

vi (rev-8)

Materials & Resources

Patient Education



Terrasana Cannabis Company does not provide medical advice.
Consult your physician if you have questions about a medical condition.

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INTRODUCTION

Welcome to your new journey as a medical marijuana patient in Ohio. Terrasana helps patients by providing them with education and safe access to natural, medical cannabis from the good earth.

Please review the following information

Ohio Medical Marijuana Patient and Caregiver's webpage:
<https://medicalmarijuana.ohio.gov/patients-caregivers>

QUALIFYING CONDITIONS

Certified physicians may recommend medical marijuana only for the treatment of a qualifying medical condition.

Under Ohio law, all of the following are qualifying medical conditions:

- ♦ Acquired immune deficiency syndrome (AIDS)
- ♦ Alzheimer's disease
- ♦ Amyotrophic lateral sclerosis
- ♦ Cancer
- ♦ Chronic traumatic encephalopathy
- ♦ Crohn's disease
- ♦ Epilepsy or another seizure disorder
- ♦ Fibromyalgia
- ♦ Glaucoma
- ♦ Hepatitis C
- ♦ Inflammatory bowel disease
- ♦ Multiple sclerosis
- ♦ Pain that is either of the following: chronic and severe or intractable
- ♦ Parkinson's disease
- ♦ Positive status for HIV
- ♦ Post-traumatic stress disorder (PTSD)
- ♦ Sickle cell anemia
- ♦ Spinal cord disease or injury
- ♦ Tourette's syndrome
- ♦ Traumatic brain injury
- ♦ Ulcerative colitis



Cannabis is understudied as a medication. Most of the research conducted on cannabis by federally funded studies uses very different product from what is being produced in medically legal states. All the cannabis grown by the government for research is grown at one facility and the plants that they are cultivating

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Be as responsible in your use of cannabis as you would with any other medication.

have very low THC percentages and trace to no CBDs. Research of cannabis as medication varies widely, and some internet information sources can be misleading. About 2% of doctors in the United States have working medical knowledge of cannabis as a medicine. Generally speaking,

patients are working with doctors and dispensaries to create the appropriate medical routine.

This guide is written to help patients understand the compounds and effects of medical cannabis and provide a greater understanding of the uniqueness of the product, and how to find the dose and method of consumption that works for the patient. The guide will provide the patient with a general understanding of cannabis, and will empower

them with the knowledge required to make appropriate decisions. The guide includes a lexicon of language associated with medical cannabis, the different forms and potential effects, a list of adverse side effects, and important resources for medical cannabis patients.

Treat cannabis in all its forms as you would other medications. Be as responsible in your use of cannabis as you would with any other medication, whether prescription or over-the-counter. Follow your doctor's recommendations on which forms of cannabis to use, how much to use, and how often to use it. Let your doctor know if you experience any undesirable or worrisome side effects of cannabis and follow up with your doctor on a regular basis.

CANNABIS PLANT 101

Though cannabis is biologically classified as the single species *Cannabis Sativa*, there are at least three distinct plant varieties (though the last is rare.):

- ♦ **Cannabis Sativa**
- ♦ **Cannabis Indica**
- ♦ **Cannabis Ruderalis**

There are also hybrids, which are crosses between sativa and indica varieties. Cannabis used for fiber is typically referred to as hemp and has only small amounts of the psychoactive cannabinoid THC, usually less than 1%.

The first identified and best-known cannabinoid is THC (delta-9-tetrahydrocannabinol). THC has the most significant psychoactive effect of the cannabinoids. The ratio of THC to other cannabinoids varies from strain to strain.

- ◆ Cannabidiol (CBD) is the main cannabinoid in low-THC cannabis strains, and modern breeders have been developing strains with greater CBD content for medical use. Talk to your recommending physician about whether CBD can be used to treat symptoms of your qualifying condition.

In addition to cannabinoids, other cannabis plant molecules are biologically active. A few other molecules known to have health effects are flavonoids and terpenes

or terpenoids (the flavor and smell of the strain). Cannabinoids, terpenoids, and other compounds are secreted by the glandular trichomes found most densely on the floral leaves and flowers of female plants.

Terpenes are any of a large group of volatile unsaturated hydrocarbons found in the essential oils of plants, especially conifers and citrus trees. These are large and diverse class of organic compounds, produced by a variety of plants, particularly conifers, and by some insects. Terpenes often have a strong odor and may protect the plants that produce them by deterring herbivores and by attracting predators and parasites of herbivores. In the cannabis plant, terpenes are produced by trichomes, the tiny crystal-like hairs on the cannabis plant flower.







HOW TO SELECT A STRAIN

When selecting a strain, it helps for the patient to know what type of terpene they tend to like, as well as the ones they don't like. Next, the patient should consider the effects they want to experience.





TERPENES



CARYOPHYLLENE

Aroma:

- ♦ Pepper
- ♦ Spicy
- ♦ Woody
- ♦ Cloves

Also Found In:

- ♦ Black pepper
- ♦ Cloves
- ♦ Cinnamon

Potential Effects:

- ♦ Stress relief





FARNESENE

Aroma:

- ♦ Apple
- ♦ Hops
- ♦ Ginger

Also Found In:

- ♦ Apples
- ♦ Turmeric
- ♦ Potatoes
- ♦ Fruit rinds

Potential Effects:

- ♦ Calming
- ♦ Focus

HUMULENE

Aroma:

- ♦ Hops
- ♦ Woody
- ♦ Earthy

Also Found In:

- ♦ Hops
- ♦ Coriander
- ♦ Cloves
- ♦ Basil

Potential Effects:

- ♦ Calming
- ♦ Uplifting





LIMONENE

Aroma:

- ♦ Citrus

Also Found In:

- ♦ Juniper
- ♦ Lemons
- ♦ Oranges

Potential Effects:

- ♦ Elevated mood
- ♦ Stress relief

LINALOOL


Aroma:

- ♦ Floral
- ♦ Citrus
- ♦ Candy

Also Found In:

- ♦ Lavender

Potential Effects:

- ♦ Mood enhancement
 - ♦ Sedation
- 



MYRCENE

Aroma:

- ♦ Earthy
- ♦ Cloves
- ♦ Herbal

Also Found In:

- ♦ Hops
- ♦ Lemongrass
- ♦ Mango
- ♦ Thyme

Potential Effects:

- ♦ Sedation
- ♦ Relaxation

PINENE

Aroma:

- ♦ Pine

Also Found In:

- ♦ Pine trees
- ♦ Rosemary
- ♦ Sage

Potential Effects:

- ♦ Alertness
- ♦ Memory retention,
- ♦ Counteracts some THC effects



EFFECTS

Different people have different experiences when they use medical cannabis. One individual may feel stress release, while another feels over-stimulated and stressed, while another feels energized and on-task.

There are many factors that impact the effect of cannabis

- ◆ **Amount used (dosage)**
- ◆ **Strain of cannabis used and method of consumption**
- ◆ **Environment/setting**
- ◆ **Experience and history of cannabis use**
- ◆ **Biochemistry**
- ◆ **Mindset or mood**
- ◆ **Nutrition or diet**
- ◆ **Types of cannabis**

Genetic “breeders” of the cannabis seed have developed thousands of different strains of cannabis from these three varieties. There are marked differences between sativa, indica, and hybrid. Today, we mostly find hybrids. It can be difficult to find pure indica or sativa.

All types of medical cannabis produce effects that are more similar than not. But individual strains will have differing cannabinoid and terpene content, producing noticeably different effects. Many people report finding some strains more beneficial than others. As noted above, effects will also vary for an individual based on the setting in which it is used and the person’s physiological state when using it.

In general, sativas and indicas are frequently distinguished as follows:

INDICAS

The general effects are on the body. Indicas generally produce sedated feelings, and are preferred for nighttime use.

SATIVAS

The general effects are on thoughts and feelings. Sativas generally are stimulating, and are preferred for daytime use.

HYBRIDS

Strains bred from crossing two or more varieties—with typically one dominant. For example, a sativa-dominant cross may stimulate appetite and relax muscle spasms. Crosses are reported to work well to combat nausea and increase appetite.

Source: Americans for Safe Access

https://www.safeaccessnow.org/using_medical_cannabis

METHODS OF CONSUMPTION

Dispensary employees are a huge source of information. Please discuss consumption methods with dispensary employees.

♦ Vaporizing

Vaporizing is the alternative to smoking. The effects are felt instantly and can last several hours.

Cannabinoids that are heated to the right temperature will boil and vaporize; the result is minimal smell and no smoke. Vaporizers emit much less odor than any type of smoking.

Many report using less cannabis for the same desired effect with this method, making it cost-effective. You can vaporize both flower and concentrated oils. Different devices are available for different products. Invest in a tabletop Volcano brand vaporizer or a hand-held vaporizer (such as vaporPlus).

♦ **Edibles**

Cannabis-infused edibles can last up to 6 to 12 hours. They are also by far the tastiest consumption method!

Cannabis can be infused into sweets like cookies, brownies, and candy or into savory dishes via sauces and seasonings. It can take one to two hours for edibles to take effect. It is recommended to consume cannabis-infused edibles in small quantities until you better understand the dosage that works best for you.

Using edible cannabis effectively will usually take some experimentation with particular product types and dosage. Digesting cannabis also metabolizes the cannabinoids somewhat differently and can produce different subjective effects, depending on the individual.

Use small amounts of edibles and wait 2 hours before gradually increasing the dose, if needed. Take care to find and use the right dose; excessive dosage can be uncomfortable and happens most often with edibles.

♦ **Tinctures**

Made with an alcohol or glycerin base, tinctures are liquid solutions that are taken sublingually (under the tongue) or added to cold beverages. They can take 30 to 60 minutes to begin working and typically last for 2 to 6 hours.

Tinctures are convenient and easy to consume, with minimal preparation involved. Try cannabis pills made with hash or cannabis oil or ingest via Tinctures/Sprays.



Find your ideal dosage to enhance your therapeutic benefits. Start with no more than two drops and wait at least an hour before increasing the dosage, incrementally and as necessary.

♦ **Concentrates**

Concentrated forms of marijuana include hash, shatter, wax, sauce, budder, moonrocks, etc.

Concentrates have higher cannabinoid content and are therefore more potent. Their effects vary depending on a particular product's potency and your method of consumption.

Concentrates can be vaporized, used in edibles, taken orally, or even applied topically depending on how they are made. Be aware of the way the product is intended to be consumed.

♦ **Topical Products**

Topicals include oils, salves, chills, patches, and lotions infused with cannabis.

Topical products are applied directly to the skin, absorbing transdermally and often used for localized relief of pain, soreness and inflammation. Relief of these products can begin within 15 to 45 minutes of application and can last several hours.



DOSAGE

The optimal dosage of cannabis differs for different patients. Individual variables like age, weight, gender, cannabis tolerance, consumption method, even the strain you are using, will determine the appropriate dosage for you. Our staff is dedicated to helping you find the ideal dosage, but it often requires a period of experimentation. New users often go through a relatively short trial-and-error period to determine the dose that reduces their symptoms.

The goal is to find the smallest amount of cannabis to achieve the desired effect of symptom relief, and refine the dosage as needed. Small, incremental changes are ideal.

A close-up photograph of a person's hands writing in a white journal. The person is wearing blue jeans and a white t-shirt. The pen is silver with a black star-shaped logo. The background is a light-colored wooden surface.

HOW TO MAINTAIN A CANNABIS JOURNAL

Track usage with a journal. Take notes to figure out what strains, dosage, and methods work best for you. It will cut down the time needed for the initial trial-and-error process. Be sure to track important information as described on the following page.

What to track in your cannabis journal

- ♦ How much cannabis you use
- ♦ How you consume it
- ♦ Which strain(s) you use
- ♦ The time you medicate
- ♦ Detailed information about your symptoms before and after medicating

How to track your symptoms

- ♦ What are they
- ♦ How are they impacted
- ♦ How long the effect lasts
- ♦ Any other qualitative information you find useful

As mentioned, every person responds differently to cannabis. A particular amount of cannabis that alleviates chronic pain for one patient may have no effect on another. A strain that alleviates insomnia in one patient may exacerbate it for someone else. It's important to be aware that using cannabis can result in adverse side effects. There has never been a reported death as a result of a cannabis overdose. If you experience adverse effects, it may help to lower the dosage and/or use a different strain. Avoid combining marijuana with sedatives or alcohol. It can cause excessive drowsiness. Short-term side effects may include: dry eyes, dry mouth, rapid heartbeat, panic attacks, anxiety, disorientation, light-headedness and dizziness, cognitive impairment, and short-term memory loss.

Each product and cannabis variety has its own cannabinoid and terpene profile and subtly different effects. Whether you use Sativa-dominant, Indica-dominant, or a Hybrid it makes a difference.

Other important information you need to know
before using medical marijuana

- ♦ Do not operate machinery after consuming cannabis.
- ♦ Cannabis is not recommended if you are pregnant or breastfeeding.
- ♦ It is illegal to consume cannabis in public.
 - This includes being in a vehicle and especially while driving.
- ♦ It is illegal to bring cannabis and cannabis products across state lines, even if both states allow medical marijuana.
- ♦ Take note of what effect each variety produces for you (therapeutic and side effects); keeping a log can be helpful.
- ♦ Increase your dosage slowly over time. Track the progress. If you can, use higher potency cannabis so you use less medicine. Concentrates can be useful, particularly if you need higher doses.
- ♦ For concentrates, use a glass made for cannabis concentrates.
- ♦ Take a medicine vacation occasionally. Either reduce or stop for however long it feels comfortable for you.
- ♦ Change the variety if the one you're using seems to be losing its effectiveness.
- ♦ Whenever possible, choose organic cannabis products. Never consume cannabis that has been treated with pesticides.

PATIENT AND CAREGIVER GUIDELINES TO POSSESSION IN OHIO

PATIENTS AND CAREGIVERS MUST MAINTAIN COMPLIANCE WITH THESE RULES

- ♦ Patient and caregiver registrations are non-transferable.
- ♦ Patients and caregivers will not engage in the cultivation of medical marijuana or the manufacture of medical marijuana extract, unless they are an employee of a medical marijuana organization (<http://codes.ohio.gov/oac/3796:5-2-01>) and such cultivating or manufacturing is performed in compliance with rules promulgated by the department pursuant to section 3796.03 of the Revised Code.
- ♦ No patient or caregiver will accept free samples of medical marijuana.
- ♦ Patients and caregivers will purchase medical marijuana only from a medical marijuana dispensary with an active certificate of operation issued by the state board of pharmacy, or where authorized pursuant to a reciprocity agreement established pursuant to section 3796.16 of the Revised Code.
- ♦ Patients and caregivers will store medical marijuana in a secure location so as to prevent theft, loss, or access by persons not authorized under this division.

- ♦ Patients and caregivers will carry their registry identification with them whenever they are in possession of medical marijuana.
- ♦ No more than a ninety day supply of medical marijuana may be possessed by or on behalf of a single patient at any time.

Medical marijuana shall be maintained in on one of the following containers at all times until administered to or by a patient

- ♦ **The original dispensing package with an unaltered dispensary label**

In accordance with rule 3796:6-3-09 of the Administrative Code

- ♦ **The container provided by a dispensary**

In accordance with paragraph (G) of rule 3796:6-3-01 of the Administrative Code.

-
- ♦ Medical marijuana will not be possessed or administered on federal property or in federal buildings.
 - ♦ Medical marijuana will not be possessed or administered at any public or private place where medical marijuana is prohibited.

- ♦ No patient will operate a vehicle, streetcar, trackless trolley, watercraft, or aircraft under the influence of medical marijuana
- ♦ A caregiver will not receive payment or other compensation for services provided as a caregiver other than reimbursement for reasonable expenses incurred in the provision of services as a caregiver. In the case of an employee of a hospice provider, nursing facility, or medical facility, or a visiting nurse, personal care attendant, or home health aide serving as a caregiver, the individual shall not receive payment or compensation above or beyond his or her regular wages.
- ♦ The state board of pharmacy will notify patients and caregivers upon the expiration of the patient's or caregiver's registration. Patients and caregivers shall dispose of all medical marijuana within seven calendar days of the expiration of their registration.
- ♦ If a patient's registration is suspended or revoked, or if a patient's registration lapses, the patient or caregiver will dispose of all medical marijuana dispensed for the benefit of that patient within seven calendar days of the expiration of their registration.
- ♦ Acceptable methods for the dispossession of medical marijuana are available at www.medicalmarijuana.ohio.gov

PURCHASE LIMITS FOR PATIENTS AND CAREGIVERS

Ohio patients (and caregivers) may purchase cannabis products only in specified quantities. The minimum purchase is a whole-day supply, while the maximum is a ninety-day supply.

A patient's ninety-day supply may be made up of a combination of products so long as the combined total supply remains within legal limits.

Whole-Day Supply

Cannabis Product	Minimum Purchase	Per
Capsule	110 mg	Day
Edible	110 mg	Day
Oil (for ingestion)	110 mg	Day
Oil (for vaporization)	590 mg	Day
Plant Material	(0.10 oz) 2,830 mg	Day
THC Lotion, Cream, or Ointment	295 mg	Day
THC Patch	295 mg	Day
Tincture	110 mg	Day

A patient and a patient’s caregiver(s) may collectively purchase no less than a whole day unit at a single time. (ORC 3796:8-2-04 A)

Ninety-Day Supply

Cannabis Product	Purchase Limit	Per
Capsule	9,900 mg	90 Days
Edible	9,900 mg	90 Days
Oil (for ingestion)	9,900 mg	90 Days
Oil (for vaporization)	53,100 mg	90 Days
Plant Material (Tier i medical marijuana)	(8 oz) 226,800 mg	90 Days
Plant Material (Tier ii medical marijuana)	(5.30 oz) 150,300 mg	90 Days
THC Lotion, Cream, or Ointment	26,550 mg	90 Days
THC Patch	26,550 mg	90 Days
Tincture	9,900 mg	90 Days

A patient and the patient’s caregiver(s) may collectively purchase, within a ninety-day period, no more than a ninety-day supply. A ninety-day supply may consist of multiple forms of medical marijuana, but the total ninety-day supply shall not exceed a ninety-day supply whether purchased as a single form or aggregated across forms. (ORC 3796:8-2-04 B)

Terminal Illness

Patients suffering from terminal illness may purchase medical cannabis in greater quantities. The following table describes the maximum ninety-day supply limits for terminally ill patients in Ohio.

Ninety-Day Supply (for Terminally Ill Patients)

Cannabis Product	Purchase Limit	Per
Capsule	11,700 mg	90 Days
Edible	11,700 mg	90 Days
Oil (for ingestion)	11,700 mg	90 Days
Oil (for vaporization)	65,700 mg	90 Days
Plant Material (Tier i medical marijuana)	(10 oz) 283,500 mg	90 Days
Plant Material (Tier ii medical marijuana)	(6.60 oz) 187,100 mg	90 Days
THC Lotion, Cream, or Ointment	33,300 mg	90 Days
THC Patch	33,300 mg	90 Days
Tincture	11,700 mg	90 Days

Notwithstanding paragraphs (A) and (B) of this rule, a patient who is diagnosed with a terminal illness and the patient's caregiver(s) may collectively purchase, within a ninety-day period, no more than a ninety-day supply. A ninety-day supply may consist of multiple forms of medical marijuana, but the total ninety-day supply shall not exceed a ninety-day supply whether purchased as a single form or aggregated across forms. (ORC 3796:8-2-04 C)





RISKS

This section addresses the potential hazards associated with medical cannabis and identifies resources available to help Ohio patients.

PROHIBITION AGAINST AND DANGERS ASSOCIATED WITH MEDICAL MARIJUANA EXTRACTIONS

The tables on the following pages provides the process used to create specific concentrates and the resulting products.

The table does not include a “toxicity” description for butter. The only danger with butter is over ingestion. In the case of medical marijuana, there has never been a case of death as a result of overconsumption.

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In the case of medical marijuana, there has never been a case of death as a result of overconsumption.

All products should be taken with caution, and in a monitored situation the first time. Edibles should always be consumed in 2-5 mg increments the first time. After 2 hours if no effect is evident, increase dose by 2 mg at a time. Wait 45 minutes (min) to 2 hours (max) between increasing dosage. As the patient learns how they react to the specific product and dosage, they can adjust accordingly.

In the case of over ingestion, drink plenty of water, try to sleep or relax in a low-lit, low-stimulus environment. The patient may experience feelings of paranoia, delusions and even hallucinations.

BUTTER

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Process	Toxicity
Boil decarboxylated cannabis product in butter or oil creating an infused cooking ingredient.	—
Resulting Products	Comments
Edibles, trail bars, nut mixes	Great for use in edibles, but limited use otherwise.
	Gluten free

WATER Bubble Hash

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Process	Toxicity
Dry, fresh, or frozen plant material mixed with cold water or ice agitated manually (or mechanically) to break down trichome heads then sifted through screens.	Rare occurrences of water intoxication
	Mold and microbes if dried improperly
Resulting Products	Comments
Bubble hash smokable concentrate	Water hash results in golden color and when pressed between parchment results in taffy or shatter like consistency.
	Often a relatively pure finish that typically tests between 50% and 80% THC.
	Difficult to maintain zero contaminants due to the bags being difficult to clean.



ETHANOL

Alcohol, Rick Simpson Oil (RSO)

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Process	Toxicity
Plant matter soaks in ethanol to dilute trichomes. Once dissolved, plant matter is removed. It is vacuum evaporated, leaving behind a sticky and potent concentrate.	Clean and easy to remove, but potential to over extract. Flammable and combustible, but not as volatile as butane.
Resulting Products	Comments
Tincture, topicals	The most used at home method. Good for smaller operations but challenging to scale up production.

CO2

Closed Loop, Hypercritical CO2

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Process	Toxicity
Carbon dioxide compressed at high pressure and temperature until it becomes a fluid that is then stripped of essential oils of the plant.	Non-flammable, no chemical solvents, but can be a toxic gas in high concentrations.
Resulting Products	Comments
Strong concentrate for dabs/pens (oil cartridge, oil syringe, distillate, topicals)	Creates an oily concentrate, ideal for smokable cartridges (E-cig), edibles, distillate. Oil is typically golden tinted, clear, or opaque that typically tests between 50% and 80% THC. Equipment cost is high, but facility cost is low. Potent results



BUTANE N-Butane Hydrocarbon

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Process	Toxicity
Pressurized and washed over plant material (usually dry) a solution is collected and then applying heat and vacuum.	Flammable and combustible; possible residual solvent if not properly purged.
Resulting Products	Comments
Strong concentrate for dabs/pens (wax, shatter, budder, live nectar, live resin, topicals)	Most common is BHO butane hash oil and known as wax, shatter, crumble. Generally tests between 60% and 90% THC. Other hydrocarbons such as propane and hexane are used but the final product can have different colors and flavors. The use of blended gases produces signature products. Moderate equipment cost. High equipment cost. Potent results



SIGNS AND SYMPTOMS OF USE AND ABUSE

Expected effects of medical marijuana may include

- ◆ Dry mouth
- ◆ Dry or red eyes
- ◆ Impaired motor coordination
- ◆ Impaired reaction time
- ◆ Impaired memory
- ◆ Impaired perception & timing
- ◆ Causes drowsiness after high
- ◆ Increases dizziness
- ◆ Decreases concentration
- ◆ Impaired judgment of speed
- ◆ Impaired judgment of distance
- ◆ Unable to recover from glare

Use of marijuana can cause the following side negative effects

- ◆ Heart & blood pressure problems
- ◆ Lung problems
- ◆ Impaired mental functioning
- ◆ Headache
- ◆ Dizziness
- ◆ Numbness
- ◆ Nausea
- ◆ Vomiting

If you experience any of these symptoms, you should discontinue use.



Non-emergency situations

If you are experiencing adverse effects, contact your physician or the Ohio Medical Marijuana Control Program Toll-Free Helpline

- ♦ **Contact your physician**
- ♦ **Call 1-833-4OH-MMCP**

1-833-464-6627

In case of an emergency

- ♦ **Stop using medical marijuana**
- ♦ **Seek medical assistance**
- ♦ **Contact your physician**

As reported by anecdotal evidence and scientific research, cannabis in all its forms is a very safe treatment. Usually, any negative side effects are easily tolerated and mild. Anxiety attacks, convulsions, and temporary psychosis are very rare complications, typically caused by ingesting too much edible cannabis or smoking cannabis high in THC, and are more likely to occur in patients who have never used medical marijuana, are novice users, or use it infrequently.

It is impossible to fatally overdose on cannabis. Over time, with regular use and dosage adjustments, many of the psychoactive effects are decreased.



The possible negative side effects of cannabis usage include

- ♦ **Decreased sperm count**
 - Seen only in animal experiments and not yet in humans, but worthy of noting
- ♦ **Drowsiness**
- ♦ **Eye redness**
- ♦ **Impaired psychomotor performance**
- ♦ **Hunger**
- ♦ **Short attention span**
- ♦ **Short-term, temporary memory loss**
- ♦ **Thirst**
- ♦ **Uneasiness**
- ♦ **Euphoria**
- ♦ **Decreased REM sleep patterns**

Some studies have shown long-term, heavy cannabis use may impact reproductive hormones, possibly causing decreased sperm counts. However, it does not cause infertility. There is evidence in animals that fetal exposure to cannabis may carry a higher risk of cognitive deficiencies, small birth weight and premature delivery, but there is no research evidence of similar effects in humans. Nonetheless, it is important for women who are pregnant or may become pregnant to avoid using cannabis until scientific research can definitively determine whether its use in pregnancy also has negative effects in humans.

While cannabis is shown to improve mental conditions, such as ADHD, PTSD, bipolar disorders, depression and anxiety, some patients may find that cannabis aggravates the symptoms of their disorder. Therefore, patients who have been diagnosed with a mental illness are encouraged to consult with their doctors before using medical cannabis, and regularly while using it.

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Driving under the influence of cannabis, especially THC, is considered a crime in most states.

Although there is conflicting research on whether cannabis use in hepatitis C is beneficial or detrimental, patients diagnosed with hepatitis C should be judicious in their use of cannabis.

Cannabis patients should refrain from driving for a minimum of two hours after using marijuana by inhalation, and should carefully assess their ability to drive or carry out complex tasks after using tinctures or especially ingested cannabis products. Keep in mind that cannabis can cause impairment of motor skills that may last for several hours, and that driving under the influence of cannabis, especially THC, is considered a crime in most states.

OPPORTUNITIES TO PARTICIPATE IN SUBSTANCE ABUSE PROGRAMS

◆ **Columbus Recovery Center**

<https://www.columbusrecoverycenter.com/resources/marijuana-addiction-in-ohio/>

◆ **OSU Counseling and Consultation Service**

<https://ccs.osu.edu/self-help/cannabis-marijuana/>

◆ **Addiction Center**

<https://www.addictioncenter.com/rehabs/ohio/>

TOLL-FREE HELPLINE

The Ohio Medical Marijuana Control Program Toll-Free Helpline responds to inquiries from patients, caregivers, and health professionals regarding adverse reactions to medical marijuana, and provides information about available services and additional assistance as needed.

To contact the line, please dial: 1-833-4OH-MMCP
(1-833-464-6627)



PATIENT RESOURCES

- ♦ **More about Terpenes**

<https://www.cannainsider.com/reviews/cannabis-terpenes/>

- ♦ **United Patients Group**

<https://unitedpatientsgroup.com/Resource-for-Medical-Cannabis-Information>

- ♦ **Americans for Safe Access:
Condition Specific Information**

<https://www.safeaccessnow.org/conditions>

- ♦ **Medical Cannabis**

https://www.safeaccessnow.org/using_medical_cannabis

- ♦ **Journaling App**

<https://releafapp.com/>

- ♦ **OMMCP**

<https://medicalmarijuana.ohio.gov/patients-caregivers>

- ♦ **Leafly**

<https://www.leafly.com/>

- ♦ **Weedmaps**

<https://weedmaps.com/>

- ♦ **Mary's Medicinals**

http://marysmedicinals.com/NewSite/wp-content/uploads/2018/07/CANNABISMAN_24x36.jpg





Terrasana Cannabis Company

Cleveland



Columbus



Fremont



Springfield