
CT Medical Marijuana & State Cannabis Trends

PRESENTED BY: John-Paul DeVeglia, PharmD



Personal Background

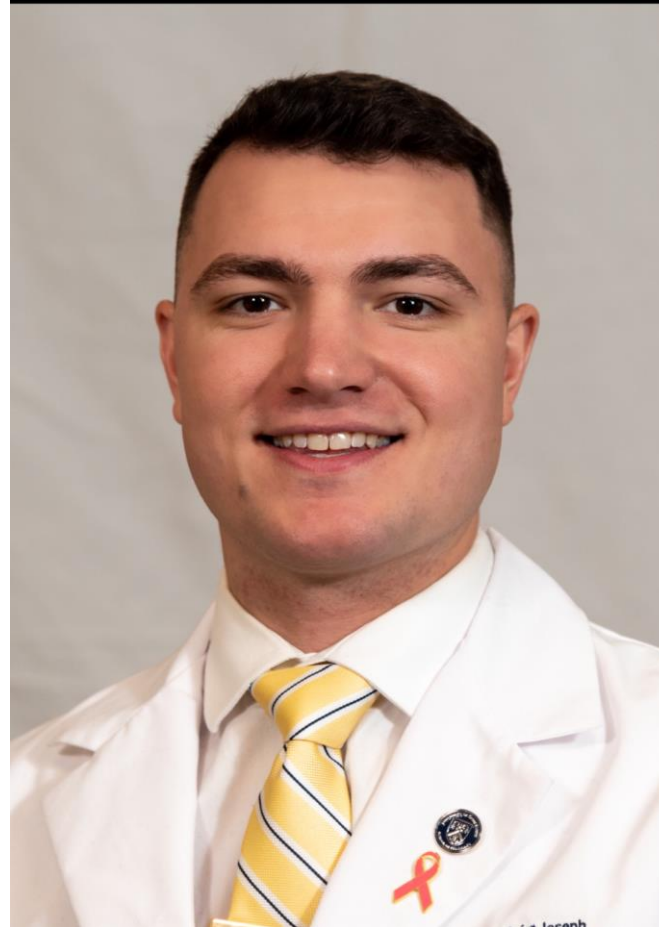
John-Paul DeVeglia,
PharmD

Dispensary Pharmacist
Fine Fettle Newington

USJ Graduate

5 years of experience in
retail/community
pharmacy

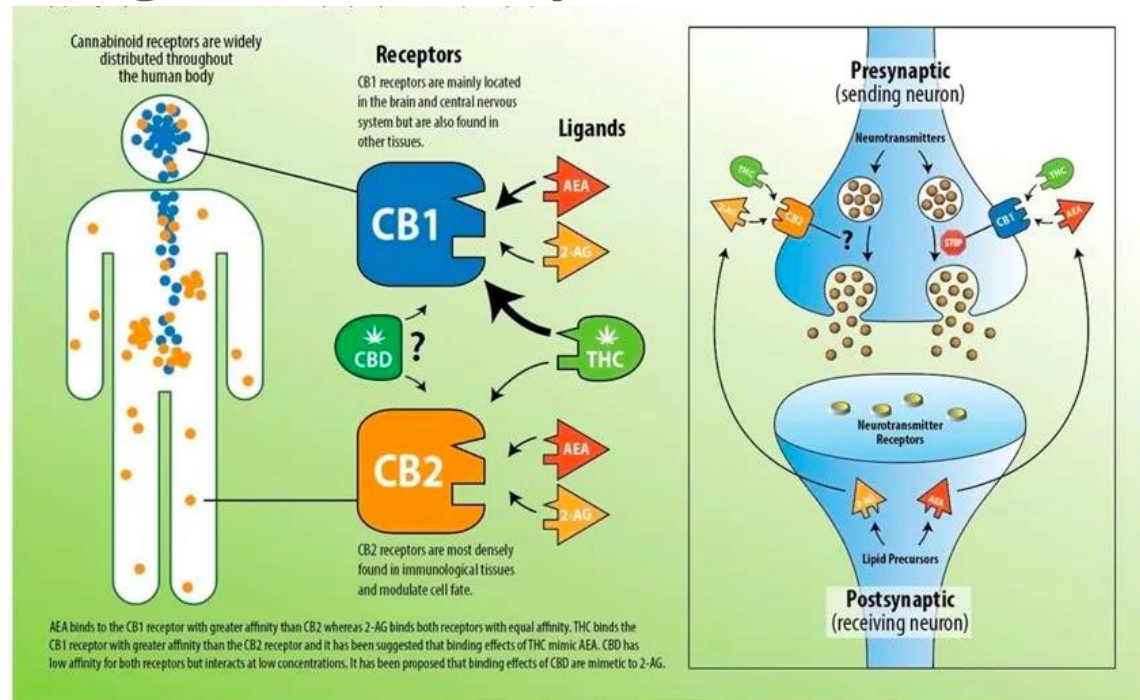
Hobbies: Reading,
Traveling, Cooking,
Hanging out with friends,
Spending time with my
cat (Cuddles)



What is Cannabis?

The Endocannabinoid System (ECS)

- Complex regulatory system comprised of¹:
 - Endocannabinoid receptors (primarily CB1 and CB2 receptors)
 - Endocannabinoids
 - Enzymes
- Regulates diverse functions throughout the body, such as¹:
 - Memory
 - Digestion
 - Motor function
 - Immune response
 - Inflammation
 - Appetite
 - Pain



Phytocannabinoids

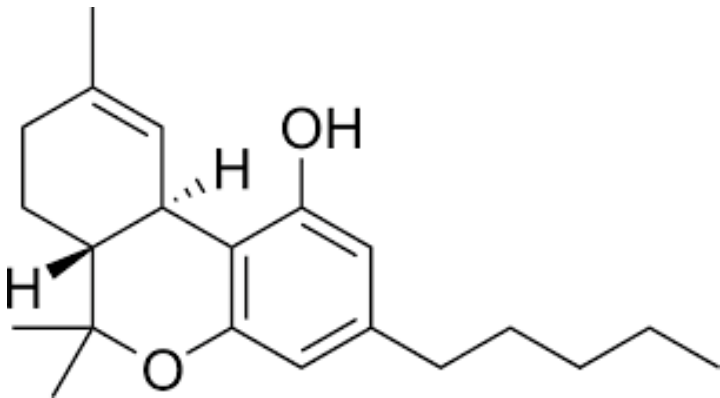
- Produced by cannabis plants in the form of carboxylic acids
 - Ex. THCA and CBDA
- Converted to chemically neutral forms (THC and CBD) via **decarboxylation** by heating cannabis through²:
 - Smoking, vaping, cooking, etc.
- Over 200 phytocannabinoids exist in cannabis plants
- Few are produced in *significant* quantities
 - THCA, CBDA, CBGA, CBCA, CBN



THC and CBD

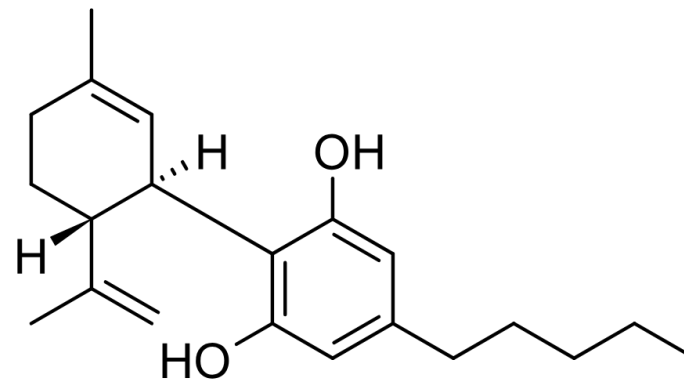
Tetrahydrocannabinol / THC

- Most common phytocannabinoid
- Potent activator of CB1 receptor
- Psychoactive (especially at high doses)
- Can be used as a “microdose” (2.5mg-5mg)



Cannabidiol / CBD

- Non-psychoactive
- Mildly activating/stimulating at low-moderate doses
- Can be helpful with pain, inflammation



THC + CBD = **Entourage Effect**

Potential Benefits for Cancer Patients

Nausea and Vomiting



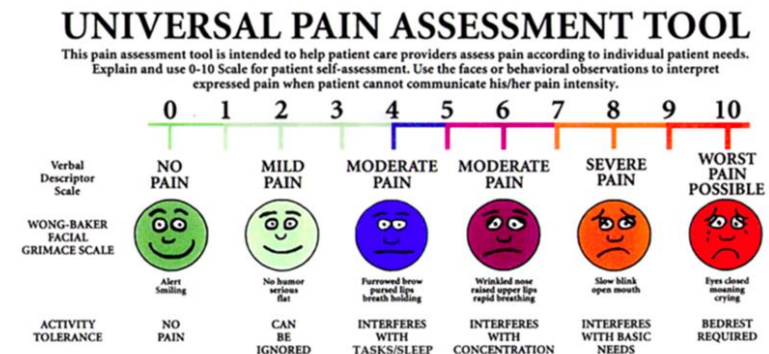
- Medical cannabis use for chemotherapy induced nausea (CIN) has been extensively studied
- THC reduces nausea through activation of CB1 receptors³
 - CB1 receptors are abundant in the brain and peripheral organs
- CBD believed to regulate nausea through 5HT receptors
- FDA approved drugs for CIN:
 - Dronabinol (**Marinol**® - tablet, **Syndros**® - liquid solution) - a synthetic form of THC⁴
- A 2015 systemic review and meta-analysis found THC and epilepsy drug not currently approved in the US, Sativex® (a 1:1 THC:CBD oromucosal spray), effective against CIN⁵

Appetite Stimulation

- Cachexia, a wasting syndrome, is commonly associated with later stages of cancer⁶
- **Marinol**® (dronabinol) has indication for anorexia associated with HIV/AIDS
 - May provide benefit with appetite stimulation in patients with cancer cachexia
- THC may influence appetite via activation of CB1 receptors⁷ in the *nucleus accumbens* (an area of the midbrain associated with increased food palatability and overeating)⁸
- Conflicting evidence for use of THC for cancer related cachexia
 - A 2006 randomized, double-blind, placebo controlled clinical trial showed oral THC had little advantage over placebo⁹
 - A 2013 observational study from Israel noted a reduction of weight loss with inhaled cannabis use as palliative care treatment in cancer patients¹⁰

Pain Relief

- Medical cannabis has displayed statistically significant pain-relieving properties in multiple studies
- Cannabinoids display analgesic and anti-inflammatory properties - thus, modulating pain via the ECS¹¹
- Evidence suggests that cannabis may serve as an adjunctive therapy for refractory pain in cancer patients being treated with opioids¹²
 - Multiple studies have displayed the ability of cannabis to reduce opioid requirements for non-cancer patients^{13, 14}



Anti-tumor Activity?

- Anti-tumor activity noted in animal models
 - Mainly inhibiting the progression of glioblastoma in rats, selectively killing cancerous cells^{15, 16}
- Activation of CB1 and CB2 receptors has displayed *in vitro* anti-tumor effects in preclinical human cancer cell studies for:
 - Breast cancer (inducing breast cancer cell death)¹⁷
 - Lung cancer (apoptosis of lung cancer cells)¹⁸
 - Prostate cancer¹⁹
- Anecdotal reports of **high dose** THC/CBD use as adjunctive therapy with conventional/accepted anti-cancer treatments
- No clinical evidence supporting use of cannabis for *sole* treatment for any type of cancer



<https://www.ctpharma.com/oils>

Potential Side Effects and Drug Interactions

Side Effects

- Unwanted psychoactive effects (THC in high doses)
 - Paranoia/anxiety
 - Tachycardia
 - Dizziness
- Exacerbation of schizophrenia or bipolar disorder in patients with genetic predisposition²⁰
- Bronchitis (with inhaled varieties) and cognitive deficits with habitual, long-term, high-dose use

Drug Interactions

- THC and CBD (more predominantly), in very high dose, can induce or inhibit cytochrome P450 enzymes in the liver²¹
- Drugs that can increase the effects of orally administered cannabis:
 - Amiodarone, diltiazem, verapamil, -azole antifungals, isoniazid, ritonavir
- Drugs that can decrease the effects of orally administered cannabis:
 - Phenobarbital, phenytoin, rifabutin, rifampicin, carbamazepine, St. John's Wort
- Cannabis can also increase the effects of:
 - Alcohol, benzodiazepines, lamotrigine, and opioids



Dosing and Other Considerations

Dosing

- Depends on indication, but relatively consistent for a given ailment
- **THC: Start low and go slow**
 - General recommendation of 2.5-5 mg PO for cannabis naive patients
- **CBD:** Do not exceed more than 20 mg/kg daily for potential drug interactions

Other Potential Benefits

- Anti-anxiety (at lower doses)
- Antidepressant activity
- Neuropathy
- Neuroprotection (at low doses of THC)
- Insomnia



How Can Cannabis Be Consumed?

Methods of Consumption

Route of Administration:	Examples:
Inhalation	Raw flower, vape oil
Oral (ingested)	Capsule, tablet, edible (cookies, brownies, etc.), honey, oral solution, tincture
Oral (sublingual)	Spray, slips, oral solution, tincture
Topical	Cream, lotion, balm, topical oil

Note: products contain varying amounts of THC, CBD, or combination of both THC + CBD

Inhalation: raw flower, vape, other concentrates

- Typical onset: 1-5 minutes;
Duration of effect: 1-3 hours
- Involves burning cannabis plant material and inhaling smoke, or heating vape cartridge and inhaling vapor
- Advantages: fast onset, convenient, ability to microdose
- Disadvantages: shorter duration of effect than other methods, inhaling smoke/additives



Oral (ingested)

- Typical onset: 30-120 minutes; expected duration: 3-8 hours
- Involves ingesting a food item infused with cannabis like baked goods, gummies, solutions/tinctures, tablets/capsules
- Advantages: dosage easy to control, longer lasting effects
- Disadvantages: delayed onset



<https://www.finefettle.com/connecticut/willimantic-dispensary/medical/products/1403093/advanced-grow-labs-agl-cannabidiol-i-1-1-micro-tablets-17023-30pk/>

Oral (sublingual)

- Typical onset: <15 minutes to 1 hour; expected duration: 4-6 hours
- Involves using drops or spray under the tongue, which allows for quick absorption into the bloodstream
- Advantages: discrete, longer lasting effects than smoking/vaping, dosage easy to control
- Disadvantages: may have unpleasant taste (tincture)



<https://www.finefettle.com/connecticut/newington-dispensary/medical/products/1756523/advanced-grow-labs-agl-agl-350mg-indicol-sublingual-spray-20675/>

Topical

- Typical onset: 15-60 min; expected duration: 2-6 hours
- Involves applying a cream, lotion, oil, or gel to relieve pain and inflammation locally
- Advantages: easy to use, typically does not produce psychoactive effects
- Disadvantages: duration of effect is variable depending on numerous factors



Medical Marijuana in Connecticut

- Act passed in May 2012 created the structure for a medical marijuana program in CT to provide patients with certain debilitating conditions access to medical marijuana
- Protects those involved in the program from any state criminal/civil penalties
 - An individual cannot be arrested in CT for possessing medical marijuana if they are an active patient in the program
- Medical marijuana can ONLY be dispensed by a licensed pharmacist
- Medical marijuana can be sold only from licensed dispensaries
 - Dispensaries are not pharmacies, they cannot sell regular prescription products

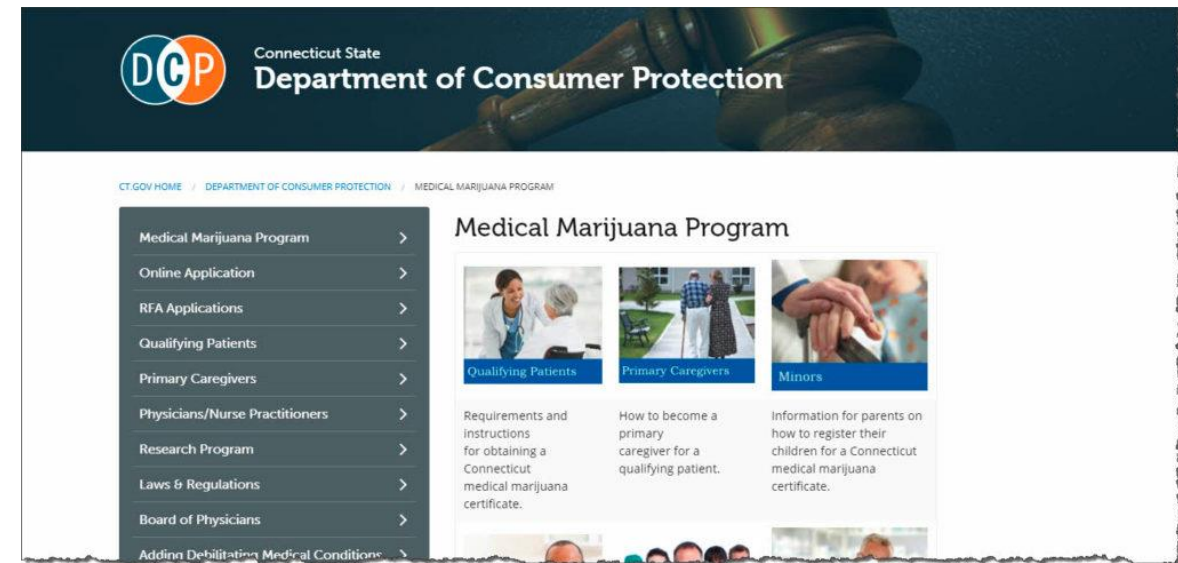
Current CTMMP Statistics (As of 10/30/2023)

42,406 Registered Patients

4 Producers

1,748 Registered Physicians

18 Dispensaries



Connecticut Medical Marijuana Dispensary Facilities

Facility Name	Address	Website	Email	Phone
Affinity Health & Wellness	1351 Whalley Avenue, New Haven, CT 06515	www.affinityct.com	info@affinityct.com	203.745.3823
Bluepoint Wellness of Connecticut	471 East Main Street, Branford, CT 06405	www.bluepointwellnessct.com	info@bluepointwellnessct.com	203.488.1388
Bluepoint Wellness of Westport	1460 Post Rd E Westport, CT 06880	www.bluepointwellnessct.com	office@bluepointwellnessct.com	203.292.8611
Curaleaf Groton Inc.	79 Gold Star Hwy, Groton, CT 06340	CT.Curaleaf.com	curaleafct@curaleaf.com	860.422.4929
Curaleaf Hartford Inc.	92 Weston Street, Suite 16, Hartford, CT 06120	CT.Curaleaf.com	curaleafct@curaleaf.com	860.246.HOPE(4)
Curaleaf Milford Inc.	255 West River Street, Milford, CT 06461	CT.Curaleaf.com	curaleafct@curaleaf.com	203.874.HOPE(4)
Curaleaf Stamford Inc.	814 East Main Street, Stamford, CT 06902	CT.Curaleaf.com	curaleafct@curaleaf.com	203.324.HOPE(4)
Caring Nature LLC.	237 East Aurora St, Waterbury, CT 06708	www.caringnaturedispensary.com	info@caringnaturedispensary.com	203.437.8477
Fine Fettle Dispensary- Willimantic	1548 W. Main Street, Willimantic, CT, 06226	www.finefettle.com	willimantic@finefettle.com	860.717.9333

Fine Fettle Dispensary-Newington	2280 Berlin Turnpike, Newington, CT 06111	www.finefettle.com	newington@finefettle.com	860.333.9032
Fine Fettle Dispensary-Stamford	12 Research Drive, Stamford, CT 06907	www.finefettle.com	stamford@finefettle.com	203.989.9133
Prime Wellness of Connecticut, LLC	75 John Fitch Boulevard, South Windsor, CT 06074	www.primewellnessofct.com	info@primewellnessofct.com	860.331.8918
Still River Wellness	3568 Winsted Road, Torrington, CT 06790	https://stillriverwellness.com/	info@stillriverwellness.com	203.815.1101
Southern CT Wellness & Healing, LLC	318 New Haven Avenue, Milford, CT 06460	www.soctwellness.com	care@soctwellness.com	203.496.5200
The Botanist - Danbury	105 Mill Plain Road, Danbury CT 06811	www.shopbotanist.com	danburyreception@shopbotanist.com	203.909.6869
The Botanist - Montville	887 Norwich-New London Turnpike, Uncasville, CT 06382	www.shopbotanist.com	montville@shopbotanist.com	860.848.0865
The Healing Corner/Trulieve	159 East Main Street, Bristol, CT 06010	www.thehealingcorner.com	hope@thehealingcorner.com	860.583.4325
Willow Brook Dispensary	1371 East Main Street, Meriden, CT 06450	www.willowbrookwellness.com	info@willowbrookwellness.com	203.889.9600

Approved Conditions for Treatment with Medical Marijuana

Includes

- Cancer
- Cachexia
- Glaucoma
- Psoriasis
- Rheumatoid Arthritis
- Parkinson's
- Multiple Sclerosis
- PTSD
- Chronic Pain of at least 6 months

Qualification Requirements

A patient may only register for a medical marijuana certificate if he or she is a Connecticut resident being treated for a debilitating medical condition by a Connecticut-licensed physician or advanced practice registered nurse.

For Adults, Debilitating Medical Conditions Include:

- Cancer (Effective 2012)
- Glaucoma (Effective 2012)
- Positive Status for Human Immunodeficiency Virus or Acquired Immune Deficiency Syndrome (Effective 2012)
- Parkinson's Disease (Effective 2012)
- Multiple Sclerosis (Effective 2012)
- Damage to the Nervous Tissue of the Spinal Cord with Objective Neurological Indication of Intractable Spasticity (Effective 2012)
- Epilepsy (Effective 2012)
- Cachexia (Effective 2012)
- Wasting Syndrome (Effective 2012)
- Crohn's Disease (Effective 2012)
- Post-Traumatic Stress Disorder (Effective 2012)
- Sickle Cell Disease (Effective 2016)*
- Post Laminectomy Syndrome with Chronic Radiculopathy (Effective 2016)*
- Severe Psoriasis and Psoriatic Arthritis (Effective 2016)*
- Amyotrophic Lateral Sclerosis (Effective 2016)*
- Ulcerative Colitis (Effective 2016)*
- Complex Regional Pain Syndrome, Type 1 and Type II (Effective 2016)*
- Cerebral Palsy (Effective 2016)
- Cystic Fibrosis (Effective 2016)
- Irreversible Spinal Cord Injury with Objective Neurological Indication of Intractable Spasticity (Effective 2016)

Cont.

- Terminal Illness Requiring End-Of-Life Care (Effective 2016)
- Uncontrolled Intractable Seizure Disorder (Effective 2016)
- Spasticity or Neuropathic Pain Associated with Fibromyalgia (Effective 2018)*
- Severe Rheumatoid Arthritis (Effective 2018)*
- Post Herpetic Neuralgia (Effective 2018)*
- Hydrocephalus with Intractable Headache (Effective 2018)*
- Intractable Headache Syndromes (Effective 2018)*
- Neuropathic Facial Pain (Effective 2018)*
- Muscular Dystrophy (Effective 2018)*
- Osteogenesis Imperfecta (Effective 2018)*
- Chronic Neuropathic Pain Associated with Degenerative Spinal Disorders (Effective 2018)*

For Patients Under 18, Debilitating Medical Conditions Include:

- Cerebral Palsy (Effective 2016)
- Cystic Fibrosis (Effective 2016)
- Irreversible Spinal Cord Injury with Objective Neurological Indication of Intractable Spasticity (Effective 2016)
- Severe Epilepsy (Effective 2016)
- Terminal Illness Requiring End-Of-Life Care (Effective 2016)
- Uncontrolled Intractable Seizure Disorder (Effective 2016)
- Muscular Dystrophy (Effective 2018)*
- Osteogenesis Imperfecta (Effective 2018)*

- Chronic Neuropathic Pain Associated with Degenerative Spinal Disorders (Effective 2018)*
- Interstitial Cystitis (Effective 2019)*
- MALS Syndrome (Median Arcuate Ligament Syndrome) (Effective 2019)*
- Vulvodynia and Vulvar Burning (Effective 2019)*
- Intractable Neuropathic Pain that Is Unresponsive to Standard Medical Treatments (Effective 2019)*
- Tourette Syndrome (Effective 2019)*

* Conditions were approved by the Regulation Review Committee via the recommendation of the Board of Physicians and Commissioner of Consumer Protection.

MMP Certification Process

If you are a patient seeking to register with the Department's Medical Marijuana Program you must:

1.) Make an Appointment with An Approved Physician:

- Only a physician can initiate your application by certifying for the Department that you have a medical condition that qualifies you for a medical marijuana registration certificate.

2.) Submit application to the DCP:

- Proof of identity, proof of CT residency, and \$100 registration fee*

3.) Register Your Primary Caregiver, if Applicable

4.) Choose your Dispensary

- A qualifying patient or primary caregiver may change the patient's designated dispensary facility no more than four (4) times per year

*A registration certificate expires one (1) year from the physician's certification date.

Recent CT Medical Marijuana Changes: The Adult Use Landscape

Adult Use in Connecticut

- Cannabis is legal in CT
 - Residents over 21
- Medical Patients can grow cannabis plants
- Cities and towns may enact ordinances to regulate where cannabis can be used in public



When Will Adult Use Sales Begin?

- Began Jan 10th in CT
- Benefits of Medical vs Adult-Use
 - Access to higher potency products
 - Greater access to medically focused products
 - Usually priced lower
 - Can purchase a larger amount at a time (up to 5oz.)
 - Costs (registration fee, taxes, etc.)
 - Medical cannabis preservation plan



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John-Paul DeVeglia (JDEVEGLIA@FINEFETTLE.COM)
Thank you for your time!

