

Indications and Use of Medical Cannabis in New York State

Legalization of Cannabis in the United States Today

Marijuana is now legal for medical use in 25 states and Washington D.C. Marijuana is also legal in five of these states for recreational or ‘adult use.’ Now that medical marijuana is legal in more than half of the U.S., with additional states voting on legislation, it is important for medical professionals to have at least a basic understanding of the risks and benefits of cannabis.

Given the volume of anecdotal evidence, plus a small number of randomized controlled trials, it is apparent that there is great potential for cannabis and cannabinoids to provide suffering patients with palliation of many symptoms. Medical providers should also be familiar with the state laws in which they practice. The legalization of cannabis remains controversial, as it is still classified by the FDA as a Schedule I substance; however, the U.S. Justice Department has made it clear that U.S. attorneys should not pursue actions against physicians in states that allow medical cannabis.

Brief History of Cannabis

The cannabis plant has been used for medicinal purposes throughout history in ancient cultures, as well as in the United States until the mid-20th century. Emperor Shen Nung of China, who also discovered tea and ephedrine, is held to be among the first to report on therapeutic uses of cannabis in a medicinal compendium dating back to 2737 B.C.

In 1839, William O’Shaughnessy, a British physician working in India, published a paper on cannabis as an analgesic and appetite stimulant that also tempered nausea, relaxed muscles, and might ameliorate epileptic seizures. This led to widespread use of cannabis in the United Kingdom, and was even prescribed to

Queen Victoria for the relief of her menstrual pain. In 1937, Harry Anslinger, head of the Federal Bureau of Narcotics successfully lobbied Congress to pass the Marihuana Tax Act, making access to the plant costly. The American Medical Association opposed the Marihuana Tax Act, fearing that it would limit medicinal study and potential prescription of the plant.

In 1942 marijuana was removed from the United States Pharmacopeia, a compendium that set standards for medicines and foods. In 1970 Congress enacted the Controlled Substances Act, classifying marijuana, along with heroin and other drugs, as a Schedule I drug.

Cannabinoid Pharmacology

All humans have a physiologic system known as the **endocannabinoid system**. We have endogenous ligands, endocannabinoids, which bind to two receptor subtypes called CB1 and CB2, which are distributed throughout our central nervous system, immune system, and also peripherally.

The endocannabinoid system affects many physiologic processes—including antinociception, motor control, feeding behavior, memory and learning, immune and inflammatory responses, and neuroprotection.

The cannabis plant is made up of over 400 molecular components. Over 60 of these are called phytocannabinoids, which are cannabinoids specific to the cannabis plant. The two most prevalent and best studied are THC and CBD.

THC is the one cannabinoid that is responsible for the psychogenic effects of cannabis. THC also has medicinal properties—including muscle relaxation, calming of pain including neuropathic pain, antiemetic, antitremor, and increasing appetite. CBD modulates the psychogenic effects of THC.

CBD also has medicinal properties—including pain control and anti-inflammation, anticonvulsant, immunomodulatory, neuroprotective, antianxiolytic, and antidepressant. Patients may not feel any psychogenic effects of cannabis when there is at least an equal ratio of THC:CBD, or $\text{THC} < \text{CBD}$.

Recommending Medical Cannabis to Patients

Because cannabis is Schedule I, physicians give recommendations and do not prescribe it. In NY,

certified patients may vape cannabis oil, take an oral tincture, or take an oral capsule. Smoking cannabis is not legal in NY. Vaping, like smoking, has a rapid onset of effect and easy dose titration. Oral ingestion of cannabis products has a delayed onset of action compared to inhalation, and titration is more difficult. Exact dosages depend on individual patient need and tolerance of side effects. There are no evidence-based guidelines on dosing. Patients' symptomatic needs and tolerance to cannabis will guide the decision making for the ratio of THC:CBD. The medical marijuana dispensaries in NY will almost always start patients at a low dose of THC and will gradually titrate dosing based on clinical assessment.

How Physicians Become Certified in NY and Care for Patients

In order to certify patients for the NY State Medical Marijuana Program, physicians must take a 4-hour online CME course designated by the NY State Department of Health (DOH) and then register with the DOH. The NY State Medical Marijuana Program has a limited number of qualifying conditions or diagnoses: Cancer, HIV, IBD, ALS, MS, Huntington's disease, Parkinson's disease, epilepsy, neuropathy, and spinal cord injury with persistent spasticity.

Additionally, physicians must be treating these patients for one of five associated conditions or symptoms: Severe or chronic pain, seizures, severe or persistent spasticity, severe nausea, or cachexia or wasting syndrome. Dispensaries are allowed to dispense up to a one-month supply to a certified patient or a certified caregiver.

Referral of Patients for Cannabis Treatment

If you have a patient who meets the criteria for qualifying conditions or diagnoses, as well as one of the five specified conditions or symptoms, **described above**, and you wish to refer the patient for possible treatment with cannabis, you will need to find a practitioner who is registered by New York State to evaluate and **certify** patients for the New York State Medical Marijuana Program.

Such physicians can be identified in the Medical Marijuana Data Management System located online within the DOH's Health Commerce System (HCS). Instructions for accessing the list are as follows:

1. Log in to the Health Commerce System (HCS) at <https://commerce.health.state.ny.us/>
2. Select the Medical Marijuana Data Management System (MMDMS) from the My Applications Menu.
3. On the Practitioner Portal, select the "Search Registered Practitioners" button.
4. Medical providers will be listed.

Visit the CCB-MJHS Palliative Care Project website at

ThePalliativeProject.org

For further information about these educational activities, please email PalliativeInstitute@mjhs.org or call (212) 649-5500.