See “Reinforcement,” UK Rehab, accessed Sept. 17, 2026, <https://www.uk-rehab.com/addiction-psychology/reinforcement/>.

⁴⁷ Nichols, “Psychedelics” and Adi Sulstarova et al., “Treatment Approaches and Efficacy in Psychedelic-Induced Psychosis: A Systematic Review,” *Asian Journal of Psychiatry* 110 (Aug. 2025), <https://www.sciencedirect.com/science/article/pii/S1876201825002473#ab0015>.

⁴⁸ Kim et al., “The Many Faces.”

⁴⁹ Kim et al., “The Many Faces.” The third patient presented with a history of psychoactive drug use resulting in psychotic episodes and subsequent hospitalization for those episodes leading the study’s authors to believe that her history of bipolar affective disorder may have conferred an increased susceptibility to psychedelic initiated psychosis.

⁵⁰ Robin J. Murphy, Suresh Muthukumaraswamy, and Harriet de Wit, “Microdosing Psychedelics: Current Evidence from Controlled Studies,” *Biological Psychiatry: Cognitive Neuroscience and Neuroimaging* 9 (May 2024): 500-511.

⁵¹ Robin J. Murphy et al., “Microdosing Psychedelics: Current Evidence from Controlled Studies.”

⁵² Rebecka Bremler, Nancy Katati, Parvinder Shergill, David Erritzoe, and Robin L. Carhart-Harris, “Case Analysis of Long-Term Negative Psychological Responses to Psychedelics,” *Scientific Reports* 13 (2023).

⁵³ Rebecka Bremler et al., “Case Analysis of Long-Term Negative Psychological Responses.”

⁵⁴ Rebecka Bremler et al., “Case Analysis of Long-Term Negative Psychological Responses.”

⁵⁵ Juan Carlos C. Montoy, et al., “US Poison Center Encounters for Psilocybin-Related Exposures: 2013-2022,” 6(5) *Journal of the American College of Emergency Physicians Open* 6, no. 5 (Aug. 30, 2025), <https://pmc.ncbi.nlm.nih.gov/articles/PMC12414881/>.

and the sale of these products is unregulated, manufacturers are substituting other types of mushrooms for psilocybin including potentially toxic mushrooms that can lead users to experience seizures, nausea, and vomiting.⁵⁶

Nonetheless, research shows that psychedelics can be used safely under supervision.⁵⁷ Numerous studies have been conducted related to the use of hallucinogens to treat certain mental health disorders which reflect that “full doses [of] serotonergic psychedelics are capable of producing lasting positive changes in behavior, personality and mental health.”⁵⁸

People who microdose report that they do not experience hallucinations or the other euphoric effects associated with a full dose.⁵⁹ Primarily, users report a “general sense of well-being” and a feeling of “being present.”⁶⁰ Other users report being “slightly stimulated or elevated” without the “full-on mind melt.”⁶¹ Anecdotal evidence, online surveys, observational studies,⁶² and open-label studies⁶³ reflect that microdosing is effective at enhancing the user’s mood, creativity, and cognition, and also at reducing the symptoms of anxiety and depression. However, researchers generally agree that more rigorous studies are needed to determine the safety and efficacy of microdosing psychedelics.⁶⁴ Until recently, few have studied the impact of microdosing a psychedelic drug over an extended period of time.

A systematic review published in 2022 of 41 microdosing studies conducted between 1955 and 2021 (with approximately 71 percent being conducted between the years of 2018 to 2021) reflects that the results were mixed, with some studies indicating improvements in mood, depressive symptoms, anxiety, and stress, while others showed increases in those symptoms, and none of the studies followed the test subjects for an extended time period.⁶⁵ The review’s authors emphasized that “some of these results need to be treated with caution,” as some of the benefits might also be attributable to “substantial psychotherapeutic support and expectancy effects associated with the administration of the microdose.”⁶⁶ Another systematic review of studies involving microdoses of LSD and an inactive placebo and their effect on the participants’ behavior found that, while short-term use provided some positive effects, “the findings provide limited support for lasting beneficial effects of repeated doses.”⁶⁷

⁵⁶ Joshua Kellogg, “The Growing Fad of ‘Microdosing’ Mushrooms is Leading to an Uptick in Poison Control Center Calls and Emergency Room Visits,” *The Conversation*, Aug. 15, 2025, <https://theconversation.com/the-growing-fad-of-microdosing-mushrooms-is-leading-to-an-uptick-in-poison-control-center-calls-and-emergency-room-visits-252866>.

⁵⁷ Nichols, “Psychedelics.”

⁵⁸ Federico Cavanna, et al., “Microdosing with Psilocybin Mushrooms: A Double-Blind Placebo-Controlled Study,” *Translational Psychiatry* 12 (2022): 307.

⁵⁹ See, e.g., Chryss Cada, “Eight Months Ago I Started Microdosing Shrooms to Relieve Crippling Anxiety and Depression. It’s Working,” *The Colorado Sun*, Aug. 7, 2022, <https://coloradosun.com/2022/08/07/microdosing-shrooms-psilocybin-anxiety-depression/> and Helen Carefoot, “The Midlife Microdosing Boom: Why Women Are Trying Magic Mushrooms,” *Flow Space*, Aug. 5, 2026, <https://www.theflowspace.com/reproductive-health/menopause/microdosing-mushrooms-menopause-3039362/>.

⁶⁰ Chryss Cada, “Eight Months Ago I Started Microdosing Shrooms to Relieve Crippling Anxiety and Depression. It’s Working,” *The Colorado Sun*, Aug. 7, 2022, <https://coloradosun.com/2022/08/07/microdosing-shrooms-psilocybin-anxiety-depression/>.

⁶¹ Helen Carefoot, “The Midlife Microdosing Boom: Why Women Are Trying Magic Mushrooms,” *Flow Space*, Aug. 5, 2026, <https://www.theflowspace.com/reproductive-health/menopause/microdosing-mushrooms-menopause-3039362/>.

⁶² An observational study is one in which the researcher does not take an active part and simply observes and records data without intervention, treatment, or other interaction with the test subjects. See Dean R. Hess, “Observational Studies,” *Respiratory Care* 68, no. 11, (Nov. 2023): 1585-1597, <https://pmc.ncbi.nlm.nih.gov/articles/PMC10589119/>.

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CONCLUSION

Despite the regulation of psychedelics under state and federal law and the lack of empirical evidence regarding their efficacy, an increasing number of individuals are beginning a microdose regimen to improve symptoms related to one or more mental health disorders or simply to improve their overall feeling of well-being. As states lessen the restrictions related to psychedelic research, additional evidence may be forthcoming.

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