Psilocybin and Psilocin
Harm Reduction Information

Also called magic mushrooms, shrooms and teonanácatl

Last updated 10/26/2026

Please Read First

This page is educational. It is not medical, legal or professional advice, and I am not a physician or an attorney. I gathered this information from published harm reduction organizations, medical and legal sources, and my own training and experience, and I may have made mistakes. You are responsible for confirming anything here before you act on it, with a qualified medical provider and, for questions of law, an attorney. Laws and knowledge about psychedelics change quickly, and some of what is written here may have changed since the date above. Nothing here encourages anyone to break the law. It exists to reduce harm for people who will make their own choices. I do my best to keep up with current law and research, but I cannot promise that anything here is current or complete.

It is advisable to meet with a psychedelic-informed physician for an assessment before using any psychedelic or related substance.

Where this information came from: The sources listed under References, and my own training and experience.

The People’s Medicine

Mushrooms that carry psilocybin grow on every continent except Antarctica [1][2]. They come up in pastures and wood chips, in wet grass and damp forest, and the greatest variety grows in the Neotropics, from Mexico down through Brazil and Chile [2]. Nobody owns this medicine. It was in the ground long before anyone gave it a name or a price.

People have kept company with these mushrooms for a very long time. The Nahuatl name teonanácatl was recorded by the Spanish friar Sahagún, who described Aztec ritual use. Spanish colonizers suppressed the practice, and it lived on in remote mountain communities [1]. Claims of much older use, such as the rock art at Tassili in Algeria, are argued over, and the evidence is thinner than the popular stories suggest [1].

In Oaxaca, the Mazatec healer María Sabina led night ceremonies called veladas with the mushrooms. After R. Gordon Wasson took part in one in 1955 and wrote about it in Life magazine in 1957, outsiders flooded her village. Her community blamed her, her house was burned, and she died in poverty. She called herself a sabia, a wise woman,

and she came to regret opening the door [3]. That history belongs at the front of any page about this medicine, because everyone who works with it now stands downstream of it.

I fell in love with mycelium before I fell in love with the mushroom. What gets picked and eaten is the fruit. The body of the fungus is a web of threadlike cells running through soil and wood, out of sight, joined to the roots and trunks around it. Walk across a forest floor and you are walking on the web. That is the picture I return to when I teach: nothing grows alone, and what looks separate on the surface is joined underneath. The mushroom is one place where the web comes up for air. The mycelium may be the medicine this time asks for. Disconnection is the greatest threat to our humanity right now, and loneliness is the crisis of our day. My own calling is to cultivate community, and to support the flowering of that network the way the web flowers into mushrooms: fed from underneath, by everything it is joined to.

This is a harm reduction sheet, so the rest of it is plain information. The medicine is old, the risks are real, and both belong in the same room.

About Psilocybin and Psilocin and Their Effects on the Body

Psilocybin is the compound most people mean when they say magic mushrooms. It is a prodrug: the body converts most of it into psilocin, the psychedelic active form, as it passes through the liver [4]. Psilocin binds strongly to the serotonin 2A receptor, and in research a drug that blocks that receptor (ketanserin) blocked the psychedelic effects [4]. Some psilocin is also present in the mushroom itself [5].

How Long It Lasts

In a controlled study of healthy adults, psilocin in the blood peaked about 2 hours after swallowing psilocybin, and subjective effects lasted 5.5 to 6.4 hours on average, with individual spread of about 2 hours either way. Effects were dose dependent [6]. An earlier review gives a shorter range, with full effects within about 70 to 90 minutes and a total of about 3 to 6 hours [4]. Sources disagree, so the general range is 3 to 6 hours, longer at larger amounts, and it varies from person to person.

Heart, Blood Pressure and Body Temperature

A pooled analysis of 113 supervised doses in 85 healthy, screened participants found that blood pressure and heart rate rise for a while after psilocybin [7]. Systolic pressure went over 140 in half of the doses and over 160 in 6%, with a highest reading of 180 over 115. Heart rate went over 100 beats a minute in 7% of doses, with a highest rate of 140. Body temperature went over 38°C in 16% of doses, and the share rose with the amount taken (7% at the lowest amount tested, 32% at the highest), with a highest reading of 39.0°C. A measure of the heart’s electrical rhythm (QTc) did not increase at peak effect [7].

Average rises are smaller, about 5 beats a minute and 10 to 15 points of systolic pressure [8]. People with existing high blood pressure may be at greater risk [8]. Frequent use is a separate concern: activation of the 5-HT2B receptor is linked to heart valve damage and fibrosis, while a single dose or widely spaced doses are thought to be safe [8].

Toxicity and the Mind

The gap between an effective amount and a toxic amount is very wide. The human lethal dose is extrapolated from animal studies to be many times the usual amount, and as of 2011 only two cases of overdose without other drugs had been reported [8]. The more common harms come from other directions: mistaking a toxic mushroom for a psilocybin mushroom [1], accidents while impaired, and psychological crisis.

In one study, 31% of volunteers given a high dose reported significant fear, and in a 2005 UK survey almost a quarter of past-year users reported a panic attack [8]. Psychotic reactions are rare, under 1% of psychedelic users, and are most likely in people with a personal or family psychiatric history [8].

How It Is Taken

Psilocybin mushrooms are eaten. They are most often taken dried and sometimes fresh; fresh mushrooms weigh about ten times as much as dried ones, so a weight means nothing until you know which form it describes [19]. How they are prepared changes how quickly the effects begin and how the stomach feels. The times below come from one article and are general ranges [19].

Eaten Dried or Fresh

Chewed whole, dried mushrooms begin to work in about 20 to 40 minutes and the experience lasts about 4 to 6 hours. The nausea some people feel is attributed to chitin, a part of the fungal cell wall [19].

Tea and Lemon Tek

Tea begins in about 15 to 30 minutes, lasts 4 to 5.5 hours, and is gentler on the stomach. In lemon tek, ground mushrooms soak in citrus juice, and the come-up is faster and more compressed: about 10 to 25 minutes, with a total of 3.5 to 5 hours. The come-up can feel overwhelming, and the source does not recommend lemon tek for first-time users [19].

Capsules, Chocolates, Gummies and Tinctures

Capsules, chocolates and gummies begin slowly, about 45 to 75 minutes, and last 4 to 7 hours depending on the form. The wait tempts people to take more too soon, and the source advises waiting at least 90 minutes before considering a second amount [19]. Uneven mixing is the main error in home-made chocolates, and many store-bought gummies sold as magic mushroom products may contain no psilocybin [19]. Tinctures

are concentrated (about 10 to 20 minutes, 3 to 4 hours), so small measuring errors matter more [19].

Colorado Regulated Products

State-licensed manufacturers may make capsules and tea bags by default, and a further endorsement allows chocolate, gummies, pressed tablets and tinctures. Every product is tested before it enters the supply chain [18].

How Many Mushrooms, and How Much Medicine

How Many Kinds

Counts depend on who counts and when. A 2000 review listed about 116 Psilocybe species plus psilocybin-containing species in Gymnopilus (14), Panaeolus (13), Copelandia (12), Pluteus (6), Inocybe (6), Pholiotina (4) and Galerina (1), about 170 in all. A 2005 review raised the Psilocybe count to 144 [1]. Other writers say more than 200 [9]. New species keep being described, including two from southern Africa in 2023 and 2024 [1].

Strains of Psilocybe cubensis

Most mushrooms sold or grown at home are Psilocybe cubensis, and they are sold under strain names. There is no authoritative count of strains. A genetic study of 81 strains found minimal differences between many strains sold under different names, and one cultivator calls strain names “little more than marketing labels” [9].

Golden Teacher and Penis Envy

Golden Teacher is usually described as moderately potent. Penis Envy is usually described as stronger, and some users take half as much of it [9]. Lab numbers are scarce. One lab-testing article reports Golden Teacher from two cultivators at 0.4% and 1.2% psilocybin by dry weight, and Penis Envy at 1.8% from a reputable cultivator and 0.6% from one that was mislabeled or poorly grown. The article names no lab or date for those figures [10]. Oakland Hyphae’s testing found that Penis Envy “tends to perform higher, but it’s random every single time” [9]. The name on the bag does not tell you the strength. Studies handle this by dosing in measured milligrams of psilocybin, not by the weight of the mushroom [6]. Colorado does the same for regulated products: licensed testing facilities must measure potency and contaminants before a product enters the supply chain, and a serving is capped at 10 milligrams of total psilocin [18]. A person who goes through a licensed healing center gets a measured amount to work with, which the unregulated market cannot offer.

How Much Psilocybin Is In a Mushroom

Dried mushrooms typically hold about 0.5% to 1% psilocybin by weight, with a published range of 0.03% to 1.78% [1]. Psilocybe cyanescens and Psilocybe azurescens appear to be the strongest species [1]. A Denver lab reported potencies

from 0.4% to 1.5% in the samples it tested, and the same article reports Psilocybe cubensis samples under one strain label ranging from below 0.1% to above 2.0% [10]. Compiled studies report up to 19.9 milligrams of psilocybin per gram, and lab-grown mushrooms are more consistent than wild ones [5].

In plain arithmetic, a gram of dried mushroom at 0.4% holds 4 milligrams of psilocybin and a gram at 1.5% holds 15, nearly four times as much. Potency also differs between mushrooms in one batch and between parts of one mushroom [11]. Because strength cannot be read from the name, assume the next batch may be stronger than the last and choose any amount with that spread in mind.

Legal Status

Last checked 10/26/2026. This area of law is changing; the Colorado Division of Natural Medicine lists revised rules as recently as 8/12/2026 [12].

Federal

Psilocybin is a Schedule I controlled substance under federal law, and it is Schedule I under the 1971 UN Convention on Psychotropic Substances [8]. Possession and use remain federal crimes on national parks, wilderness areas and other federal land [13].

Colorado

Under the Natural Medicine Health Act of 2022, adults 21 and older may use psilocybin personally in private settings, may grow it on the grounds of a private residence if it is secured from anyone under 21, and may share it without payment with other adults in communal or supported settings [13]. Selling is not part of personal use. Any sale outside the state’s regulated system is illegal, and the Division has sent cease-and-desist letters to businesses selling mushrooms [14]. The legal route runs through the license system: licensed cultivators grow the mushrooms, licensed manufacturers and testing facilities prepare and measure them, and licensed healing centers, where trained facilitators work with clients, provide them [18].

Use in public places is not protected, providing it to anyone under 21 is a level 1 drug felony, driving or operating a machine while impaired is not protected, and employers may fire an employee for use at work [13]. Licensed healing centers are the state’s regulated route: as of 10/23/2026 the Division reports 11 standard and 35 micro healing center licenses approved [12].

Contraindications

Certain medications and conditions make psilocybin riskier. Much of the evidence below comes from case reports, surveys and self-reported accounts, so it is thin, and sources sometimes disagree. Check with a medical provider before using, and never

stop or change a prescribed medicine on your own, because stopping some of them carries risks of its own [15].

Medications

- **Lithium:** described as strongly contraindicated, with a risk of seizures and delirium. The evidence is self-reported accounts, which the authors call low quality [16][15]. In the same dataset lamotrigine was not linked to seizures [15].
- **MAOIs (including selegiline patches and tranylcypromine):** a risk of high blood pressure and overheating, and MAO-A inhibition may strengthen psilocin. Generally contraindicated, with a long washout period [16].
- **SSRIs and SNRIs (fluoxetine, sertraline, escitalopram):** the evidence is mixed. Some naturalistic reports say they blunt the effects. The one randomized trial found psilocybin's effects were not reduced after two weeks on an SSRI, which the authors call too short to settle the question, and serotonin syndrome risk is described as theoretical [16][15].
- **Tricyclic antidepressants:** may weaken the effects and add to blood pressure and heart rate swings [16].
- **Mood-stabilizing anticonvulsants (valproate, carbamazepine, lamotrigine):** may weaken the effects. These have not been studied much [16].
- **Antipsychotics (olanzapine, risperidone):** block the 5-HT2A receptor and can reverse the effects. They are avoided in therapeutic use and sometimes used to end an experience that is not tolerated [16].
- **Benzodiazepines (midazolam):** may dampen the effects, although visual and time perception changes persist [16].
- **Stimulants (methylphenidate, amphetamines):** avoided because of rises in heart rate and blood pressure [16].
- **Others named in the same guide:** linezolid (may weaken the effects), St. John's wort and metoclopramide (both to be avoided), and diuretics (avoid dehydration). Beta blockers and other blood pressure medicines are sometimes used to manage the body's response, so talk with the prescriber [16].

Conditions

- **High blood pressure and heart disease:** blood pressure and heart rate rise after psilocybin [7][8].
- **Heart valve disease:** frequent use is linked to valve damage through the 5-HT2B receptor [8].
- **Personal or family history of psychosis or other serious psychiatric illness:** carries the highest risk of a psychotic reaction [8].
- **Conditions that raise body temperature or make heat dangerous:** body temperature went over 38°C in 16% of supervised doses [7]. Ask a provider what this means for you.

Addiction and Misuse

Physical dependence, addiction and misuse are three different things. Physical dependence means the body has adapted to a substance and reacts with withdrawal when it is stopped. Addiction, which the DSM-5 calls substance use disorder, is a pattern of continued use despite harm. Misuse is using a substance in a way or an amount that causes harm or was not intended, and it can happen without addiction.

For psilocybin, the evidence on physical dependence and addiction is low. Repeated use does not cause physical dependence or withdrawal [4][8]. Tolerance builds after a single dose and fades within a few days, and it crosses over to LSD and mescaline [8]. Animals self-administer psilocybin at low rates [8]. Low is not none, and the concerns that remain are psychological: using to escape ordinary life, and the heart valve concern with frequent use above.

Synergistic Effects and Combining Medicines

The medicines listed under Contraindications are the combinations with the best documentation. Mixing psilocybin with MDMA, sometimes called hippie flipping, raises the risk of serotonin syndrome and puts added strain on the heart. The handout Psychedelics and Cautions names more combinations known to go badly, with a note that this is a young field and caution is the best way to proceed. Any other substance can change the experience in ways nobody has studied well, so check each one with a medical provider.

Testing, Foraging and Purity

Misidentification is a more common public health concern than overdose, because some psilocybin species resemble mushrooms that are toxic [1]. The deadly galerina (Galerina marginata) contains amatoxins that destroy the liver. The North American Mycological Association’s 2012 toxicology report records a person who ate it believing it was a hallucinogenic mushroom (the report says that case may be a fabrication) and a dog that died of liver failure after eating mushrooms suspected to be galerina [17].

Reagent test kits are not a safe way to identify a mushroom. The Ehrlich reagent reacts with indoles, so ordinary button mushrooms reacted strongly in one set of tests, and so did the death cap, which is deadly. A Galerina sample gave no reaction, and that genus is toxic. Results also varied between mushrooms and between parts of the same mushroom [11]. A color change does not measure strength either.

The safer routes are to identify any wild mushroom with an experienced person, and to buy only from sources that publish independent lab results. Colorado has labs that measure mushroom potency, such as Altitude Consulting in Denver, which uses high-performance liquid chromatography [10].

Preparation and Integration

Dosing and timing numbers belong to the sources listed at the end of this sheet and to a medical provider, because they change more often than this sheet does.

Before

Preparation starts weeks ahead. Ask a psychedelic-informed physician to go through your medications and your heart. Do not stop a prescribed medicine on your own.

Choose the people and the place the way you would choose who holds the rope. Have a sober sitter you trust, a room where you will not be interrupted, a bathroom close by, and no plans to drive afterward. Know what you have: strength varies so much (see above) that what you took last time says little about the next batch.

After

The days after belong to the experience too. Leave room in the calendar. Write or draw what came up, and talk with someone who can hear it without needing it to mean something. If something frightened you or you cannot place it, bring it to a qualified professional. Fireside Project offers peer support after an experience as well as during one.

If You Need Help Now

In a medical emergency, call 911. If you are in emotional crisis, you can call or text 988. Fireside Project has trained volunteers who talk with you by phone or text during and after a psychedelic experience, and DanceSafe sells kits for testing what you hold.

Call 911 for a seizure, loss of consciousness, delirium or confusion that does not clear, or a very high body temperature [16][7]. If a wild mushroom may have been the wrong one, call for an ambulance at once for severe abdominal pain, vomiting, diarrhea, convulsions, delirium or loss of consciousness [11]. Keep a sample of what was eaten if you can, and call Poison Help at 1-800-222-1222.

Where to Find More Information and Support

Amounts, timing and combinations are best checked against these sources and with a medical provider, because they are updated more often than this sheet. Erowid, TripSit and PsychonautWiki include user reports and community writing, so read them as experience as well as research.

- Erowid: https://erowid.org. Library on psychoactive plants and chemicals, with a lab testing results database called DrugsData.
- DanceSafe: https://dancesafe.org. Drug checking, test kits and education.
- TripSit: https://tripsit.me. Harm reduction information and support.

- PsychonautWiki: https://psychonautwiki.org. Community written substance information.
- Zendo Project: https://zendoproject.org. Peer support and education for difficult psychedelic experiences.
- Fireside Project: https://firesideproject.org. Free, confidential psychedelic peer support by phone, text and app.
- MAPS: https://maps.org. Psychedelic research and news.
- Colorado Division of Natural Medicine: https://nmd.colorado.gov. The state's rules, licensed healing centers and announcements.
- North American Mycological Association: https://namyco.org. Mushroom identification and poisoning information.
- Poison Help: 1-800-222-1222.

Mailing Lists

- Erowid Monthly, a free email list: https://www.erowid.org/about/about_announcements.shtml
- Erowid Extracts, the members' newsletter: https://erowid.org/membership/
- MAPS email newsletter: sign up at https://maps.org

References

The numbers in brackets in the text point to these references. Where a source is a summary page, the studies it cites are named beneath it, and those should be checked against the originals before this sheet is final.

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