

# Therapeutic Cannabis in New Hampshire

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## Goals/Objectives



Brief History of the NH Therapeutic Cannabis Law

Certification Process

Therapeutic Cannabis 101

Noted Observations with my Patients

Number to text: 37607

LISAWITHROW811

## Survey

What's the first thing that comes to mind when you hear "marijuana for medicinal use?"

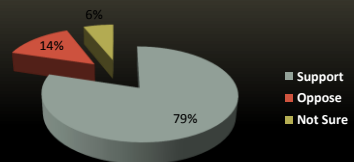
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Brief History of the NH Therapeutic Cannabis Law



## WMUR Granite State Poll (February 2013)

Do you support or oppose allowing doctors in New Hampshire to prescribe small amounts of marijuana to patients suffering from serious illness?



## History of NH House Bill 573



- Legislation approved and signed on June 23, 2013
- Signed into LAW 2 years later on June 23, 2015
- Due to lack of patient protection, patients were without legal access until dispensaries opened... Until...

## Paving the Way

- Linda Horan
  - Lawsuit against State
  - Set prior precedence
- DHHS started issuing Therapeutic Cannabis cards December 2015



## NH House Bill 573: Protection of Patient/Caregiver

“A qualifying patient shall not be subject to arrest by state or local law enforcement, prosecution or penalty under state or municipal law, or denied any right or privilege for the therapeutic use of cannabis in accordance with this chapter, if the qualifying patient possesses an amount of cannabis that does not exceed the following:

- (a) Two ounces of usable cannabis; and
- (b) Any amount of unusable cannabis.”

## NH House Bill 573: Protection of Patient

“For the purposes of medical care, including organ transplants, a qualifying patient’s authorized use of cannabis in accordance with this chapter shall be considered the equivalent of the authorized use of any other medication used at the direction of a provider, and shall not constitute the use of an illicit substance.”

## NH House Bill 573: Protection of Provider

“A provider shall not be subject to arrest by state or local law enforcement, prosecution or penalty under state or municipal law, or denied any right or privilege, including but not limited to a civil penalty or disciplinary action by the New Hampshire board of medicine or any other occupational or professional licensing entity, solely for providing written certifications, provided that nothing shall prevent a professional licensing entity from sanctioning a provider for failing to properly evaluate a patient’s medical condition.”

1. Complete [ ] Box A – Condition / Symptom (both sections), [ ] Box B – Condition Only  
2. Sign and date at the bottom of the page

<b>A. Condition / Symptom (Check all that apply)</b> I certify that I am treating _____ (Patient Name) who has the following condition(s):	
. Acquired immune deficiency syndrome . Alzheimer's disease . Amyotrophic lateral sclerosis . Cancer . Chronic pancreatitis . Crohn's disease . Ehlers-Danlos syndrome . Epilepsy . Glioma . Hepatitis C	. Lupus . Multiple sclerosis . Muscular dystrophy . One or more injuries or conditions that has resulted in one or more qualifying symptoms listed below . Parkinson's disease . Positive status for human immunodeficiency virus . Spinal cord injury or disease . Traumatic brain injury . Ulcerative colitis
<b>AND who has a severely debilitating or terminal medical condition, or its treatment, that has produced at least one of the following qualifying symptoms or side effects:</b>	
. Agitation of Alzheimer's disease . Cachexia . Chemotherapy-induced anorexia . Constant or severe nausea . Elevated intracranial pressure . Moderate to severe vomiting	. Seizures . Severe pain that has not responded to previously prescribed medication or surgical measures or for which other treatment options produced serious side effects . Severe, persistent muscle spasms . Wasting syndrome
OR	
<b>B. Condition Only (Check all that apply)</b> I certify that I am treating _____ (Patient Name) who has the following condition(s):	
. Moderate or severe post-traumatic stress disorder . Moderate to severe chronic pain . Severe pain that has not responded to previously prescribed medication or surgical measures or for which other treatment options produced serious side effects	
SIGNATURE	
Signature of Certifying Provider	Date

## Certification Process



## Process for “Prescribing”/Certifying”

- Who Can “Prescribe”?
- Requirements for Certification Process
  - Written Certification
- Application for Registry Identification Card
- Appointment at “Alternative Treatment Center”
  - Ongoing Follow-up

## Who Can “Prescribe” Therapeutic Cannabis?

- Two important concepts to understand:
  - Medical provider does NOT prescribe.
  - Medical provider is simply signing a paper certifying the patient suffers from qualifying medical condition(s) with associated symptom(s).

## Process (1): Who Can Provide Certification?

- Physician
- APRN
  - Nurse Practitioner
  - Nurse Midwife
  - Nurse Anesthetist
- \*\*\*MUST have DEA prescriptive authority for controlled substances.\*\*\*



PAs are NOT allowed to provide cannabis certifications

## Process (2): Requirements for Certification Process

- Physician or APRN
- 3 month Provider-Patient medical relationship
- In-person full medical assessment
- Provider must provide education regarding potential effects of cannabis
- Written Certification/Application to DHHS
- Provider required to follow-up with patient for monitoring of effects

## Process (3): Requirements of Written Certification

- 3 month Provider-Patient medical relationship
  - In-person full medical assessment
    - A history
    - Review of labs, imaging, other relevant tests
    - A diagnosis of current medical condition
    - Treatment plan appropriate for licensee's medical specialty
    - Explain potential health effects of therapeutic use of cannabis

### Written Certification (Continued)

“The **3-month requirement** for the provider-patient relationship required ...**shall not apply** if the provider issuing the written certification certifies that the onset of the patient’s qualifying medical condition occurred within the past 3 months, and the **certifying provider is primarily responsible for the patient’s care related to his or her qualifying medical condition.**”

### Application (for patient) to obtain Registry Identification Card

- **Application to NH DHHS:**

- **Written Certification from Provider**
- **Patient application to NH DHHS:**
  - Photo on CD
  - Check for \$50
  - Proof of residency
- **To be processed within 20 calendar days**



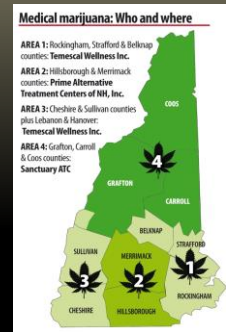
### Appointment at Alternative Treatment Center



- **Appointment with Alternative Treatment Center Agent**
- **Verification of qualifying medical condition and symptom assessment**
- **Determination of cannabis type and route**
- **Dispensing of cannabis**

### Four Alternative Treatment Centers

- **Dover**
- **Lebanon**
- **Merrimack**
- **Plymouth**



### Alternative Treatment Centers

- **Merrimack**



### Alternative Treatment Centers

- **Plymouth**



## Alternative Treatment Centers



- Dover
- Lebanon

## Required Ongoing Follow-up

- Follow patient clinically at appropriate intervals at discretion of provider
- Provide follow-up care and treatment for qualifying medical condition
- Monitor effects of cannabis



What Questions can I answer before continuing?

## Therapeutic Cannabis 101




## Therapeutic Cannabis 101 Strains

- **Sativa**
  - Mentally stimulating
  - Increased energy
  - Euphoria
  - Helps with nausea, GI upset, appetite stimulant, headaches, depression, fatigue
- **Indica**
  - Increased relaxation
  - More sedating
  - Helps with pain, anxiety, muscle spasms, insomnia
- **Hybrids**
  - Best of both worlds = bred to achieve specific qualities

## Therapeutic Cannabis 101 Cannabinoids

- **Chemical compounds (over 300)**
- **Two most well-known Cannabinoids:**
  - **Tetrahydrocannabinol (THC)**
    - Major psychoactive compound
    - Used for nausea, appetite stimulant, muscle spasms, euphoria
  - **Cannabidiol (CBD)**
    - Major non-psychoactive compound
    - Calms the "high" from THC
    - Used for pain, anti-inflammatory, seizures, anxiety, psychosis, and inhibiting tumor cell growth

## Therapeutic Cannabis 101 Delivery Methods



- Smoking
- Vaping
- Tinctures
- Salves
- Capsules
- Transdermal patches
- Edibles

## Therapeutic Cannabis 101 Potential Effects

- Smoking
  - Increased risk of cancer
  - Hypertension
  - MI
  - Lung disease
- Short-term effects
  - Dry mouth/Dry eyes
  - Tachycardia
  - Coughing (if smoking)
  - Anxiety
  - Panic attacks
  - Confusion
  - Paranoia
  - Lightheadedness/dizziness (more common high/low blood pressure)

## Therapeutic Cannabis 101 Potential Effects

- Long-term side effects
  - Chronic bronchitis
  - Memory loss \*\*\*
  - Cognitive impairment\*\*\*
- Possibility of exacerbation (personal/family hx):
  - Schizophrenia
  - Bipolar disorder
  - High anxiety (agoraphobia)

## Potential for Dependency

Substance	Dependency percentage
Cannabis	6-9%
Caffeine	11%
Alcohol	15.4%
Cocaine	16.7%
Heroin	23.1%
Tobacco	31.9%


## HOW DRUGS ARE CLASSIFIED IN THE US

SCHEDULE	DESCRIPTION	EXAMPLES
Schedule 1	Drugs with no currently accepted medical use and a high potential for abuse. They are the most dangerous drugs of all the drug schedules with potentially severe psychological or physical dependence.	- Heroin - Lysergic acid diethylamide (LSD) - Marijuana (Cannabis) - Methylendioxyamphetamine (Ecstasy) - Methqualone - Peyote
Schedule 2	Drugs with a high potential for abuse, with use potentially leading to severe psychological or physical dependence. These drugs are also considered dangerous.	- Combination products with less than 15mg of hydrocodone per dosage unit (Vicodin) - Cocaine - Methamphetamine - Methadone - Hydromorphone (Dilaudid) - Meperidine (Demerol) - Oxycodone (OxyContin) - Fentanyl - Deserlime - Adderall - Ritalin
Schedule 3	Drugs with a moderate to low potential for physical and psychological dependence. Schedule 3 drugs abuse potential is less than Schedule 1 and Schedule 2 drugs but more than Schedule 4.	- Products containing less than 90mg of codeine per dosage unit (Tylenol and codeine) - Ketamine - Anabolic steroids - Testosterone
Schedule 4	Drugs with a low potential for abuse and low risk of dependence.	- Xanax - Sonata - Darvon - Darvocet - Valium - Ativan - Talwin - Ambien - Tramadol
Schedule 5	Drugs with lower potential for abuse than Schedule 4 and consist of preparations containing limited quantities of certain narcotics. Schedule 5 drugs are generally used for antidiarrheal, antitussive, and analgesic purposes.	- Cough preparations with less than 200mg of codeine per 100ml (Robitussin AC) - Lorazepam - Motofen - Lorcet - Parepectolin

SOURCE: Drug Enforcement Administration

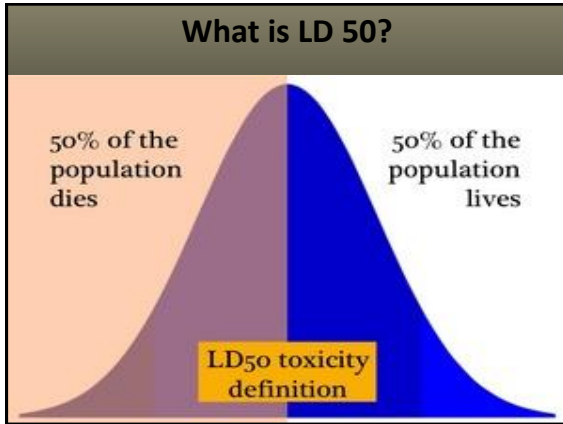
## What is Lethal Dose 50 (LD 50)?

### LD50



LD50 is a standard of measurement of acute toxicity that is stated in milligrams (mg) of pesticide per kilogram (kg) of body weight. An LD50 represents the individual dose required to kill 50 percent of a population of test animals. Because LD50 values are standard measurements, it is possible to compare relative toxicities among pesticides. The lower the LD50 dose, the more toxic the pesticide.

Source: epa.gov

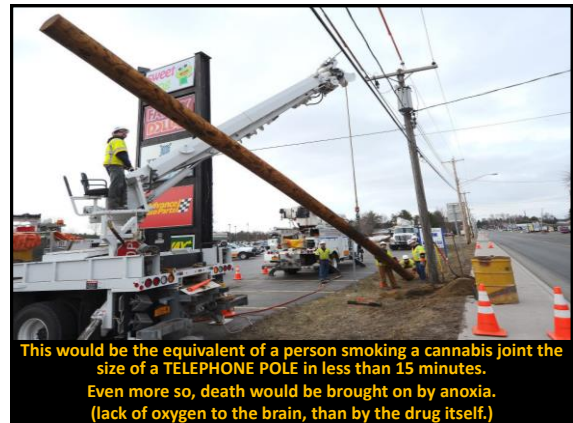


Substance	Comments	LD 50* (mg/kg)
Fentanyl		0.00003
Nicotine		50
Methamphetamine		57
Meloxicam		83.5
Cocaine		96
Oxycodone		>100
Caffeine		192
Aspirin		200
Ketamine		229
Hydromorphone	Dilaudid, Exalgo	261
Hydrocodone	Vicodin, Norco	375
Morphine		461
Ibuprofen	Motrin	740
Acetaminophen		2,402
Ethanol	Alcohol	7,000
Cannabis		Any Guesses?!?!

### So what is the calculated LD50 for Cannabis?

- (1500 pounds) / (80 kg) = 18.75 pounds/kg
- 1 pound = 453,592 mg
- 18.75 pounds x 453,592 =

8,504,850 mg / kg!!!



Substance	Comments	LD 50* (mg/kg)
Fentanyl		0.00003
LSD		16.5
Heroin		30
Nicotine		50
Cocaine		96
Oxycodone		>100
Hydromorphone	Dilaudid, Exalgo	261
Methaqualones	Quaaludes	326
Ecstasy		350
Hydrocodone	Vicodin, Norco	375
Morphine		461
Ethanol	Alcohol	7,000
Cannabis		8,504,850

### Why is LD 50 so high for cannabis?

- Very few cannabinoid receptors in the brain stem
- Brain stem controls respiration and cardiac functions.
- Death cannot occur from cardiorespiratory failure - unlike opiates (heroin) - where there are abundant opiate (mu) receptors in the brain stem.

## Noted Observations with my Patients



## Therapeutic Cannabis: How I've seen my Patients Benefit

- Decreased Pain
- Decreased muscle spasms/contractures
  - Reduction in Seizures
  - Decreased anxiety
- Increased restorative sleep
- Increased Quality of Life
  - Decreased Nausea
- Increased appetite/Weight gain
- Reduction or complete titration from pharmaceuticals (opioids, benzodiazepines, muscle relaxants, and psychotropics).

## Therapeutic Cannabis: How I've seen my Patients Benefit

- PTSD
  - Decreased anxiety
  - Increased calm/peaceful feeling
  - Decreased hypervigilance
  - Increased restorative sleep

## Discussion Questions

1. What have you heard – from the press, other colleagues, the general public, or family/friends regarding Medical Marijuana?
2. What are some of the implications to our practice in the medical profession?
3. What are some of your concerns?

## Other Questions?



- Thanks for listening!
- What questions can I answer for you?

## References:

- Integr8 Health = <http://integr8health.com/>
- [www.Healer.com](http://www.Healer.com)
- New Hampshire Department of Health and Human Services: *Therapeutic Use of Cannabis Advisory Council, HB 573, Chapter 242:1-6, Laws of 2013, RSA 126-X; Annual Report 2014, January 1, 2015*
- New Hampshire Medical Society:
  - Herbal Marijuana Survey