

Committee Staff:

Mental Health

Jennifer Wilcox, Legislative Analyst

Michael Benjamin, Policy Analyst

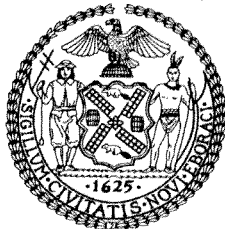
Pamela Corbett, Finance Analyst

Drug Abuse

Matthew Carlin, Counsel

Joseph Mancino, Policy Analyst

Pamela Corbett, Finance Analyst



THE COUNCIL

BRIEFING PAPER OF THE HUMAN SERVICES DIVISION

Robert Newman, Legislative Director

**COMMITTEE ON MENTAL HEALTH, MENTAL RETARDATION,
ALCOHOLISM, DRUG ABUSE, AND DISABILITY SERVICES**

Hon. G. Oliver Koppell, Chair

SUBCOMMITTEE ON DRUG ABUSE

Hon. Ruben Wills, Chair

November 18, 2011

OVERSIGHT: MEDICAL MARIJUANA

INTRODUCTION

On Friday, November 18, 2011, the Committee on Mental Health, Mental Retardation, Alcoholism, Drug Abuse, and Disability Services, chaired by Council Member G. Oliver Koppell, and the Subcommittee on Drug Abuse, chaired by Council Member Ruben Wills, will hold a joint hearing entitled, “Oversight: Medical Marijuana.” The purpose of this hearing is to investigate whether medical marijuana should be legalized in New York. Invited to testify at today’s hearing are representatives from the New York City Department of Health and Mental Hygiene (DOHMH), policy organizations, advocates and treatment providers.

BACKGROUND

Marijuana is a dry, shredded green and brown mix of flowers, stems, seeds and leaves derived from the plant *cannabis sativa*.¹ While marijuana contains more than 60 chemical compounds known as cannabinoids, the main psychoactive element is delta-9-tetrahydrocannabinol (THC).² The second most abundant cannabinoid in marijuana is Cannabidiol (CBD) which has no psychoactive effects.³

The federal Controlled Substances Act (CSA) of 1970 included marijuana in the list of Schedule I drugs.⁴ Schedule I drugs are defined under the Act as having a high potential for abuse, no currently accepted medical use in treatment, and a lack of accepted safety for use under medical supervision.⁵ The CSA allows the U.S. Attorney General to reschedule a drug if he

¹ Nat’l Institute on Drug Abuse, *NIDA InfoFacts: Marijuana*, <http://www.drugabuse.gov/Infofacts/marijuana.html> (last visited Apr. 19, 2010).

² Institute of Medicine, *Marijuana and Medicine: Assessing the Science Base*, 24-25 (1999) http://www.nap.edu/openbook.php?record_id=6376&page=24 (hereinafter *Institute of Medicine*).

³ *Id.* at 25.

⁴ 21 USC § 812.

⁵ *Id.*

finds that it does not meet the criteria for the schedule to which it was assigned.⁶ In turn, the Attorney General delegated that authority to the Administrator of the Drug Enforcement Administration (DEA).⁷ In 1972, the National Organization for the Reform of Marijuana Laws (NORML), filed a petition was filed to have marijuana rescheduled from a Schedule I Drug to a Schedule II Drug.⁸ Schedule II drugs may be prescribed by a doctor for therapeutic purposes. After years of court battles, in 1988, the DEA's Administrative Law Judge ordered that the marijuana plant be rescheduled as a Schedule II Drug.⁹ The DEA overruled this decision and issued a final rule declining to reschedule marijuana as a Schedule II Drug in March 1992.¹⁰

In 1996, California became the first state to legalize the use of medical marijuana. Currently, the use of marijuana for medical purposes has now been legalized in 16 states and the District of Columbia.¹¹ A 17th state, Maryland, has a limited medical marijuana defense which means that qualifying patients have an affirmative defense if charged with possessing up to an ounce of marijuana, but the law does not provide a means of accessing medical marijuana.¹² In all 16 medical marijuana states a doctor's recommendation or certification is required for patients to possess and use medical marijuana.¹³ In addition, in all states except California, the patient must be certified by a physician as suffering from a serious medical condition or symptom listed in the state's law.¹⁴ All of the state laws include cancer, AIDS, and multiple sclerosis or spasms as qualifying conditions and all of the laws except those in New Jersey and

⁶ 21 USC § 811.

⁷ 28 C.F.R. §0.100(b) .

⁸ *In the Matter of Marijuana Rescheduling Petition*, Docket No. 86-22 2 (Sept. 6, 1988)
<http://medicalmarijuana.procon.org/sourcefiles/Young1988.pdf>.

⁹ *Id.*

¹⁰ 57 FR 10499.

¹¹ Ethan Nadelmann, *Reefer Madness*, N.Y. Times, Nov. 6, 2011

http://www.nytimes.com/2011/11/07/opinion/reefer-madness.html?_r=2&ref=todayspaper.

¹² Marijuana Policy Project, *The Sixteen States and One Federal District with Effective Medical Marijuana Laws*
<http://www.mpp.org/assets/pdfs/library/17LawsSummary.pdf> (last visited Nov. 15, 2011).

¹³ *Id.*

¹⁴ *Id.*

DC include severe pain and severe nausea.¹⁵ Nine state laws allow for dispensaries, and in all except California, the dispensaries are registered with and regulated by the state.¹⁶ Fifteen of the states allow home cultivation in modest amounts under limited circumstances.¹⁷

The proposed New York State bill that would legalize medical marijuana would require a doctor's recommendation and certification that the patient suffers from a severe debilitating or life-threatening condition, a condition associated with a severe debilitating or life-threatening condition or a complication of such a condition or its treatment (including but not limited to inability to tolerate food, nausea, vomiting, dysphoria or pain).¹⁸ Home cultivation would not be allowed under the proposed legislation and dispensaries would be registered with and regulated by the State.¹⁹ Please see the attached chart, created by the Marijuana Policy Project, at the end of this report for a more complete breakdown.

MARIJUANA AS A MEDICINE

The categorization of marijuana as a Schedule I drug presents significant barriers to conducting research about its effects and use as a medicinal drug.²⁰ Research on the effects of Schedule I drugs on humans must be reviewed by the Food and Drug Administration (FDA) to ensure it will fulfill the FDA's Investigational New Drug requirements.²¹ The research protocols must also be reviewed by the Drug Enforcement Agency (DEA) in order for researchers to

¹⁵ *Id.*

¹⁶ *Id.*

¹⁷ *Id.*

¹⁸ N.Y. State Bill A.7347/S.2774

¹⁹ *Id.*

²⁰ Am. College of Physicians, *Position Paper: Supporting Research Into the Therapeutic Role of Marijuana*, (2008) http://www.acponline.org/advocacy/where_we_stand/other_issues/medmarijuana.pdf (last visited Nov 14, 2011).

²¹ Am. Medical Ass'n, Report 3 of The Council on Science and Public Health, *Use of Cannabis for Medicinal Purposes*, Executive Summary, 2009, <http://www.ama-assn.org/resources/doc/csaph/i09csaph3ft.pdf> (last visited Nov. 14, 2011).

obtain a valid registration for a Schedule I substance.²² Additionally, the researchers must then apply to the National Institute on Drug Abuse (NIDA) to access the NIDA supply of marijuana, as that is the only legal federal source of marijuana.²³ Marijuana is the only major drug for which the federal government controls the only legal research supply.²⁴ Researchers, who are not funded through the National Institute of Health (NIH), must undergo institutional peer review before submitting protocols to the DEA. After submission, the scientific merits of each protocol are evaluated through a public health service interdisciplinary review process.²⁵ Despite these hurdles, however, some research has been conducted on the medical use of marijuana.

In January 1997, the White House Office of National Drug Control Policy asked the Institute of Medicine (IOM) to review scientific evidence and assess the potential health benefits and risk of marijuana.²⁶ The IOM issued a report (IOM Report) which found that, “For patients who suffer simultaneously from severe pain, nausea, and appetite loss, such as those with AIDS or who are undergoing chemotherapy, cannabinoid drugs might offer broad-spectrum relief not found in any other single medication.”²⁷

In 2009, the American Medical Association conducted a review (AMA Review) of research on medical marijuana and found fewer than 20 randomized controlled clinical trials of smoked marijuana.²⁸ The AMA Review found that “results of short term controlled trials indicate that smoked cannabis reduces neuropathic pain, improves appetite and caloric intake especially

²² *Id.*

²³ *Id.*

²⁴ Gardiner Harris, Researchers Find Study of Medical Marijuana Discouraged, NY Times, Jan 18, 2010 <http://www.nytimes.com/2010/01/19/health/policy/19marijuana.html>.

²⁵ Am. Medical Ass’n, Report 3 of The Council on Science and Public Health, *Use of Cannabis for Medicinal Purposes*, Executive Summary, 2009, <http://www.ama-assn.org/resources/doc/csaph/i09csaph3ft.pdf> (last visited Nov. 14, 2011).

²⁶ *Institute of Medicine*, *supra* note 2 at vii.

²⁷ *Id.* at viii.

²⁸ Anna Wilde Mathews, *Is Marijuana a Medicine?*, The Wall Street Journal, Jan. 18, 2010, <http://online.wsj.com/article/SB10001424052748703626604575011223512854284.html>.

in patients with reduced muscle mass and may relieve spasticity and pain in patients with multiple sclerosis.”²⁹

Neuropathic Pain

Neuropathic pain results from damage to or dysfunction of the peripheral or central nervous system.³⁰ The nervous system can be injured by infections, diabetes, physical trauma, strokes, and many other diseases.³¹ It is estimated that 5-10% of the US population is affected by neuropathic pain.³² This type of pain is particularly troublesome because while several drugs are approved to treat this pain (opioids, anticonvulsants, and antidepressants), they are only moderately effective, and complete or near-complete relief is unlikely.³³

The Center for Medicinal Cannabis Research (CMCR) at the University of California has approved and completed four studies in the treatment of neuropathic pain with marijuana.³⁴ All four studies showed a significant decrease in pain resulting from the use of medical marijuana.³⁵ A 2007 study involving 50 AIDS patients published in the journal *Neurology* found that 52% of those who smoked marijuana reported a 30% or greater reduction in pain as compared to 17% with placebo.³⁶ A 2008 study on patients with central and neuropathic pain concluded that “cannabis may be effective at ameliorating neuropathic pain and may be an alternative for

²⁹ Am. Medical Ass’n, Report 3 of The Council on Science and Public Health, *Use of Cannabis for Medicinal Purposes*, Executive Summary, 2009, <http://www.ama-assn.org/resources/doc/csaph/i09csaph3ft.pdf> (last visited Nov. 14, 2011).

³⁰ The Merck Manual, Neuropathic Pain, http://www.merckmanuals.com/professional/neurologic_disorders/pain/neuropathic_pain.html (last visited Nov. 14, 2011).

³¹ University of California, Center for Medical Cannabis Research, *Report to the Legislature and Governor of the State of California presenting findings pursuant to SB847 which created the CMCR and provided state funding*, 8 (2010) http://www.cmcr.ucsd.edu/images/pdfs/CMCR_REPORT_FEB17.pdf (hereinafter *CMCR*).

³² *Id.*

³³ *Id.*

³⁴ *Id.*

³⁵ *Id.*

³⁶ Anna Wilde Mathews, *Is Marijuana a Medicine?*, *The Wall Street Journal*, Jan. 18, 2010, <http://online.wsj.com/article/SB10001424052748703626604575011223512854284.html>.

patients who do not respond to, or cannot tolerate, other drugs.”³⁷ In addition, Canada has approved the use of the drug Sativex, a cannabis based mouth spray, to treat neuropathic pain resulting from multiple sclerosis in adults.³⁸

Nausea/Vomiting/Malnutrition

Nausea and vomiting are common side effects of treatments for cancer,³⁹ AIDS/HIV,⁴⁰ and Hepatitis C⁴¹ as well as other diseases. The IOM Report found that most of the studies conducted at the time of publication were based on chemotherapy induced nausea and vomiting and concluded that marijuana is a modest antiemetic.⁴² In fact, the FDA has approved a synthetic form of THC, Marinol, for nausea and vomiting associated with cancer chemotherapy.⁴³ Similarly, a 2006 study found that patients who used marijuana during the course of their Hepatitis C treatment to reduce the side effects of nausea and vomiting, were significantly more likely to adhere to their treatment regimen.⁴⁴

Marijuana acts not only an antiemetic, but also as an appetite stimulant. Wasting syndrome in AIDS patients is defined as, “the involuntary loss of more than 10% of baseline average body weight in the presence of diarrhea or fever of more than 30 days that is not

³⁷ Barth Wilsey, et al, *A Randomized, Placebo-Controlled, Crossover Trial of Cannabis Cigarettes in Neuropathic Pain*, *The Journal of Pain*, Vol. 9, No. 6 (June 2008) http://intraspec.ca/neuropathic_pain_wilsey.pdf.

³⁸ SATIVEX Fact Sheet from Health Canada

³⁹ *Institute of Medicine*, *supra* note 2 at 145.

⁴⁰ Margaret Haney, et al, *Dronabil and Marijuana in HIV-Positive Marijuana Smokers: Caloric Intake, Mood Sleep* <http://science.iowamedicalmarijuana.org/pdfs/hiv/Haney%20THC%20Cannabis%20in%20HIV%20JAIDS%202007.pdf>.

⁴¹ Benedikt Fischer, et al, *Treatment for hepatitis C virus and cannabis use in illicit drug user patients: implications and questions*, *European Journal of Gastroenterology & Hepatology* 18 (2006) http://safeaccess.ca/research/pdf/hepCannabis_Fischer.pdf.

⁴² *Institute of Medicine*, *supra* note 2 at 146 (Antiemetic is defined as a drug that prevents or alleviates nausea and vomiting).

⁴³ Statement of Robert J Meyer, Director, Center for Drug Evaluation and Research, Food and Drug Administration before the House Committee on Government Reform and the Subcommittee on Criminal Justice, Drug Policy, and Human Resources (April 1, 2004) <http://www.fda.gov/NewsEvents/Testimony/ucm114741.htm>.

⁴⁴ Diana Sylvestrea, et al, *Cannabis use improves retention and virological outcomes in patients treated for hepatitis C*, *European Journal of Gastroenterology & Hepatology* 18 (2006) http://www.natap.org/2006/HCV/091506_02.htm.

attributable to other disease processes.”⁴⁵ Malnutrition is common among AIDS patients as a result of cachexia (illness with emaciation) or starvation which may be caused by loss of appetite, nausea, and vomiting.⁴⁶ For patients with cancer, 50-80%, depending on the type of cancer, will develop cachexia. Marinol has been approved by the FDA for weight loss associated with cancer and AIDS.⁴⁷ A 2007 study found that marijuana and Marinol increased daily caloric intake and body weight in patients with HIV.⁴⁸ However, the dose of Marinol required to increase caloric intake and body weight at the same rate as smoked Marijuana was substantially higher than normally recommended.⁴⁹

Multiple Sclerosis

Multiple Sclerosis (MS) is a chronic disease that attacks the central nervous system which is made up of the brain, spinal cord, and optic nerves.⁵⁰ In individuals with MS the body’s defense system attacks myelin, which is the substance that protects nerve fibers.⁵¹ Damage to the myelin or underlying nerve fiber disrupts nerve impulses traveling to and from the brain and spinal cord.⁵² One of the most common symptoms of MS is spasticity, which is

⁴⁵ *Institute of Medicine, supra* note 2 at 154.

⁴⁶ *Id.* at 155.

⁴⁷ Statement of Robert J Meyer, Director, Center for Drug Evaluation and Research, Food and Drug Admin. before the House Committee on Government Reform and the Subcommittee on Criminal Justice, Drug Policy, and Human Resources (April 1, 2004) <http://www.fda.gov/NewsEvents/Testimony/ucm114741.htm>.

⁴⁸ Margaret Haney, et al, *Dronabil and Marijuana in HIV-Positive Marijuana Smokers: Caloric Intake, Mood Sleep* <http://science.iowamedicalmarijuana.org/pdfs/hiv/Haney%20THC%20Cannabis%20in%20HIV%20JAIDS%202007.pdf>.

⁴⁹ Am. Medical Ass’n, Report 3 of The Council on Science and Public Health, *Use of Cannabis for Medicinal Purposes*, Executive Summary, 2009, <http://www.ama-assn.org/resources/doc/csaph/i09csaph3ft.pdf> (last visited Nov. 14, 2011).

⁵⁰ National Multiple Sclerosis Society, What is Multiple Sclerosis, <http://www.nationalmssociety.org/about-multiple-sclerosis/what-we-know-about-ms/what-is-ms/index.aspx> (last visited Nov. 15, 2011).

⁵¹ *Id.*

⁵² *Id.*

defined as feelings of stiffness and a wide range of involuntary muscle spasms.⁵³ Approximately 90% of MS patients eventually develop spasticity.⁵⁴ Existing studies on the treatment of muscle spasticity with marijuana, which are limited in number, found that patients reported subjective improvements in spasticity and pain, but a lack of objective improvements.⁵⁵ However, a 2007 study by the CMCR on 30 patients with multiple sclerosis found that marijuana, as compared to a placebo, significantly reduced both an objective measure of spasticity and pain intensity.⁵⁶

OPPOSITION TO MEDICAL MARIJUANA

Despite the clinical studies showing marijuana's efficacy in treating various conditions, there is opposition to the legalization of medical marijuana. The main arguments against the legalization of medical marijuana are 1) the availability of synthetic THC, 2) concerns regarding addiction, and 3) the belief that marijuana is a "gateway drug."

Marinol vs. Marijuana

In 1985, the FDA approved Marinol Capsules, the active ingredient of which is THC, for nausea and vomiting associated with cancer chemotherapy for patients who fail to respond to other antiemetic treatments.⁵⁷ In 1992, the FDA approved Marinol Capsules for the treatment of anorexia associated with weight loss in patients with AIDS.⁵⁸

⁵³ Nat'l Multiple Sclerosis Society, Symptoms, <http://www.nationalmssociety.org/about-multiple-sclerosis/what-we-know-about-ms/symptoms/index.aspx> (last visited Nov. 15, 2011).

⁵⁴ *Institute of Medicine*, *supra* note 2 at 160.

⁵⁵ Nat'l Multiple Sclerosis Society, Marijuana, <http://www.nationalmssociety.org/about-multiple-sclerosis/what-we-know-about-ms/treatments/complementary--alternative-medicine/marijuana/index.aspx> (last visited Nov. 14, 2011).

⁵⁶ *CMCR*, *supra* note 17 at 12.

⁵⁷ Statement of Robert J Meyer, Director, Center for Drug Evaluation and Research, Food and Drug Admin. before the House Committee on Gov't Reform and the Subcommittee on Criminal Justice, Drug Policy, and Human Resources (April 1, 2004) <http://www.fda.gov/NewsEvents/Testimony/ucm114741.htm>.

⁵⁸ *Id.*

Opponents of medical marijuana argue that the delivery system for marijuana is unsafe and Marinol makes it unnecessary. While most of the side effects for marijuana and Marinol are the same, marijuana is often smoked, causing harmful substances to be absorbed into the lungs. The NIDA website states that, “marijuana smoke contains 50-70 percent more carcinogenic hydrocarbons than tobacco smoke. Marijuana users usually inhale more deeply and hold their breath longer than tobacco smokers do...”⁵⁹ The NIDA website also cites to a study that found no links between marijuana use and lung, upper respiratory, or upper digestive track cancers.⁶⁰ Thus far, no definitive link has been found between lung cancer and marijuana use.

In addition, medical marijuana users may choose to vaporize rather than smoke marijuana. A 2007 study on the delivery of marijuana by vaporization found that blood levels of vaporized marijuana are similar to those of smoked marijuana.⁶¹ Carbon monoxide levels however were significantly reduced with vaporization as compared with smoked marijuana.⁶² Further, a 2010 study found that replacing smoked cannabis with cannabis which was vaporized led to improved pulmonary function in cannabis users who experienced respiratory symptoms.⁶³

There are also significant differences between the ways in which Marinol and marijuana work. While Marinol lacks many of the harmful components that can come with traditional marijuana, it also lacks some of the beneficial components, such as cannabidiol, which has been found to have anti-seizure effects.⁶⁴ Another difference is that Marinol is orally administered, unlike marijuana which can be smoked, inhaled through a vaporizer, or eaten. Marinol is slow in

⁵⁹ Nat'l Institute on Drug Abuse, NIDA InfoFacts: Marijuana <http://www.drugabuse.gov/infofacts/marijuana.html> (last visited Nov 14, 2011).

⁶⁰ *Id.*

⁶¹ *CMCR*, *supra* note 17 at 12.

⁶² *Id.*

⁶³ Nicholas T. Van Dam & Mitch Earleywine, *Pulmonary function in cannabis users: Support for a clinical trial of the vaporizer*, (2010) <http://www.albany.edu/~me888931/Vaporizer.pdf>.

⁶⁴ Brian Montopoli, *Does the Pot Pill Work?*, CBS News, Nov. 9, 2009 <http://www.cbsnews.com/stories/2009/08/03/health/main5209380.shtml>.

the onset of action, but produces more pronounced and often unfavorable psychoactive effects that last much longer than those experienced with smoking.⁶⁵ Inhaled marijuana is quickly absorbed in the blood and produces immediate effects.⁶⁶ There are many patients who may prefer immediate effects due to the severity of their symptoms⁶⁷ and the wish to titrate their own medication.⁶⁸ In addition, patients who are experience nausea and vomiting may be unable to swallow a pill.⁶⁹

Marijuana Addiction

In 2009, marijuana was used by nearly 730,000 New Yorkers or 12 percent of the City's population, making marijuana the most commonly used illicit drug in New York City.⁷⁰ Research shows that about 9 percent of users become addicted to marijuana.⁷¹ Addiction is defined as substance dependence which is "a cluster of cognitive, behavioral, and physiological symptoms indicating that a person continues use of the substance despite significant substance-related problems."⁷² The DSM-IV Criteria for substance dependence requires symptoms of both tolerance and withdrawal.⁷³ There is a difference in the development of tolerance to the different effects of marijuana. Studies have shown that daily marijuana smokers became tolerant to feeling "high" but did not become tolerant to the stimulatory effects of marijuana on appetite.⁷⁴

⁶⁵ Am. College of Physicians, *Position Paper: Supporting Research Into the Therapeutic Role of Marijuana*, (2008) http://www.acponline.org/advocacy/where_we_stand/other_issues/medmarijuana.pdf (last visited Nov 14, 2011).

⁶⁶ *Id.*

⁶⁷ *Id.*

⁶⁸ *Institute of Medicine*, *supra* note 2 at 150.

⁶⁹ Am. College of Physicians, *Position Paper: Supporting Research Into the Therapeutic Role of Marijuana*, (2008) http://www.acponline.org/advocacy/where_we_stand/other_issues/medmarijuana.pdf (last visited Nov 14, 2011).

⁷⁰ N.Y. City Dep't of Health & Mental Hygiene, *NYC Vital Signs: Illicit Drug Use in New York City*, Feb. 2009 Vol. 9 No. 1, <http://www.nyc.gov/html/doh/downloads/pdf/survey/survey-2009drugod.pdf>.

⁷¹ National Institute on Drug Abuse, NIDA InfoFacts: Marijuana <http://www.drugabuse.gov/infofacts/marijuana.html> (last visited Nov 14, 2011).

⁷² *Institute of Medicine*, *supra* note 2 at 86.

⁷³ *Id.* at 87.

⁷⁴ *Id.* at 89.

The IOM Report found that there is a marijuana and THC withdrawal syndrome, but it is “mild and subtle compared with the profound physical syndrome of alcohol or heroin.”⁷⁵ In addition, the AMA Review found that, “although some cannabis users develop dependence, they are considerably less likely to do so than users of alcohol and nicotine, and withdrawal symptoms are less severe.”⁷⁶

Marijuana as a “Gateway Drug”

One of the most frequent arguments cited by opponents of medical marijuana is that approving marijuana for medical use validates its use for young people and therefore sends the wrong message.⁷⁷ In turn, marijuana usage will act as a gateway to the usage of drugs that are more harmful.⁷⁸

Because marijuana is the most commonly used illicit drug, it is the first illicit drug that most people encounter.⁷⁹ However, most drug users begin their drug use with alcohol and nicotine, usually when they are still too young to legally use them.⁸⁰ The IOM Report found that marijuana “does not appear to be a gateway drug to the extent that it is the cause or even that it is the most significant predictor of serious drug abuse....”⁸¹ Furthermore, IOM Report analyzed opiates as a drug with medical uses and high addiction potential and found that, “No evidence suggests that the use of opiates or cocaine for medical purposes has increased the perception that their illicit use is safe or acceptable.”⁸² According to one publication that describes the impact of

⁷⁵ *Id.* at 90.

⁷⁶ Am. Medical Ass’n, Report 3 of The Council on Science and Public Health, *Use of Cannabis for Medicinal Purposes*, Executive Summary, 2009, <http://www.ama-assn.org/resources/doc/csaph/i09csaph3ft.pdf>.

⁷⁷ *Institute of Medicine*, *supra* note 2 at 101.

⁷⁸ *Id.* at 98.

⁷⁹ *Id.* at 99.

⁸⁰ *Id.*

⁸¹ *Id.* at 101.

⁸² *Id.* at 102.

state medical marijuana laws, research has shown that in the 15 years since the passage of the first state medical marijuana law, marijuana use among teens has generally gone down following the passage of such laws.⁸³

CONCLUSION

At today's hearing, the Committee will examine the advantages and disadvantages associated with legalizing medical marijuana in New York.

⁸³ Karen O'Keefe & Mitch Earleywine, *Marijuana Use by Young People: The Impact of State Medical Marijuana Laws* (2011) <http://www.mpp.org/assets/pdfs/library/Teen-Use-FINAL.pdf>.



Marijuana Policy Project
 236 Massachusetts Ave., NE
 Suite 400
 Washington, DC 20002
 p: (202) 462-5747 • f: (202) 232-0442
 info@mpp.org • www.mpp.org

Key Aspects of State and D.C. Medical Marijuana Laws

State	Year Initially Enacted	Home Cultivation	Caregivers	Possession Limits	Dispensaries	Qualifying Conditions	ID Cards?	Recognizes Out-of-State ID Cards?
Alaska	1998, initiative, revised later by the legislature.	Allowed.	Yes. Caregivers can assist only one patient, unless the caregiver is a relative of more than one patient.	One ounce of marijuana, six plants.	Not allowed.	Cancer, HIV/AIDS, glaucoma, cachexia, severe pain, severe nausea, seizures, and persistent muscle spasms.* The health department can approve additional conditions.	Yes, through the Department of Health and Social Services.	No.
Ariz.	2010, initiative.	Allowed in enclosed, locked facility if the patient does not live within 25 miles of a dispensary.	Yes. Caregivers can assist up to five patients. Caregivers cannot be paid for their services, but they may be reimbursed for actual expenses.	Two and one-half ounces of marijuana, 12 plants for those allowed to cultivate.	Yes. Department of Health Services-regulated non-profit dispensaries are allowed. Up to 125 may be registered (one for every 10 pharmacies). The dispensary application process is on hold pending litigation.	Cancer, HIV/AIDS, Hepatitis C, ALS, Crohn's disease, glaucoma, Alzheimer's, severe and chronic pain, cachexia, severe nausea, seizures, or persistent muscle spasms. The Department of Health Services can approve additional conditions.	Yes, through the Department of Health Services.	Yes, for patients with conditions that qualify under Arizona law. Does not allow out-of-state patients to obtain marijuana from dispensaries.

* = Some or all of this state's listed illnesses must be resistant to other treatments.

Last updated: August 11, 2011.

NOTE: This grid is not intended for or offered for legal advice. It is for informational and educational purposes only. It also does not capture nuances of the laws, many of which are a dozen or more pages. Please consult with an attorney licensed to practice in the state in question for legal advice.

State	Year Initially Enacted	Home Cultivation	Caregivers	Possession Limits	Dispensaries	Qualifying Conditions	ID Cards?	Recognizes Out-of-State ID Cards?
Calif.	1996, initiative, added to later by the legislature.	Allowed.	Yes. Caregivers must have "consistently assumed responsibility for the housing, health, or safety of [the] patient."	At least eight ounces and six mature plants or 12 immature plants. Counties can allow more and a defense can be raised for more.	Collectives and cooperatives are allowed. There is no state licensing, but some localities issue licenses and regulations. They pay the state sales tax and some cities have specific taxes.	"Cancer, anorexia, AIDS, chronic pain, spasticity, glaucoma, arthritis, migraine, or any other illness for which marijuana provides relief."	Yes, optional. Issued by the Department of Public Health.	No.
Colo.	2000, amendment to state constitution approved by voters, legislation enacted later.	Allowed.	Yes. A caregiver must have "significant responsibility for managing the well-being of the patient." Generally, a caregiver cannot assist more than five patients.	Two ounces of marijuana, six plants.	Yes. About 1,000 dispensaries — or "medical marijuana centers" — are regulated and registered both locally and by the state department of revenue. Medical marijuana is subject to sales tax, with an exemption for indigent patients.	Cancer, HIV/AIDS, glaucoma, severe pain, cachexia, severe nausea, seizures, and persistent muscle spasms. The health department can approve additional conditions.	Yes. Issued by the Department of Public Health and Environment.	No.
Del.	2011, legislation.	Not allowed.	Yes. Caregivers can assist up to five patients.	Up to six ounces at one time. Three ounces can be obtained from a dispensary every 14 days.	Yes, there will be three non-profit compassion centers by Jan. 1, 2013. three more by 2014, and more can be added if needed.	Cancer, HIV/AIDS, decompensated cirrhosis, ALS, Alzheimer's, PTSD, debilitating pain that has not responded to other treatments or if they produced serious side effects, intractable nausea, seizures, and persistent muscle spasms. The health department can add conditions.	Yes. Issued by the Department of Health and Social Services.	Yes, for patients with conditions that qualify under Delaware law. Patients can only obtain marijuana with a Delaware ID card.

State	Year Initially Enacted	Home Cultivation	Caregivers	Possession Limits	Dispensaries	Qualifying Conditions	ID Cards?	Recognizes Out-of-State ID Cards?
D.C.	1998, initiative, later revised by D.C. Council. Due to intervention by Congress, the law did not go into effect until July 2010.	Not presently allowed, but a committee will recommend whether to allow it by January 1, 2012.	Yes. Caregivers can assist only one patient.	Up to two ounces in a 30-day period, obtained from a registered dispensary. The mayor can increase this to four ounces.	Yes, there will be five dispensaries and 10 separate cultivation facilities. Dispensaries will pay sales tax and must have a sliding scale of prices for low-income patients.	Cancer, HIV/AIDS, glaucoma, severe and persistent muscle spasms, and conditions treated with chemotherapy, AZT, protease inhibitors, or radiotherapy. The mayor can approve additional conditions.	Yes, issued by the Department of Health. Not yet accepting applications.	No.
Hawaii	2000, legislation.	Allowed.	Yes. Caregivers can assist only one patient.	A patient and caregiver can collectively possess three ounces and cultivate three mature plants and four immature plants.	Not allowed.	Severe pain, cachexia, severe nausea, seizures, or severe and persistent muscle spasms. The health department can approve additional conditions.	Yes, through the state Department of Public Safety.	No.
Maine	1999, initiative, revised later by initiative and the legislature.	Allowed in enclosed, locked location.	Yes. Caregivers can assist up to five patients at a time.	2.5 ounces. The patient, caregiver, or dispensary can grow up to six mature plants for a patient and may have plants at other states of harvesting.	Yes. Health department regulated non-profit dispensaries are allowed. So far, eight have been registered. They are subject to the state sales tax.	Cancer, HIV/AIDS, Hepatitis C, ALS, Crohn's disease, nail patella, glaucoma, Alzheimer's, intractable pain, cachexia, severe nausea, seizures, or persistent muscle spasms. The health department can approve additional conditions.	Yes, optional for patients and some caregivers. Issued by the Department of Health and Human Services.	Yes.

State	Year Initially Enacted	Home Cultivation	Caregivers	Possession Limits	Dispensaries	Qualifying Conditions	ID Cards?	Recognizes Out-of-State ID Cards?
Md. (partial law)	2011, legislation, which improved upon even more limited law from 2003.	No.	No.	One ounce.	No, but a working group will propose a comprehensive bill in December 2011.	Cachexia, severe or chronic pain, severe nausea, seizures, severe and persistent spasms, or any other condition that is severe and resistant to conventional medicine.	No. This law is an affirmative defense and sentencing mitigation only.	No.
Mich.	2008, initiative.	Allowed in enclosed, locked location.	Yes. Caregivers can assist up to five patients at a time.	2.5 ounces. The patient or caregiver can grow up to 12 plants for a patient.	Not provided for in the state law, though some cities have local ordinances.	Cancer, HIV/AIDS, Hepatitis C, ALS, Crohn's disease, nail patella, glaucoma, Alzheimer's, severe and chronic pain, cachexia, severe nausea, seizures, or severe and persistent muscle spasms. The health department can approve additional conditions.	Yes, through the Department of Licensing and Regulatory Affairs.	Yes.
Mont.	2004, initiative, restricted by legislature in 2011. A referendum campaign has been launched against the new law.	Allowed.	Yes. Under the 2004 law, caregivers could assist an unlimited number. Under the new law, caregivers can assist only three and cannot be compensated. However, that part of the law has been enjoined.	Four mature plants, 12 seedlings, and one ounce (under the revised law).	Not explicitly allowed, but caregivers could assist an unlimited number of patients until July 1, 2011, resulting in storefront operations. However, the three patient cap part of the new law is currently enjoined,	Cancer, HIV/AIDS, glaucoma, cachexia, intractable nausea or vomiting, seizure disorder, MS, Crohn's, painful peripheral neuropathy, admittance to hospice care, or in some cases, severe pain or spasms. Also, patient cards issued for other conditions prior to July 1, 2011 are valid until they expire.	Yes, through the Department of Health and Human Services.	No. The state had reciprocity prior to the 2011 amendment to the law.

State	Year Initially Enacted	Home Cultivation	Caregivers	Possession Limits	Dispensaries	Qualifying Conditions	ID Cards?	Recognizes Out-of-State ID Cards?
Nev.	1998 and 2000, amendment to state constitution approved by voters, legislation followed.	Allowed.	Yes. Caregivers must have significant responsibility for managing a patient's well-being. Marijuana cannot be delivered for compensation.	One ounce, three mature plants, four immature plants.	Not allowed.	Cancer, HIV/AIDS, glaucoma, severe pain, cachexia, severe nausea, seizures, or persistent muscle spasms. The health department can approve additional conditions.	Yes, through the Department of Health and Human Services.	No.
N.J.	2010, legislation.	Not allowed.	Yes. Caregivers can assist only one patient.	No more than two ounces can be dispensed to a patient in 30 days.	Yes. In March 2011, the health department registered six state-regulated dispensaries called "alternative treatment centers." It may register more in the future.	ALS, multiple sclerosis, muscular dystrophy, inflammatory bowel disease, cancer, HIV/AIDS, terminal illness, seizure disorders, intractable skeletal muscular spasticity, and glaucoma.* The health department may approve additional conditions.	Yes, they will be through the Department of Health and Senior Services, but as of August 11, 2011, they are not yet accepting applications.	No.
N.M.	2007, legislation.	Allowed with special permit and possible inspection.	Yes. Caregivers can assist up to four patients at a time, but they cannot cultivate.	Six ounces. Patients with cultivation licenses are also allowed to cultivate four mature plants and 12 seedlings.	Yes. As of August 2011, there are 25 "licensed producers" that can grow only 150 plants and seedlings. The state health department regulates the licensed producers.	Severe chronic pain, peripheral neuropathy, intractable nausea/vomiting, cachexia, Hepatitis C, Crohn's disease, PTSD, ALS, cancer, glaucoma, multiple sclerosis, spinal cord damage with spasticity, epilepsy, and HIV/AIDS. The health department can approve additional conditions.	Yes, through the Department of Health.	No.

* = Some or all of this state's listed illnesses must be resistant to other treatments.

State	Year Initially Enacted	Home Cultivation	Caregivers	Possession Limits	Dispensaries	Qualifying Conditions	ID Cards?	Recognizes Out-of-State ID Cards?
Ore.	1998, initiative, revised later by legislature.	Allowed at registered grow sites. No one can produce marijuana for more than four people at a time.	Yes. A caregiver must have "significant responsibility for managing the well-being" of the patient.	24 ounces of marijuana, six mature plants, and 18 immature plants.	Not allowed.	Cancer, HIV/AIDS, glaucoma, Alzheimer's, cachexia, severe pain, and persistent muscle spasms. The health department can approve additional medical conditions.	Yes, through the Department of Human Services.	No.
R.I.	2006, legislation, revised later by legislature.	Allowed in enclosed, locked facility.	Yes. Patients are allowed up to two caregivers (dispensaries are considered caregivers). Caregivers can assist up to five patients.	2.5 ounces, 12 plants, and 12 seedlings. Caregivers can possess that much per patient, with a 24 plant, five-ounce cap. The cap does not apply to dispensaries.	Yes. The health department approved three dispensaries, called "compassion centers," but Gov. Chafee put final registration on hold.	Cancer, HIV/AIDS, Hepatitis C, glaucoma, Alzheimer's, severe debilitating pain, cachexia, severe nausea, seizures, and persistent muscle spasms. The health department can add conditions.	Yes, through the state Department of Health.	Yes.
Vt.	2004, legislation, revised later by legislature.	Allowed in enclosed, locked facility.	Yes. Caregivers can assist only one patient.	Two ounces of marijuana, two mature plants, and seven immature plants.	Yes, four non-profit dispensaries will be allowed pursuant to a law enacted in May 2011.	Cancer, multiple sclerosis, HIV/AIDS, severe pain, cachexia, severe nausea, or seizures.*	Yes, through the Department of Public Safety.	No.

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State	Year Initially Enacted	Home Cultivation	Caregivers	Possession Limits	Dispensaries	Qualifying Conditions	ID Cards?	Recognizes Out-of-State ID Cards?
Wash.	1998, initiative, revised later by legislature.	Allowed.	Yes. Caregivers can only assist one patient at a time. Caregivers must wait 15 days between serving two different patients.	24 ounces of marijuana and 15 plants, with a defense for more. Patients can collectively grow, with no more than 10 patients, 72 ounces, and 45 plants.	Not allowed.	Cancer, HIV/AIDS, multiple sclerosis, seizure and spasm disorders, intractable pain, glaucoma, Crohn's disease, Hepatitis C, and diseases causing nausea, vomiting, or appetite loss.	No. Note: This law does not include protection from arrest or prosecution. It has an affirmative defense that prevents conviction.	No.