



Cannabis *by* **Design**

MEDICAL MARIJUANA PHYSICIANS

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Dear Patient:

On behalf of myself and our entire staff we'd like to welcome you to Florida's medical cannabis program. We're excited to help you obtain a better sense of wellness utilizing a more natural substance.

This welcome packet contains important information about dosing, how to properly use the medicine, how the state ordering system works, how to place your first order, as well as contact information for the dispensaries and medical marijuana treatment centers. **Please read everything carefully and keep this packet in a safe place.**

A few quick points:

- Medicinal cannabis is unlike any conventional pharmaceutical medication. It puts you in direct control of your own treatment. If you're unwilling or unable to take a personal interest in your daily treatment regimen, this program will not work for you.
- You may be accustomed to a physician prescribing a medication, telling you to take it a set amount of days, then report back in 3-6 months to let them know how your treatment is progressing. Cannabis is a "use as directed" medicine and cannot be properly dosed. Results and effects vary from person to person. You must do your own research and learn as much as you can about utilizing cannabis to treat your specific conditions. Simply Googling your condition with the word "cannabis" or "marijuana" afterward can result in thousands of informative websites. We advise that you experiment with a variety of products until you find your optimal dose. To avoid adverse reactions, remember to **start with a low dose and slowly increase over a period of days or weeks** to acclimate your body to cannabinoids.
- Cannabis cannot be legally prescribed within the United States. The physicians at CBD provide recommendations for treatment, which the Supreme Court has upheld as a physician's protected First Amendment right. We don't prescribe, we recommend courses of treatment. As such, it is important to know that **you** will be controlling your own dose, method of administration, and the results associated.
- Florida law prohibits us from calling in specific product orders to the dispensaries on our patients' behalf. We'll provide you the basic education on products available, but you ultimately must make the decision on which products and which dispensaries you'll use, and you must place your own order.
- While we are a medical practice that initially qualifies patients and enters them into the Registry, we have no control over the patient or caregiver application process. The Office of Medical Marijuana Use, a division of the Department of Health, is charged with application processing and approvals. If you have a question about the status of your application, you must call the OMMU at 1-800-808-9580 and inquire with them directly. To ensure your initial application is not rejected, please **follow all directions carefully and complete the application form completely.**
- Our office staff is always happy to answer quick questions, however if you require a more detailed level of care, we will ask you to schedule an office visit.

With your continued dedication to your care and self-education of your own treatment, we're hopeful you'll see some incredibly positive results and obtain a better feeling of wellbeing.

Sincerely,
**The Physicians at
Cannabis By Design**



Review of Medical Marijuana

Marijuana, also known as cannabis, is a flowering plant of the genus *Sativa*. It has been around for thousands of years. In fact, throughout recorded history including every major human civilization, there has been reference to cannabis, either for medical use or for religious or ceremonial use.

The use of cannabis medicinally is well documented. It was useful for many ailments and was, in fact, on all formularies until the mid-1900s.

Marijuana was targeted by US federal drug agencies because of its obscurity among most Americans. At that time, its use was primarily limited to African Americans and Mexican immigrants. In fact, the name marijuana began as slang used by Mexicans, but later became a recognized term still used today. A media propaganda campaign was instituted and found to be very successful, making marijuana one of the most feared substances in American history.

Social unrest around the time of the Vietnam War and military sponsored research into the effects of cannabis began the slow tide that later changed the way most Americans view this plant. Today, the majority of Americans appreciate the medical potential of cannabis and more than 26 states have passed legislation to legalize its medical use.

The cannabis plant contains over 180 active chemical ingredients. These are comprised of cannabinoids, terpenes, and flavonoids, and each have potential therapeutic benefits. The chemical structure of the cannabinoid 9-tetrahydrocannabinol (THC) was first identified in the laboratory of Rafael Mechoulam in Israel in 1965. Today he is considered the "father of cannabis".

Of all of the cannabinoids found in the cannabis plant, we only understand a very few. The two cannabinoids most widely studied are THC (tetrahydrocannabinol) and CBD (cannabidiol). These substances have been found to act on receptors found in the human body called Endocannabinoid Receptors.

The discovery of endocannabinoid receptors led researchers to look for the reason for their existence in the human body. This led to the discovery of the Human Endocannabinoid System (ECS). The CB1 and CB2 endocannabinoid receptors found in the ECS are found throughout the central nervous system, in many organs, and within the immune system. In fact, CB1 receptors are thought to be the most prevalent receptor in the central nervous system.

The ECS plays a role in many physiological functions - from heart and lungs to digestive, endocrine, immune, and reproductive physiology, to your mind and emotions. Although the mechanisms are not yet fully understood, we know cannabinoid receptors play a role in things like metabolism, mood, cravings, pain, immunity and more.

According to cannabis expert Dr. Dustin Sulak:

"The endogenous cannabinoid system, named after the plant that led to its discovery, is perhaps the most important physiologic system involved in establishing and maintaining human health. In each tissue, the cannabinoid system performs different tasks... But the goal is always the same: homeostasis, the maintenance of a stable internal environment despite fluctuations in the external environment."

Research consistently shows that its rich complement of compounds work synergistically within the body's own endocannabinoid system to help maintain homeostasis and restore health, including being a valuable weapon in today's anti-cancer arsenal. Even our pets are beginning to reap the powerful healing benefits of this ancient herb.

More than 60 US and international health organizations support legalization of medical marijuana. The US lags far behind in removing the barriers that prevent access to this powerful medicinal herb, which has already been decriminalized in many countries including Canada, the Netherlands, Spain, Israel, and Germany. It is likely that even more health benefits will be discovered as new studies emerge.

Is Medical Marijuana Safe?

Cannabis, also known as marijuana, has been safely used by humans for thousands of years. Generally speaking, marijuana has not been shown to be addictive in adults. However, in adolescents, heavy use of cannabis (as well as other substances) has been associated with addiction disorder and increased prevalence of psychosis.

There are potential side effects associated with marijuana use. The manifestation of side effects is typically dose-related and may include dizziness, dry mouth, dry eyes, hunger, paranoia, and increased heart rate. Different marijuana cultivars (or strains) have unique characteristics including side effects. Changing the dose or perhaps the strain is often all that is needed to eliminate any undesirable effects. Nonetheless, caution is advised for patients with unstable cardiac disease and/or a history of psychosis.

Since 1999, overdose deaths involving prescription opioids have quadrupled, according to the Centers for Disease Control and Prevention (CDC). By 2020, the Substance Abuse and Mental Health Services Administration (SAMHSA) predicts that more than 4.4 million seniors will report prescription drug abuse. Even when taken as prescribed and not abused, many drugs harbor life-threatening side effects, especially in senior patients. Opiates can lower a patient's resilience and increase the risk of falls and confusion.

Medical marijuana is incredibly safe. When used correctly and with proper physician guidance, many of the risks of opiate use are greatly reduced, and the risk of fatal overdose is completely negated. In fact, marijuana can reduce the phenomenon of "opioid tolerance" (the need for more drug to get the same effect) and can prevent withdrawal symptoms when reducing opioids. Marijuana research studies have demonstrated an extraordinarily high estimated lethal dose making it unlikely to overdose. This may be why, according to SAMHSA (Substance Abuse and Mental Health Services Administration), there has never been a death recorded from the use of cannabis.

Is Medical Marijuana an Option for Chronic Pain Patients?

Despite this, chronic nonmalignant pain is not a condition listed by the Florida Department of Health to make one eligible for the use of medical marijuana.

Senate Bill 8A, which defines the qualifying conditions for medical marijuana for Floridians, listed chronic nonmalignant pain as one of the twelve conditions. But, what is not appreciated by many, chronic nonmalignant pain is defined elsewhere in the bill as pain that is caused by a qualifying medical condition or that originates from a qualifying medical condition and persists beyond the usual course of that qualifying medical condition.

This means that unless the patients' chronic nonmalignant pain is caused or is a result of one of the other qualifying conditions, it is not in itself a qualifying condition.

The bill does give some latitude to physicians in determining whether a patient's condition is a medical condition of the same kind or class or comparable to those qualifying conditions enumerated in paragraphs (a)-(j) of the bill. So, if a certifying physician feels that a patient's chronic nonmalignant pain is a condition that is of the same kind or class or comparable to a listed qualifying condition, and is willing to attest to it, then that physician may qualify that patient.

Upon use of the ambiguous diagnosis, a medical condition of the same kind or class or comparable to the other qualifying conditions, the physician must submit to the Board of Medicine a form to provide documentation (clinical, medical, or scientific) that establishes the efficacy of marijuana as treatment for the condition, as well as separate documentation supporting the qualified physician's opinion that the benefits of the medical use of marijuana would likely outweigh the potential health risks for the patient. Currently this justification will be submitted to the Florida Board of Medicine and/or the Board of Osteopathic Medicine via the mail or uploaded into the online Medical Marijuana Use Registry. The documentation must be reviewed and approved by the Office of Medical Marijuana Use before the patient may obtain products.

Incidentally, there is no time limit for the OMMU to review and approve these registrations. Additionally, the Boards of Medicine have been tasked with the creation and implementation of a physician certification pattern review board.

We believe that Pain Medicine physicians are best suited to determine who is legitimately suffering from chronic nonmalignant pain. We know better than most of our colleagues that the majority of chronic pain patients have a legitimate need for treatment. Most patients want to get off dangerously addictive opioids and other poorly tolerated pharmaceuticals. Medical marijuana is a valid option for them. There have been many patients who have found medical marijuana to be a clinically effective substitute to other analgesics, including high dose opioids.

Even though it is our opinion that pain severe enough to require opioid medication or severe neuropathic non-opioid dependent pain should sufficiently qualify a patient for medical marijuana, the decision to make this recommendation has potential professional consequences.

Understanding Florida Dispensaries

Unlike other states like Colorado and California, when you enter a medical marijuana dispensary in Florida, you will not be able to assess all of your options for medical marijuana.

Florida established the medical marijuana program with a vertically integrated model. That means that each license given by the state of Florida to a Medical Marijuana Treatment Center (MMTC) grants that organization the ability to grow the plants, extract the chemicals from the plants, process and package the drugs, transport the drugs, and dispense or sell the drug in their dispensaries. So, when you enter a dispensary, you are only seeing the products offered by that one MMTC. Most MMTCs are known by the same name as the dispensary. Each MMTC selects their own plant cultivars (strains) which all have unique medicinal characteristics. They also choose what products they will carry. The medical products at each dispensary may have similarities, but may have different packaging, different doses, and different prices.

If you are not seeing the results you expect with a product from one dispensary, consider exploring the products of a different dispensary. In addition to varying clinical effects related to plant cultivars, you may need to ask about cutting agents and fillers used to make the medications. For example, many of the products are cut with different kinds of oils of which some patients may be intolerant.

The Entourage Effect

Cannabis contains hundreds of therapeutic compounds known as cannabinoids, terpenoids, and flavonoids. Although many cannabinoids have been recognized, only about a dozen have been studied to any extent, and only two have been extensively studied (THC and CBD).

Most animal studies with CBD or THC utilize a synthetic, single-molecule product produced by biochemical laboratories for research purposes. In contrast, whole plant extractions typically include THC and CBD as well as over 400 trace compounds including terpenes and flavonoids. These compounds act synergistically to create what scientists refer to as an “entourage effect”. The entourage effect magnifies the therapeutic benefits of the plant’s individual components, so the medicinal impact of the whole plant is greater than the sum of its parts.

It is important to consider the entourage effect (or lack thereof) when extrapolating data based on animal studies: 100 milligrams of synthetic single-molecule CBD is not equivalent to 100 milligrams of a CBD-rich whole plant cannabis extract.

Once you understand the entourage effect, you will see why medications containing only THC or CBD aren’t always sufficient for many medical conditions.

The Patient / Caregiver ID Card Application Process



The first step in obtaining legal patient status within Florida's medical cannabis program is being qualified by a physician authorized by the Department of Health to recommend cannabis.

After the Physicians have had their in-person certification exam with you, you will be added to the state's Medical Marijuana Use Registry. Once added, you will be given a Registry Patient ID Number that becomes attached to you for the duration of your participation in the program.

The law requires all qualified patients and caregivers to complete an ID card application. You may then complete the required application, either in paper form or electronically online. **If you complete your application online, you can pay the fee directly with a credit or debit card.**

Paper Application Requirements

- All spaces must be filled out (including the Registry Patient ID Number) and each application must be signed.
- A color 2" x 2" passport-style photo of your face and shoulders taken against a white background, without facial coverings or expressions must be attached.
- Adult residents must provide a copy of his or her valid Florida driver license or a copy of a valid Florida identification card. The Department will reject patient applications without a physical address (such as those with a PO Box).
- For patients under the age of 18, the parent or legal guardian must provide the Department with a certified copy of a birth certificate or a current record of registration from a Florida K-12 school. Additionally, the parent or legal guardian must have a valid Florida driver license or Florida identification card.
- Patients that qualify as "seasonal" (or living within Florida for at least 31 consecutive days per year) may use two of the following instruments to prove their legal residency status:
 - A deed, mortgage, monthly mortgage statement, mortgage payment booklet, or residential rental or lease agreement.
 - One proof of residential address from the seasonal resident's parent, step-parent, legal guardian or other person with whom the seasonal resident resides and a statement from the person with whom the seasonal resident resides stating that the seasonal resident does reside with him or her.
 - A utility hookup or work order dated within 60 days before registration in the medical use registry.
 - A utility bill, not more than two months old.
 - Mail from a financial institution, including checking, savings, or investment account statements, not more than two months old.
 - Mail from a federal, state, county, or municipal government agency, not more than two months old.
 - Any other documentation that provides proof of residential address as determined by department rule.

A check or money order made out to the Department of Health in the amount of \$75 must be sent in with the application or sent independently to the Department if the patient chooses to do the online application. **You must include your Registry Patient ID Number in the memo space of the check or money order.**

Important Information

Application processing time varies due to staffing limitations at the Office of Medical Marijuana Use. Our systems only allow us to see if patients are approved or not, but do not give us any access to applications have been received, are in process, or have been rejected. **Patients are advised to call the Office of Medical Marijuana Use directly at 1-800-808-9580 Monday – Friday from 8 AM – 5 PM to inquire about application status.** Once your application is approved, you'll receive an email from the Medical Marijuana Use Registry to the email address given to our office when you had your appointment. Within 2-3 weeks of your initial approval, you'll be mailed your physical Patient ID Card. **Keep it on your person at all times.** If you have any life changes (such as marriage or a move), you'll need to fill out a Department Change of Address form and send it back to the Office of Medical Marijuana Use along with a \$15 check or money order. Patient ID cards are valid for one year from the date of approval. The Department of Health recommends patients renew their licenses 45 days prior to their expiration, so there is no lapse in legal patient status.

For more information on the application process, visit <http://flhealth.gov/ommu>

Accessing the Medical Marijuana Use Registry Online

When a patient or caregiver is added to the Registry by their qualifying physician, they're assigned a Patient Registry ID Number and are sent two automatic emails from the Medical Marijuana Use Registry to the email address we have on file. One email contains a username and link, the other email contains a temporary password.

Use your email address and temporary password to log into the Registry at <https://mmuregistry.flhealth.gov>. When you log in for the first time, the system will prompt you to enter your temporary password and create a new password.

If you forget your password (or if you never receive your temporary password email), you can click the Forgot Password link in the log in screen to have a new temporary password generated and sent to your email address.

Once logged into the Registry, patients can utilize the ID Card feature from the menu to complete and sign their Patient ID Card application and pay their annual patient or caregiver ID card fee.

The Registry will also allow patients to see active and expired orders (what the doctor has to enter into the system), and how many milligrams are left for dispensement for each active order.

Patients can also process their own renewal for their ID cards directly online.

Step By Step Online Application Process

Applying for your Patient or Caregiver ID card online requires a bit of computer savvy, but usually expedites the application process. To apply for your card online:

1. Visit <https://mmuregistry.flhealth.gov> and click LOG IN from the top menu. Enter your email address and temporary password.
2. When you first login, you will be prompted to change your temporary password. You must enter the temporary password emailed to you, then enter a new password that consists of at least **10 digits, one capital letter, and a special character.**
3. Once logged into the Registry, click **ID Card** from the top menu. You must complete the online application by uploading and attaching your proof of residency, passport photo (unless your driver's license/ID photo has been automatically pulled from the Motor Vehicle Database), and signing by entering your first and last name.
4. After you've completed your online application, you can pay the annual card fee directly within the Registry by entering your credit or debit card information.

What does my recommendation look like?

The Doctor enters your order within the Physician Portal inside of the Medical Marijuana Use Registry. Florida requires physicians to specify dose in milligrams, regimen (number of times per day), and duration (up to 70 days).

In addition to the above, when physicians enter their recommendations into the system, they must provide method of ingestion. The doctor can order up to four methods of delivery per dose and can select whether or not the patient can also purchase a “cannabis delivery device” such as a vape pen.

The allowed methods of ingestion in Florida currently are inhalation (vape), oral (capsules), sublingual (under the tongue drops), topical (on the skin), or suppository (rectal) form.

The physician must also create separate orders for low-THC (high-CBD) or medical marijuana (full potency).

Because Florida is forcing doctors to essentially write a prescription for a controlled substance (which is prohibited for physicians within the United States), the Physicians have been providing a uniform dosage for all patients - both for low-THC and medicinal marijuana.

Once you have an active order entered into the system, the dispensaries will be able to see and verify your order when you call and will be able to talk to you about products and pricing. Note that patients that no show for appointments will have their orders automatically cancelled, and we cannot resubmit orders until you've been seen by The Physicians.

What dispensary should I use?

Pricing, discounts, delivery fees, and product selection varies with each dispensing organization. We advocate doing some of your own research to see what products may fit your needs best, and then calling the dispensaries and asking informed questions. **Additionally, you're not legally bound to one dispensing organization.** You can fill your order in full or in partial with any dispensary.

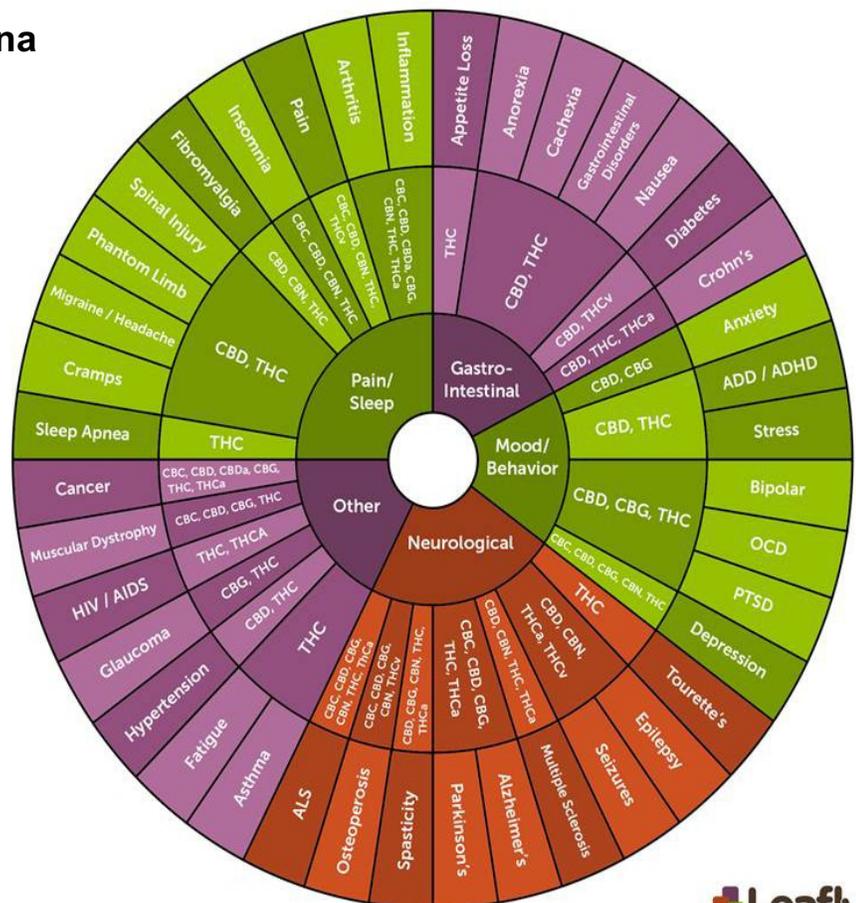
Simple Google searches using your condition and cannabis within the search bar can yield a variety of results. Sites like leafly.com offer a comprehensive strain and condition database.

Low-THC vs. Full Potency Marijuana

In many instances, a bad first experience may be enough for someone to tragically banish cannabis from his or her life forever. Typically, the reason for doing so has to do with the anxious, paranoid side effects associated with THC, but what first-timers might not realize is there are a few ways to minimize those unpleasant feelings. For those beginners, we've compiled three basic tips, tricks, and recommendations for finding that perfect first-time experience.

Both medical marijuana and low-THC cannabis are available currently within Florida.

Unlike THC, CBD is a non-psychoactive compound with relaxing and medicinal properties. CBD actually helps counteract the anxiety associated with THC, so it's a perfect starting point for new users.



The wheel above contains some of the common qualifying conditions and which combinations have been shown to be the most successful for treatment.

While some patients may not initially prefer the psychoactive effects of THC, it is a vitally important component of successful cannabis therapy. Science has identified what is known as the “entourage effect”, a benefit found from the sum of all parts of the plants.

How is Cannabis dispensed in Florida?

When you call or visit a dispensing organization, they'll look your information up within the Compassionate Use Registry and verify that you're a legal patient and what the doctor has ordered you.

When the doctor puts the order into the system, the daily dose and regimen is multiplied by the number of days of the order. For example, an inhalation order of 200 milligrams taken once per day for 70 days would equal 14,000 milligrams total (200 x 1 x 70), meaning the patient could purchase up to 14,000 milligrams of vape juice in that 70 day order period. This does not mean you should use this amount every day. This is the maximum dosage that is recommended. You should start with a low dose and increase slowly until you find the ideal dose. **You do not have to purchase the full amount of milligrams with each order.** You are permitted to purchase the full amount or break it up into however many days you would like to purchase.

Since medical marijuana and low-THC must be ordered separately, unless you specify otherwise to the doctors, they will have placed both orders in the system for you.

What do I do if I have an issue with the product?

If you have an issue with the product that isn't related to your health (poor quality, broken cannabis delivery device, missing product), you'll need to call the dispensary you purchased it from.

Should you have a question about your medication regimen, daily dose, or delivery method, feel free to call our office during normal business hours.

While drug interactions and negative side effects are rare with cannabis, they can occur. **If you are ever experiencing a health emergency, you need to call 9-1-1 immediately.** If you have any negative side effects, please call us as soon as possible.

Tips for Beginners

Some common sense tips to reduce bad reactions from cannabis for beginners:

1. Until you know the effects of the medication on you, remember to **start low and go slow**. As you become more acquainted with cannabis and its effects, you can better gauge your appropriate level of therapy.
2. If you ever experiencing an adverse effect after taking cannabis, try to focus on your breathing and calm yourself. A quick sniff of black pepper or chewing on a peppercorn has been known to reduce effects of THC. Additionally, a dose of low-THC cannabis can counteract the effect of THC.
3. You should keep a cannabis journal and make sure you notate your experiences with therapy. Include the strain and dosage used, the route of administration, and any therapeutic effects and side effects that you experience.

Patient Ordering Instructions

As a patient of our clinic, you have been provided with a copy of our Cannabis Basics training and have acknowledged that you fully read and understand what you were provided. This information is vital to your treatment and is considered “doctors’ orders,” similar to discharge instructions. Please keep this documentation handy and refer to it if you have questions about dosing or products.

If you have questions about your application status, you must contact Florida’s Office of Medical Marijuana Use. Their phone number is 1-800-808-9580 and their contact email address is medicalmarijuanause@flhealth.gov.

1. **Verify your order within the Registry and understand what the doctor has ordered for you.**
 - You can login to your account by going to the Medical Marijuana Use Registry at <https://mmuregistry.flhealth.gov>. If you don’t have your original temporary password email, click the forgot password link, put in your email address, and click submit to have another temporary password email sent to you.
 - Our standard order includes oral, inhalation and topical methods of administration for both low-THC and full potency cannabis. Oral products include edibles, capsules, tinctures, some concentrates, and oil suspensions. Inhalation products include vape cartridges, nasal sprays, or any product that must be inhaled.
2. **Do your research** on products available at the various MMTCs (dispensaries). Visit their websites, find their product catalogs, and read up. Look for specials and discounts. If you have specific questions about products, call the MMTC directly and ask them for an answer. If the customer service representative can’t answer your question satisfactorily, ask to speak to a supervisor. Current MMTC contact information can be found in the Cannabis Basics packet. The website thepattypage.com is an excellent source for information on different MMTCs, including different products and discounts they offer.
3. You may call a MMTC or visit any legal dispensary in the state to purchase your medication. You do not have to exclusively purchase medicine from one MMTC. **We advise patients to shop around until they find the most effective products to treat their conditions.** Most importantly, don’t purchase a huge variety of products until you find your optimal dose. There is no need to spend thousands of dollars in products as you get accustomed to your treatment. When you call or visit an MMTC, make sure you have your Patient or Caregiver Identification card with you.
4. **If you have an issue with a product or cannabis delivery device, you must call the MMTC where it was purchased.**

Cannabis BASICS



Cannabis is a flowering plant that has fibrous stalks used for paper, clothing, rope, and building materials leaves, flowers, and roots used for medicinal purposes, and seeds used for food and fuel oil. Cannabis leaves and flowers are consumed in several forms: dried flower buds or various types of concentrated, loose, or pressed resin extracted from the flowers or leaves through a variety of methods. Once mature, the plant's leaves and flowers

are covered with trichomes, tiny glands of resinous oil containing cannabinoids and terpenes that provide physical and psychoactive effect

Cannabinoids

Concentrations or percent of each type of cannabinoid ranges widely from plant to plant and strain to strain.

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. While THC has been the focus of breeding and research due to its various psychoactive and therapeutic effects, non-psychoactive cannabinoids have physiologic effects that can be therapeutic.

Cannabidiol (CBD) relieves convulsions, inflammation, anxiety and nausea—many of the same therapeutic qualities as THC, but without psychoactive effects. CBD is the main cannabinoid in low-THC cannabis strains, and modern breeders have been developing strains with greater CBD content for medical use.

- **Cannabinol (CBN)** is mildly psychoactive, decreases intraocular pressure and seizure occurrence.
- **Cannabichromene (CBC)** promotes the analgesic effects (pain relief) of THC and has sedative (calming) effects.
- **Cannabigerol (CBG)** has sedative effects and antimicrobial properties, as well as lowers intraocular pressure.
- **Tetrahydrocannabivarin (THCV)** is showing promise for type 2 diabetes and related metabolic disorders.

In addition to cannabinoids, other cannabis plant molecules are also 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.

Effects of Cannabis

Different people have different experiences. 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:

- 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

Though cannabis is biologically classified as the single species *Cannabis Sativa*, there are at least **three distinct plant varieties: Cannabis Sativa, Cannabis Indica, and Cannabis Ruderalis**, though the last is rare. There are also hybrids, which are genetic 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%.

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, including pain and nausea control, appetite stimulation, reduced muscle spasm, improved sleep, and others. But individual strains will have differing cannabinoid and terpene content, producing noticeably different effects. Many people report finding some strains more beneficial than others. For instance, strains with more CBD tend to produce better pain and spasticity relief. 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:

Sativas

The primary effects are on thoughts and feelings. Sativas tend to produce stimulating feelings, and many prefer it for daytime use.

Some noted Therapeutic Effects from use of Sativas:

- Stimulating/energizing
- Increased sense of well-being, focus, creativity
- Reduces depression, elevates mood
- Relieves headaches/migraines/nausea
- Increases appetite

Some noted Side Effects from use of Sativas:

- Increased anxiety feelings
- Increased paranoia feelings

Indicas

Indicas tend to produce sedated feelings and many prefer it for nighttime use.

Some noted Therapeutic Effects from use of Indicas:

- Provides relaxation/reduces stress
- Relaxes muscles/spasms
- Reduces pain/inflammation/headaches/migraines
- Helps sleep
- Reduces anxiety
- Reduces nausea, stimulates appetite
- Reduces intra-ocular pressure
- Reduces seizure frequency/anti-convulsant

Some noted Side Effects from use of Indica's:

- Feelings of tiredness
- “Fuzzy” thinking

Hybrids

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

Cannabis Consumption Basics

How Can I Use Cannabis More Safely?

One of the great aspects of cannabis is that there are many ways to use the medicine effectively.

Ingest via Eating

This is one of the safest ways to consume your medication, but understand that the effects from eaten cannabis may be more pronounced and **onset of the effects will be delayed by an hour or more** and typically last longer than inhalation. 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 only small amounts of edibles initially, and wait 2 hours before gradually increasing the dose, if needed. Take care to find and use the correct dose for you, because excessive dosage can be uncomfortable, and this happens most often with edibles.

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.**

Apply via Topicals

This is one of the safest ways to consume your medication and may be the best option for certain pains or ailments. Rubbing cannabis products on the skin will not result in psychoactive effects.

Inhale via Vaporizer

This is the safest way to inhale your medicine because it heats the cannabinoid-laden oils to the point where they become airborne vapors, without bringing the other plant material to combustion, drastically reducing the amount of tars and other chemical irritants that you otherwise would inhale. Vaporizers also emit much less odor than any type of smoking.

Know Your Variety

Cannabis comes in many varieties, roughly divided between sativas that originated near the equator and indicas that come from northern latitudes, though modern breeding programs have created a wide range of hybrids. Each variety has its own cannabinoid and terpene profile and subtly different effects. Whether you use Sativa-dominant, Indica-dominant, or a Hybrid makes a difference.



- Take note of what effect each variety produced for you (therapeutic and side effects); keeping a log can be helpful.
- Use higher potency cannabis if needed, so you use less medicine. Concentrates can be useful, particularly if you need higher doses.
- Experiment with high CBD strains, particularly for nausea, appetite, and pain.
- Take a medicine vacation occasionally. While cannabis does not produce tolerance in the way opiates do, reducing or ceasing cannabis use can yield enhanced effects when restarted. 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.

Think About Drug Interactions

No significant interactions between cannabis and other drugs are known at this time, although research indicates cannabis enhances the effects of opiate painkillers. Little is known about the interaction of cannabis and other pharmaceutical medications, but it is important to consider any complementary effects.

Some studies show interactions with barbiturates, theophylline, fluoxetine, disulfiram, sedatives, antihistamines, etc. A synergistic effect can occur with alcohol use, so avoid mixing the two.

***** If you are on blood thinners, you must notify your doctor that you have started medical cannabis, and you will need to have weekly blood monitoring.**

Consider Safety (for yourself and your community)

***** Cannabis may cause drowsiness. Avoid driving or operating heavy machinery when using.**

***** Do not consume cannabis and drive. Cannabis use can impair motor skills and can result in a DUI. Always find a safe environment to consume your medicine. Wait at least 1-2 hours after you medicate before getting behind the wheel.**

Keep a Cannabis Log

To establish an optimal treatment regime with cannabis, you will need to balance the effects of different strains, doses, and methods of ingestion. It may be helpful to record your therapeutic relationship with cannabis on an ongoing basis. One method is through keeping a cannabis-use log that captures your experience, including thoughts, feeling and behaviors. Periodically reviewing the log can help both you and your doctor make decisions about what works best. To start, keep a detailed log, as described below, for at least one week. Once you've got a week's worth of information, complete the self-assessment worksheet that follows. This worksheet will help you better understand many things about yourself, including: your ailments and symptom patterns, your treatment behaviors, and the efficacy and side effects of the cannabis medicines you use. In keeping a medication log, try to keep things standardized, and be as consistent as possible. Here are some logging tips on useful information to collect:

1. **Date/Time:** Record every time you consume cannabis with the current date and time of day.

2. **Amount:** The amount of cannabis used (gram estimate or other consistent measure).

3. **Strain:** The name, strain or variety of the cannabis strain or variety of cannabis medicine used. If you don't know the name, write a detailed description of the medicine.

4. **Code:** Strains are generally described as Indica, Sativa, or hybrid. You may want to code your entries: I=Indica, S=Sativa, S/I=Sativa- dominant Indica Cross, and I/S= Indica-dominant Sativa Cross.

5. **Type:** is the form of cannabis consumed: dried bud flower, concentrates, tincture/sprays, edibles/drinks or topical. You may want to use: F=flower, C=concentrate, T=tincture/spray, E=edible, TO=topical.

6. **Cannabinoid Content:** refers to the percent of THC, CBD and/or CBN. If you have this information available to you, write down percentages of each cannabinoid. If you're using edibles or similar, a description of potency and preparation is helpful.

7. **Mode:** Write down how you used your medication. Either inhale via S=smoke, V=vaporize, E=eat/digest, T=tincture/spray, TO=topical.

8. **Therapeutic Effects:** List any positive effects experienced (physical, mental, social, behavioral, etc).

9. **Negative Side Effects:** List your negative effects.

10. **Timing:** How quickly did you experience the first therapeutic effects? When did you feel the peak of relief? When did it start to noticeably dissipate? How long until effects were gone?

11. What prompted your cannabis use? List the specific factors that told you it was time for medicine, as well as the general symptoms or conditions being treated (e.g. pain, nausea, anxiety, etc.)

12. How did you feel (mindset)? Record your mood and feelings before and after you used cannabis.

13. Where were you (setting)? Were you at home, at a collective, in your office? Sitting, standing, lying down?

14. Who were you with? Were you by yourself, with a friend, a large group, among other cannabis consumers, etc?

15. What were you doing? Just before you used cannabis, what was going on? What were the activities or circumstances leading up to it?

Proper Dosage



There are some things worth mentioning about the dosing and administration of cannabis. In small doses, cannabis can be helpful for things like nausea, appetite, pain, sleep, mood and anxiety. However, in larger doses, cannabis can have the opposite effect, leading to an increase in anxiety, pain and/or depression.

The bi-directional effects of cannabis make it is essential that patients "**start low and go slow**" to avoid experiencing any adverse reactions. The most common side effects of Delta-9 tetrahydrocannabinol (THC) are **dizziness, dry eyes and mouth, euphoria, increased heart rate, decreased blood pressure, fatigue and increased appetite.**

Cannabidiol (CBD) can cause psycho-activity: **dizziness, jitteriness, diarrhea, palpitations and even decreased appetite with prolonged use.** With proper guidance, patients can utilize medical cannabis with optimal results and minimal adverse reactions.

Delivery Methods

Today we have many different delivery methods for cannabis. Long gone are the days in which the only option was smoking. Now patients can choose from vaporizing, edibles, tinctures, suppositories, topicals and even transdermal patches. There are pros and cons to each delivery method.

Inhalation/Smoking

The most well-known and popular delivery method for deriving effects from cannabis is smoking. Smoking cannabis flowers provides relief of symptoms within 5 to 15 minutes. For many patients with chronic pain, anxiety, or acute nausea and vomiting, this delivery method is ideal. The number one concern with smoking cannabis is potential lung damage and/or cancer. Tashkin looked at the possible long-term effects on the lungs in chronic cannabis smokers and found that there was no link to an increased risk of lung cancer or chronic obstructive lung disease. In fact, researchers found that cannabis may have some protective effects against these illnesses in users who smoke it.

When patients smoke cannabis in a joint or pipe, they are heating the medicine at a high temperature (close to 600 degrees). At that temperature, burning cannabis is more likely to produce carcinogens and tars. While smoking has not been correlated with any increased risk of lung damage or cancer, it can lead to chronic bronchitis and/or chronic cough.

****It should also be noted that smoking raw cannabis is currently prohibited under Florida law.****

Vaporizing

An alternative to smoking is vaporization. There are many different products available for vaping. Some patients vaporize the flowers or buds of the cannabis plant, while others prefer to vaporize concentrated cannabis. Some other names of concentrated forms of cannabis are oils, dabs, waxes, shatter, nail hits and rosin. Concentrated forms of cannabis are often extracted with chemical solvents such as butane. Testing for residual solvents is a must to avoid inhaling high levels of residual solvent chemicals. Also, some concentrated forms of cannabis oil have been mixed with propylene glycol to ease inhalation administration.

Inhalation of propylene glycol has been linked to respiratory and immune disorders. The concentrated forms are higher potency ranging from 50% to 90% THC. There is much debate about whether high potency cannabis is truly medicinal or just an attempt by people to get extremely intoxicated. For many patients with neuropathic or cancer-related pain, highly concentrated cannabis is most effective at relieving their pain.

Inhalation is a quick and easy way to medicate. Contrary to popular belief, inhalation is low-dose and easiest to control. Patients should titrate up slowly. While the onset of relief is fast, the length of relief is only around 2-3 hours. Inhalation requires more frequent administration and may not be ideal for long-lasting relief.

Ingestible Cannabis



Ingestibles can include anything from cookies, brownies, candies, and capsules to tinctures, sprays, tea, and oils. The advantage of ingesting cannabis is that it will provide much longer relief than inhalation. In general, patients can experience a reduction in their symptoms for 6-8 hours or more. Most ingestibles in the form of edibles (cookies, brownies, candies, sodas) come in dosages that far exceed the necessary amount to obtain relief.

When cannabinoids are ingested, they are processed through the liver. The liver converts delta-9 tetrahydrocannabinol (THC) into 11-hydroxy-THC (11-OH-THC) which is a much more potent form of THC. The bio-availability of ingested cannabis ranges from 4% to 20%. Cannabis is fat soluble, delaying full onset of action from 1-3 hours. These factors make it difficult to dose a majority of THC rich-edibles. The high variability of ingested cannabis, coupled with the delayed onset of effectiveness, can lead to potential over-medicating. Often, while a patient is waiting for relief they will consume more than they need, thinking that they didn't take enough originally.

Unfortunately, this leads to side effects that can be unpleasant and uncomfortable. In higher dosages of 10 mg or more, patients can experience anxiety, paranoia and/or hallucinations.

Edibles

Edibles, such as baked goods, lozenges and capsules, can be difficult to part out in equal amounts. Take the example of a brownie that has 100 mg of cannabinoids per package. How can you guarantee, when you break that brownie down into several small pieces, that within each piece the cannabis is evenly distributed? In a cannabis-naïve patient, a recommended starting dose is generally between 2.5mgs to 10 mgs of cannabinoid. The more potent the product, the higher chance a patient has of over-medicating.

Dosage	Experience	Edible Recommendations
1 - 10 mg	Beginner	 Tinctures (Provides measured dosing)
11 - 20 mg	Intermediate	 Hard Candy (Pre-determined dosing)
21 - 65 mg	Moderate	 Syrups (Provides creative options)
66 mg +	Expert	 Baked Goods (High THC content per cost)

Tinctures, Sprays and Oils

Liquid forms of cannabinoids can be a great way to start low and slow. As long as the products are clearly labeled with dosing, patients can start with as little as one drop or one spray. By definition, a tincture is in an alcohol or glycerin base. Among many cannabis products, tinctures are now being developed in an oil base (such as olive oil, coconut oil or medium chain triglycerides (MCT) oil).

Sprays can also be a great way to start low and slow. Many cannabis sprays deliver a metered dose allowing patients to self-titrate.

Topicals and Transdermals

Topical cannabis products can be beneficial for localized issues. Pain, muscle spasms, eczema, psoriasis, bug bites and/or burns can be treated with topical cannabis. The advantage is that the cannabinoids will act locally (and not regionally), thereby decreasing the potential for systemic side effects. Animal studies have shown that THC topically is two times stronger than hydrocortisone. Topical THC can be effective at reducing itching and inflammation on the surface of the skin. CBD has also been shown to decrease inflammation, muscle tightness and itching. As a topical, CBD absorbs into the skin 10x better than THC. When using a topical, patients can expect to experience relief within 20 minutes, and that relief can last for several hours.

Transdermal products can come in patches and/or topical gel pens. The transdermal products have been designed to penetrate the skin and reach the blood stream for more systemic relief. Patches can provide relief within 20 minutes, and the effects can last for 12 hours. Additionally, if a patch is removed, the adverse reaction will dissipate within 20 to 30 minutes. It can be a great way to introduce cannabis into a patient who is concerned about negative side effects and allow them some control over dosing and administration.

Special Considerations

As with all cannabis products, patients should be looking for medicines free of pesticides, solvents, molds, fungus and bacteria. Without standards in place, pesticide use in growing cannabis is unregulated. Solvents, such as butane, hexane and isopropyl alcohol are used to extract concentrated forms of cannabis. Testing the final cannabis product for pesticides, mycotoxins, residual solvents and potency would help ensure the safety of the medicine being consumed.

Finally, cannabis is best when it is individualized to the patient. Dosing is not a one-size-fits-all model, nor is it a silver bullet.



DO NOT GIVE TO CHILDREN



PLEASE DO NOT DRIVE



KEEP OUT OF REACH FROM PETS

Local Dispensary (MMTC) Phone Numbers & Locations

Name	Address	Phone number
Trulieve	8435 4 th street n St. Pete, FL 33702	727-498-5115
Trulieve	24761 US-19 #630, Clearwater, FL 33763	727-288-2540
Trulieve	8701 North Dale Mabry Highway Tampa, FL 33614	813-333-2602
Curaleaf	3811 Tyrone Blvd N St. Pete, FL 33709	877-303-0741
Surterra	2001 4th St N, St. Petersburg, FL 33704	727-295-0001
Surterra	10761 Ulmerton Rd, Largo, FL 33778	727-205-4002
Surterra	2558 E Fowler Ave, Tampa, FL 33612	813-327-7918
Knox	601 34 th Street North St. Pete, FL 33713	727-605-0066
MUV	7229 N Dale Mabry Hwy, Tampa, FL 33614	813-437-6550

VISIT: WWW.THEPATTYPAGE.COM for more information on the different dispensaries, current discounts and products!

If you have any Questions regarding the Medical Marijuana Registry Please Contact the Office of Medical Marijuana Use at: (800) 808-9580