

2018

CANNABIS CLINICIANS COLORADO

Your Clinician

720-443-2420
Healthy Choices Unlimited

Medical Marijuana New Patient Success Guide

Courtesy of



HCU Education Ltd.

CoScc.org



Marijuana
for
Medical
Professionals

MJforMDs.com



Healthy Choices Unlimited

Common Forms of Cannabis and Methods of Usage

Inhaled Marijuana – The fastest way to get marijuana into your body is to inhale it. This includes smoking, vaporizing, and dabbing.

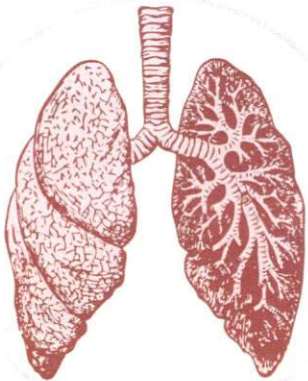


Smoking pipes and hand-rolled joints are ways cannabis has been enjoyed for centuries.

- Takes effect fast. Effects felt in 1-3 minutes.
- Wears off fast. Effects last only 1-3 hours.
- Hard to over-do-it. Had too much? Set the pipe down and wait an hour.

Vaporizing is more efficient than smoking. Lighting your marijuana with a 500+ degree flame destroys some of the medical compounds and carcinogens are released.

- Unlike tobacco, there are no known cases of lung cancer caused by only smoking cannabis.



Inhaled Marijuana

Forms: Smoking, Dabbing, Vaporizing

Onset: 1–3 Minutes
Effects Last: 1–3 Hours

CBD

CBD or Cannabidiol is the second most common cannabinoid after THC. CBD is a proven analgesic, anti-emetic, anti-spasmodic, anti-anxiety, anti-seizure, and anti-inflammatory compound. It also stimulates bone growth, reduces graft versus host disease, reduces tumor growth in certain cancers, and has a positive effect on metabolism. CBD is non-psychoactive, but can cause drowsiness and lethargy at high doses. CBD is found in strains of marijuana and hemp plants. Most patients find combining CBD with THC or THC-A gives a better medical effect than CBD alone.

CBDa

CBD-A is the raw version of CBD with the acid chain still attached. Some scientists have found CBD-A to give a stronger effect than CBD on pain and nausea. Research is ongoing.

CBC

CBC or cannabichromene, is the third most common cannabinoid in the marijuana plant overall. CBC is non-psychoactive and has analgesic, anti-inflammatory, and very promising antibiotic properties. Like CBD, CBN, and CBG; CBC works best when combined with some THC.

CBG

CBG or cannabigerol, is the cannabinoid formed first in the plant and has shown significant ability to counteract and prevent tumor formation.

Terpenes can be thought of as the building-blocks of essential oils. Chemically, they are chains of linked isoprene units. Terpenes are responsible for fragrance in plants, including cannabis plants. The same Limonene terpene found in lemons is what gives Lemon Skunk its characteristic lemony scent. And, just as lemon oil is used in aromatherapy for health benefits, terpenes are a part of the therapeutic effects of marijuana.

Cannabinoids and Thier Uses

Cannabis plants contain over 480 chemical compounds. Over 80 of these compounds exist only in cannabis family plants. These are called **phyto-cannabinoids**. There are many other cannabinoids, but these are the main ones you'll find tested for and labeled at dispensaries.



THC is the abbreviation for Delta(9)-tetrahydrocannabinol, the most well-known cannabinoid. THC causes that euphoric 'high' feeling. It has many medical benefits including pain relief, appetite stimulation, and reducing nausea and spasms.



THCa is the raw acid form of THC found in raw cannabis plants. It is non-psychoactive until heated or dried. It seems to boost the immune system while reducing inflammation. Using THCa from raw cannabis juice or THCa tinctures gives people some of the benefits of THC without the 'high'.



THCv is a somewhat psychoactive cannabinoid that appears to act as a vasodialator. Strains high in THCv, such as Durban Poison, are often recommended for migraines, tension headaches, and asthma symptoms.



CBN is a breakdown of THC that has been exposed to oxygen or light. CBN is roughly 10% as psychoactive as THC. It is known to cause drowsiness and reduce spasms.

PHYTO-CANNABINOIDS

<p>A-PINENE</p> <p>ANTI-INFLAMMATORY BRONCHODILATOR AIDS MEMORY ANTI-BACTERIAL</p> <p>also found in pine needles</p> 	<p>LINALOOL</p> <p>ANESTHETIC ANTI-CONVULSANT ANALGESIC ANTI-ANXIETY</p> <p>also found in lavender</p> 	<p>DELTA CARYOPHYLLENE</p> <p>ANTI-INFLAMMATORY ANALGESIC PROTECTS CELLS LINING THE DIGESTIVE TRACT</p> <p>also found in black pepper</p> 	<p>MYRCENE</p> <p>CONTRIBUTES TO SEDATIVE EFFECT OF STRONG INDICAS SLEEP AID MUSCLE RELAXANT</p> <p>also found in hops</p> 	<p>LIMONENE</p> <p>TREATS ACID REFLUX ANTI-ANXIETY ANTIDEPRESSANT</p> <p>also found in citrus</p> 
--	---	--	---	--

- Vaporizers can be small electronic cigarettes or large table-top units.
- All vaporizers heat cannabis until the plant oils are released as vapor. Because the cannabis does not burn, there is no smoke.
- Both whole herb medicines and concentrated oils can be vaporized.



Dabs are small doses of super-potent cannabis concentrates, typically made from hash oil.

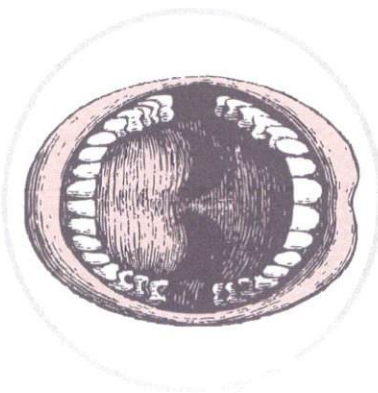
Dabs are NOT recommend for new patients! The high potency can result in fainting and other over-consumption symptoms.



Asthma inhaler-style cannabis dispensers are a new way to get fast relief without smoking or vaporizing. They deliver a cool mist of atomized cannabis to the lungs.

Oral Absorption

- Marijuana held in your mouth before you swallow. Includes drops, tinctures, sprays, lollipops, breath strips, etc.
- Tinctures and sprays are liquids that go on or under the tongue.
- Lollipops, chews, and breath strips are held in the mouth while they dissolve.
- A good medium-onset and short-duration choice for people who don't want to smoke.



Oral

Absorption

Forms: Sprays, Tinctures, Drops, Lollipops

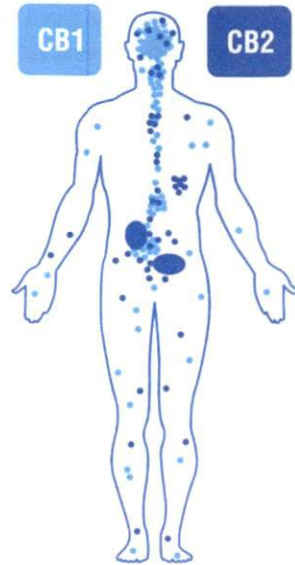
Onset: 10–25 Minutes
Lasts for: 1–3 Hours

Microdosing is taking small (1-5mg) amounts a few times a day as preventative medicine, without the high feeling. Oral products like drops and sprays are often used for microdosing.

Health Effects of Marijuana	THC	THC-A	THC-V	CBN	CBD	CBD-A	CBC	CBC-A	CBG	CBG-A	Benefits
Pain relief											Analgesis
Reduces inflammation											Anti-inflammatory
Supresses appetite											Anorectic
Stimulates appetite											Appetite stimulant
Reduces vomiting and nausea											Antimetic
Reduces contractions of small intestine											Intestinal antiprokinetic
Relieves anxiety											Anxiolytic
Tranquilizing / psychosis management											Antipsychotic
Reduces seizures and convulsions											Antiepileptic
Suppresses muscle spasms											Antispasmodic
Aides sleep											Anti-insomnia
Reduces efficacy of immune system											Immunosuppressive
Reduces blood sugar levels											Anti-diabetic
Prevents nervous system degeneration											Neuroprotective
Treats psoriasis											Antipsioratic
Reduces risk of artery blockage											Anti-ischemic
Kills or slows bacteria growth											Anti-bacterial
Treats fungal infection											Anti-fungal
Inhibits cell growth in tumours / cancer											Anti-proliferative
Promotes bone growth											Bone-stimulant

Every single mammal on this planet, from you, to an elephant, to the smallest mouse, has a receptor system in their body that recognizes cannabis compounds. It's called the **Endocannabinoid System**, or ECS for short.

The ECS is comprised of CB1 receptors in the brain and nervous system, and CB2 receptors in the gut, organs, and immune system. The ECS is one of the largest receptor systems in the body. Why do we have such a massive system for ... a plant? Because it's not just for marijuana. The ECS is there because our bodies make cannabis compounds naturally.



The Endocannabinoid System

The job of the ECS is to help maintain homeostasis, meaning balance. The chemical compounds that bind to ECS receptors are called cannabinoids. Cannabinoids made naturally by the body are called Endogenous Cannabinoids, or endocannabinoids. Cannabinoids from plants are called Phyto (Greek word for plant) cannabinoids.

There is a theory among some researchers that ECS deficiency may contribute to disease. In other words, if your body doesn't make enough natural cannabinoids, you can feel sick. This may explain why phytocannabinoids are effective at relieving certain conditions. Hopefully, more research will lead to more answers in the future.



Edibles and Gastro-Intestinal Absorption

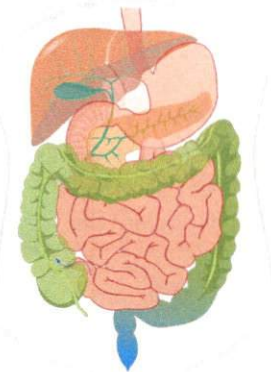
- Edibles are marijuana products you swallow. Includes chocolate bars, pot brownies, cookies, snacks, drinks, capsules and more.
- New patient beware! Because they have to be digested before taking effect, it can be anywhere from 30 to 90 minutes before they are felt.
- Taking a small bite, waiting only 15 minutes, thinking "it didn't work" and eating the whole thing, is how people get into trouble.
- Edibles can be highly psychoactive – more so than other forms. Use caution until you know your tolerance.



GI Absorption

Forms: Edibles, Candies, Drinks, Snacks, Capsules

Onset: 30–90 Minutes
Lasts for: 6–8 Hours



Other Options



Raw Cannabis Juice is a raw plant extract, like wheatgrass juice. Juice is typically made from non-flowering plant leaves and is useful for many digestive, inflammatory, and immune system issues.

- Depending on the strain used, juice contains raw cannabis acids THC-A and/or CBD-A. It will not make you high or stoned.
- It can be frozen in ice cube trays for easy storage in a measured dose.



Suppositories made from cannabis oils and waxes can be used either rectally or vaginally.

- Vaginal suppositories take effect in about 20 minutes. They last from 3-6 hours.
- Rectal suppositories have much lower bloodstream uptake and so may allow for higher doses. They are sometimes used for colon spasms, back pain, and some cancers.

Personal Intimate Oils are thought to increase bloodflow when applied on women's mucus membranes. Men may not experience the effects as intensely.



Titrating: Adjust the dose per amount of time indicated for form of cannabis used. If minimal results after wait time, dose again with low amount up to 4 times each day. Record results until desired relief is achieved. Total of doses last time is next starting dose.



Start with 1 puff every 15 minutes

Inhaled

Start with one puff. Add another puff every 15 minutes

Oral

Start 2.5-5mg. Add 2-3mgs per 30 mins

Edibles / GI

Start 2.5-5 mg. Add 2-3mgs per 60 mins

Transdermals

Stick patch on venous area (wrist, ankle, back of knee, etc)

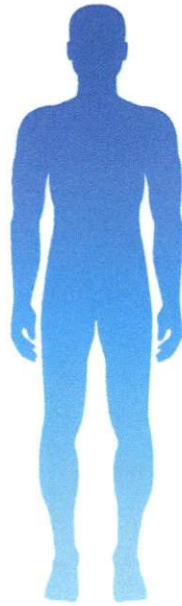
Remove if too strong
Gels, use 1 squeeze per 30 mins



You may react differently to different forms of marijuana, even with the same dose.

It may take several days or even weeks of slow increases to determine the appropriate therapeutic level.

Starting Doses for New Patients



2 – 10mg

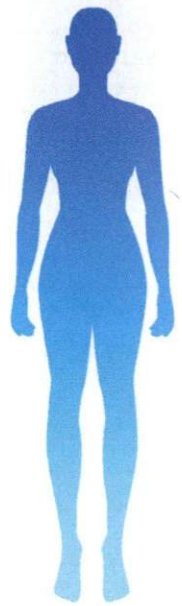
Above



150lbs

Below

2 – 5mg



Starting Dose Guidelines for Tested Medicines

This is easiest to do with tinctures when first starting out.

CBD alone: Start with 1mg per 10 lbs body weight
Increase or decrease as needed up to 4 times per day
Grumpy? Lethargic? Reduce CBD and add THC

THC: Start with 2-5mg

Best to start at night. Increase as needed up to 4 times per day.
Anxious? Uncomfortable? Reduce THC and add CBD

Cannabis is Not One-Size-Fits-All, but there IS a size for Everyone

Myth "CBD is the medicine - THC is just for getting high"

Fact THC is a valuable and effective medicine, too. Most people need a combination of CBD and THC to get relief. It's called the **Entourage Effect**.

Typical Things to Try First Time

Daytime:

Non-psychoactive salves, CBD alone, THC-A, and micro-doses (1-5mgs) of THC

Acute Episodes:

Puff on a pipe or vape pen; inhlaer mist a few drops tincture or oral sprays

Night:

Piece of edible or capsule, puff of inhaled, cannabis patch, cup of tea, or a bath soak



- Dosing with cannabis is highly personal. What works for one person may not be right for another - even with the same disease.
- Finding your dose involves the trial and error method. **It's important to write down what you try.** For best results, record other drugs and treatments used, too.

Methods of Use Summary

Method	Onset	Duration
Inhaled (Vapor or smoke)	1-3 minutes	1-3 hours
Oral (drops, lozenge, spray)	10-25 minutes	1-3 hours
Ingested (capsules, edibles, etc)	30-90 minutes	6-8 hours
Topical (balms, etc)	15-30 minutes	3-6 hours
Transdermal (patch, gels)	15-30 minutes	6-8 hours

