

ESTTA Tracking number: **ESTTA425505**

Filing date: **08/16/2011**

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
BEFORE THE TRADEMARK TRIAL AND APPEAL BOARD

Notice of Opposition

Notice is hereby given that the following party opposes registration of the indicated application.

Opposer Information

Name	Medcan Health Management Inc.
Granted to Date of previous extension	08/17/2011
Address	150 York Street Suite 1500 Toronto, M5H3S5 CANADA

Attorney information	Ariana Gallisa Cooley LLP 101 California St., 5th Floor San Francisco, CA 94111-5800 UNITED STATES agallisa@cooley.com, trademarks@cooley.com
----------------------	--

Applicant Information

Application No	77023236	Publication date	04/19/2011
Opposition Filing Date	08/16/2011	Opposition Period Ends	08/17/2011
Applicant	MediCann, Inc. Suite 555 4096 Piedmont Ave. Oakland, CA 94611 UNITED STATES		

Goods/Services Affected by Opposition

Class 044. First Use: 2004/04/01 First Use In Commerce: 2004/04/01 All goods and services in the class are opposed, namely: Medical clinics
--

Grounds for Opposition

The mark is merely descriptive	Trademark Act section 2(e)(1)
Other	No Lawful Use in Commerce (15 USC 1051, 15 USC 1127); Identification is not Consistent with Specimen (TMEP 1402.05)

Attachments	Notice of Opposition - MEDICANN - August 16 2011.pdf (6 pages)(73126 bytes) Exhibits A to F - Reduced - CM.pdf (17 pages)(5515432 bytes) Exhibit G - Reduced - CM.pdf (28 pages)(7783873 bytes) Exhibit H - Reduced - CM.pdf (24 pages)(4674634 bytes)
-------------	---

Certificate of Service

The undersigned hereby certifies that a copy of this paper has been served upon all parties, at their address record by First Class Mail on this date.

Signature	/Ariana Gallisa/
Name	Ariana Gallisa
Date	08/16/2011

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
BEFORE THE TRADEMARK TRIAL AND APPEAL BOARD**

Medcan Health Management Inc., Opposer

v.

MediCann, Inc., Applicant

NOTICE OF OPPOSITION

Trademark: MEDICANN

U.S. Serial No.: 77023236

Filed: October 17, 2006

Published: April 19, 2011

Services: Medical clinics

First Used: April 1, 2004

NOTICE OF OPPOSITION

Medcan Health Management Inc., a Canadian corporation, having an address of 150 York Street, Suite 1500, Toronto, Canada M5H 3S5 believes that it is or will be damaged by registration of the mark MEDICANN, Serial No. 77023236, in the name of MediCann, Inc., a California corporation, having an address of Suite 555, 4096 Piedmont Ave., Oakland, California 94611 and hereby petitions for refusal of such registration.

As grounds for the opposition, Opposer alleges the following:

FACTUAL BACKGROUND

Medcan Health Management, Inc. and the MEDCAN Application

1. Medcan Health Management Inc. (hereinafter “Opposer”) is Canada’s leading private healthcare clinic and offers a variety of leading-edge screening and diagnostic tests on site through its Comprehensive Health Assessment service, an extensive Executive Health program, risk assessment and prevention programs in Men’s Health, Genetics and Cardiology and a range of wellness services.
2. Opposer is the owner of U.S. Application No. 85151097 for MEDCAN in connection with “Physical fitness training, consultation and design of physical fitness programs for others” in International Class 41 and “Medical management services, namely, providing preventative medical diagnostic testing, consultation, information and treatment in the field of health, general wellness, and preventative medicine including but not limited to comprehensive health examinations, cardiology, chiropody, chiropractic, dermatology, endoscopy, genetics, men's health, women's health, nutrition, optometry, physiotherapy, sports medicine, and travel health; Managed health care services, namely, providing medical, general wellness, and lifestyle management and preventative health care programs; Providing customized managed medical and preventative health care programs and professional services provided by medical and health care professionals” in International Class 44.
3. The Examining Attorney for Opposer’s application has been refused registration due to a likelihood of confusion with MEDICANN, U.S. Application No. 77023236.

MediCann, Inc. and the MEDICANN Application

4. MediCann, Inc. (hereinafter “Applicant”) is a California corporation that has applied to register MEDICANN (US Application No. 77023236) in connection with “medical clinics.”
5. Upon information and belief, MEDICANN is actually a medical *cannabis* clinic. Opposer’s information and belief is based on the information found on the home page of Applicant’s website found at the URL www.medicann.com, a true copy of which is attached here as Exhibit A and incorporated here by reference.
6. Upon information and belief, Applicant’s mark MEDICANN is an abbreviation of medical (MEDI) and cannabis (CANN). Opposer’s information and belief is based on Applicant’s offered services discussed in detail below.
7. The registration of the Pending Application will cause actual harm to Opposer.

FIRST GROUND FOR OPPOSITION

NO LAWFUL USE IN COMMERCE, 15 U.S.C. §§ 1051, 1127

8. Opposer repeats and realleges each and every allegation set forth in Paragraphs 1 through 7 as if fully set forth herein.
9. Applicant’s mark may not be registered on the US Patent and Trademark Office (“USPTO”) Registries because it is not used in lawful interstate commerce as set forth in Sections 1 and 45 of the Lanham Act, 15 U.S.C. §1051 and 1127.
10. Pursuant to Section 1604.10 of the Trademark Manual of Examination Procedure (“TMEP”), the USPTO presumes that an applicant that states the mark is in use in commerce is stating that the mark is in use “in a type of commerce that Congress can regulate, unless there is contradictory evidence in the record” (emphasis added).
11. Specifically, use of a mark in commerce must be lawful use in interstate commerce to be the basis for federal registration of the mark. See *In re Midwest Tennis & Track Co.*, 29 USPQ2d 1386, 1386 n.2 (TTAB 1993) (noting that “[i]t is settled that the Trademark Act’s requirement of “use in commerce,” means a “lawful use in commerce,” and [that the sale or] the shipment of goods in violation of [a] federal statute . . . may not be recognized as the basis for establishing trademark rights” (quoting *Clorox Co. v. Armour-Dial, Inc.*, 214 USPQ 850, 851 (TTAB 1982))); *In re Pepcom Indus., Inc.*, 192 USPQ 400, 401 (TTAB 1976); TMEP §907.
12. In this case, Applicant has claimed use of MEDICANN for “medical clinics.” However, as shown in the specimen of use filed on October 17, 2006, a true and correct copy of which is attached hereto as Exhibit B and incorporated by reference, Applicant is in the business of medical *cannabis* (also known as marijuana) clinics pursuant to the California Medical Marijuana Program statute, Cal. Health & Safety Code §§ 11362.7 et seq, also known by its initiative name, Proposition 215.
13. Upon information and belief, Applicant offers services only to California residents. Opposer’s belief is based on the information shown on the “Evaluations” page of Applicant’s website, a true and correct copy of which is attached hereto as Exhibit C and incorporated by reference. According to this Evaluations page, Applicant’s services are limited to providing patients with medical cannabis recommendations and identification cards identifying the patient as a qualified to receive medical cannabis under California law. To receive the card, patients must show proof of residency in the State

of California, specifically, in the California county in which the county health department under whose auspices the card is issued, as well as a physician with a California medical license, pursuant to California Health and Safety Code § 11362.715.

14. Upon information and belief, Applicant's clinics are located only in the State of California. Opposer's belief is based on Applicant's "Locations" page from its website, a true and correct copy of which is attached hereto as Exhibit D and incorporated by reference, which shows locations only within the State of California.
15. Upon information and belief, Applicant does not market its services to residents outside the State of California. Opposer's belief is based on the message from MediCann's founder, a true and correct copy of which is attached hereto as Exhibit E and incorporated by reference, in which the founder states that MediCann provides access to medical cannabis to more than 200,000 patients in the State of California.
16. Even assuming arguendo that services are provided to residents outside of California, Applicant cannot show that it can provide any *lawful* services in interstate commerce. Upon information and belief, alternative therapies are offered only to the extent that they complement the medical cannabis treatments and are in fact offered by affiliated providers, not by the MediCann clinic itself. Opposer's belief is based on the message from MediCann's founder shown in Exhibit E and the description found on the "Who We Are" page of MediCann's website, a true and correct copy of which is attached hereto as Exhibit F and incorporated by reference.
17. To qualify for federal service mark registration, the use of a mark in commerce must be lawful. *Gray v. Daffy Dan's Bargaintown*, 823 F.2d 522, 526, 3 USPQ2d 1306, 1308 (Fed. Cir. 1987) (stating that "[a] valid application cannot be filed at all for registration of a mark without 'lawful use in commerce'"); TMEP §907; *see In re Stellar Int'l, Inc.*, 159 USPQ 48, 50-51 (TTAB 1968); *CreAgri, Inc. v. USANA Health Scis., Inc.*, 474 F.3d 626, 630, 81 USPQ2d 1592, 1595 (9th Cir. 2007). Thus, any goods and services to which the mark is applied must comply with all applicable federal laws. *See In re Midwest Tennis & Track Co.*, 29 USPQ2d 1386, 1386 n.2 (TTAB 1993) (noting that "[i]t is settled that the Trademark Act's requirement of 'use in commerce,' means a 'lawful use in commerce,' and [that the sale or] the shipment of goods in violation of [a] federal statute . . . may not be recognized as the basis for establishing trademark rights'" (quoting *Clorox Co. v. Armour-Dial, Inc.*, 214 USPQ 850, 851 (TTAB 1982))); *In re Pepcom Indus., Inc.*, 192 USPQ 400, 401 (TTAB 1976); TMEP §907.
18. The Controlled Substances Act (CSA) prohibits, among other things, manufacturing, distributing, dispensing, or possessing certain controlled substances, including marijuana and marijuana-based preparations. 21 U.S.C. §§812, 841(a)(1), 844(a); *see also* 21 U.S.C. §802(16) (defining "[marijuana]").
19. Because Applicant's services are prohibited by the CSA, Applicant cannot establish lawful use of the mark MEDICANN in interstate commerce.
20. Upon information and belief, Applicant's services are limited to the State of California and do not constitute lawful use in interstate commerce. This belief is based on the fact that marijuana use has been decriminalized in California under California Proposition 215 for medical use by Californians

but remains illegal under federal laws. Applicant would therefore be in violation of federal laws if it offered services in interstate commerce.

21. Upon information and belief, there is no market for Applicant's services because it is authorized only under local law. Thus, there is no market for MEDICANN services outside of California.

SECOND GROUND FOR OPPOSITION
APPLICANT'S MARK IS DESCRIPTIVE, 15 U.S.C. §1052

22. Opposer repeats and realleges each and every allegation set forth in Paragraphs 1 through 7 as if fully set forth herein.
23. Section 2(e)(1) of the Lanham Act prohibits registration of marks that "when used on or in connection with the goods of the applicant is merely descriptive or deceptively misdescriptive of them" 15 U.S.C. §1052. Per Section 1209 of the TMEP, such marks are not protected "to prevent the owner of a mark from inhibiting competition in the sale of particular goods; and...to maintain freedom of the public to use the language involved."
24. Applicant's mark is descriptive because it merely describes the purpose of Applicant's services, namely to provide medical marijuana clinic services. Trademark Act Section 2(e)(1), 15 U.S.C. §1052(e)(1); *see* TMEP §§1209.01(b), 1209.03 *et seq.*
25. The term MEDI is an abbreviation for MEDICAL.
26. The term CANN is an abbreviation for CANNABIS.
27. Applicant's mark is therefore understood as simply a shortening of the phrase MEDICAL CANNABIS, which is used for the treatment of medical illness. As an example, please see the attached Wikipedia entry for medical cannabis, a true and correct copy of which is attached hereto as Exhibit G and incorporated by reference.
28. The joining of MEDI and CANN is not sufficient to form a unitary mark under Section 1213.05 of the TMEP.
29. Unlike marks such as BLACK MAGIC, which have a meaning separate and apart from the descriptive meaning of each term, in this case MEDICANN is understood simply to mean MEDICAL CANNABIS.
30. It would be contrary to the Lanham Act to allow Applicant to monopolize both MEDI and CANN, as this would unduly restrict the public from using the language to refer to medical cannabis services.
31. Applicant's mark is descriptive of the particular type of clinic service provided under the mark and thus should be refused registration under Section 2(e)(1) of the Lanham Act.

THIRD GROUND FOR OPPOSITION
IDENTIFICATION IS NOT CONSISTENT WITH SPECIMEN, TMEP §1402.05

32. Opposer repeats and realleges each and every allegation set forth in Paragraphs 1 through 7 as if fully set forth herein.

33. Pursuant to Section 1402.05 of the TMEP, an identification of services is unacceptable if it is inconsistent with the services indicated by the specimens. Furthermore, the identification should specify specialized characteristics to accurately describe the goods or services. *See In re Toro Mfg. Corp.*, 174 USPQ 241 (TTAB 1972) (noting that use on “grass-catcher bags for lawn-mowers” did not justify the broad identification “bags,” which would encompass goods diverse from and commercially unrelated to applicant’s specialized article); *Ex parte Consulting Engineer Publishing Co.*, 115 USPQ 240 (Comm’r Pats. 1957) (amendment of “periodical” to “monthly news bulletin” required); TMEP §1402.05
34. In this case, Applicant has described its services as “medical clinics.”
35. As shown in the specimen previously attached as Exhibit B and Applicant’s website printouts previously attached as Exhibits C, D, E and F, Applicant’s services are medical cannabis clinics.
36. If Applicant had properly identified its services as “medical cannabis clinics” it would have received a refusal consistent with others issued by the USPTO against services related to marijuana. As an example, attached hereto as Exhibit H and incorporated by reference are true and correct copies of several office actions (without attachments) issued by the USPTO against applications claiming marijuana services in International Class 44.
37. Applicant’s misidentification of its services as “medical clinics” when in fact they are medical cannabis services renders the application void, because it is contrary to the policy of the USPTO for an applicant to misidentify the services and thereby avoid a refusal of registration based solely on a misunderstanding as to the nature of the services.

WHEREFORE, Opposer prays that this Opposition be sustained, and that Application Serial No. 77023236 be refused.

This Notice of Opposition is submitted with the statutory filing fee of \$300.00. Charge any missing fee to Deposit Account No. 033118, Order No. 158166 /204.

Dated: August 16, 2011

Respectfully submitted,
COOLEY LLP
JOHN W. CRITTENDEN
ARIANA GALLISA

By: 
Ariana Gallisa
101 California Street, 5th Floor
San Francisco, California 94111
Telephone: (415) 693-2000
Fax: (415) 693-2222
Email: trademarks@cooley.com

CERTIFICATE OF TRANSMITTAL AND SERVICE

I hereby certify that this Notice of Opposition is being electronically transmitted in PDF format to the Trademark Trial and Appeal Board through the Electronic System for Trademark Trials and Appeals (ESTTA) on the date indicated below. I hereby further certify that on the date indicated below, a true and correct copy of this Notice of Opposition was placed in the United States Mail, postage prepaid, addressed to Applicant and its attorney of record (as identified in the above-referenced application) as follows:

Krisana M. Hodges
Law Office of Krisana M. Hodges
149 9th St. Ste 201
San Francisco, CA 94103-2620

MediCann, Inc.
Suite 555 4096 Piedmont Ave.
Oakland, CA 94611
United States

Date: August 16, 2011

A handwritten signature in blue ink, appearing to read "Arianna Galli", is written over a horizontal line.

Exhibit A



SCHEDULE AN APPOINTMENT ONLINE

VERIFY PATIENT

MediCann is America's Largest Network of Trusted Medical Cannabis Doctors

Providing Compassionate Care Since 2004

Locations Near You



Quick Links

- > [Appointment Request](#)
- > [Become a Member](#)

[Click Here to Join Now](#)

- > [About MediCann's ID Card Program](#)
- > [MediCann's Blog](#)

Events

4/02/11 "Cannabis As Medicine" Medical Cannabis Symposium (San Diego, CA)

4/30/11 New Living Expo - MediCann Sponsored Forum (San Francisco, CA)

More Events Coming Soon!

MediCann. Safe. Natural. Medicine.

For safe, natural pain relief due to: Arthritis, Fibromyalgia, Cancer, Neuropathy, Back problems, Migraine headaches, Muscle spasm, HIV/AIDS, Inflammation, and Glaucoma.

MediCann also provides safe therapeutic solutions for insomnia, anxiety and the symptoms of post-traumatic stress disorder. When prescription drugs aren't working - or the side effects are potentially dangerous - MediCann can help.

- *Medical marijuana has never had a fatal side-effect.*
- *Medical marijuana is recognized as an effective pain relief agent.*
- *The National Institute of Health recognizes the therapeutic value of cannabis.*
- *The AMA calls for further study of marijuana and cannabinoids in the treatment of certain diseases.*
- *The MediCann medical cannabis card is recognized by dispensaries throughout California.*

About Us

- [Who We Are](#)
- [Founder Message](#)
- [Management Team](#)
- [Careers](#)

Press

- [Press Releases](#)
- [Medicann In The News](#)
- [Downloads](#)

Community

- [Newsletter](#)
- [Events](#)
- [Medical Board](#)
- [Resources](#)
- [Law Enforcement](#)
- [Medicann's Blog](#)
- [Become A Member](#)
- [Patient Testimonials](#)

Medical Conditions

- [Prescription Drug Alternative](#)
- [Chronic Pain](#)
- [Back Pain](#)
- [Arthritis](#)
- [Migraine Headaches](#)
- [Muscle Spasms](#)
- [Depression](#)
- [Anxiety](#)
- [Insomnia](#)
- [Other Therapeutic Uses](#)

Evaluations

- [The Evaluation](#)
- [Medicann ID Card](#)
- [Become A Member](#)

FAQs

Contact Us

Research

- [Medical Marijuana Benefits](#)
- [Clinical Pharmacology](#)
- [Use of Cannabis](#)
- [Research By Experts](#)
- [Science Of Medical Use](#)
- [History Of Medical Use](#)

Locations A-O

- [Anaheim Clinic](#)
- [Chatsworth Clinic](#)
- [Concord Clinic](#)
- [Cotati Clinic](#)
- [Elk Grove Clinic](#)
- [Eureka Clinic](#)
- [Fresno Clinic](#)
- [Long Beach Clinic](#)
- [Modesto Clinic](#)
- [North Highlands Clinic](#)
- [Oakland Clinic](#)

Locations R-Z

- [Redding Clinic](#)
- [Sacramento Clinic](#)
- [San Diego Clinic](#)
- [San Francisco Clinic](#)
- [San Jose Clinic](#)
- [Santa Cruz Clinic](#)
- [Santa Rosa Clinic](#)
- [Soquel Clinic](#)
- [Ukiah Clinic](#)
- [West Hollywood Clinic](#)

Exhibit B



To make an appointment please call 866 MD CNNBS / 866 632 6627

- Home
- New at MediCann
- In the Media
- Clinic Locations
- Appointments
- F.A.Q.'s
- Current Events
- Legal
- Newsletter
- Requirements
- ID Card Verification
- Contact Us

Welcome to MediCann

MediCann's Mission

To provide legitimate health information to individuals about the therapeutic uses of alternative medicines, including medical marijuana, and to ensure that all individuals have safe, legal and affordable access to licensed healthcare practitioners. MediCann supports the patients' right to choose the best medicine.

MediCann is an organization of integrative medicine clinics committed to providing a stress-free, holistic environment where patients in need of medicinal marijuana receive a cost-effective, expert evaluation by a licensed medical professional. Qualified patients receive a physician's recommendation allowing them the legal use of Medical Marijuana under California Proposition 215, also known as the California Compassionate Use Act of 1996 Health and Safety Code Section 11362.5, and under SB420, section 11362.7.

Our trained, board-certified physicians, working closely with attending physician and company founder Dr. Jean Talleyrand, allow MediCann to provide our patients with convenient, reliable medical advice and evaluations at an affordable cost.

MediCann provides an environment where patients are treated with the compassion and understanding they deserve. We want to make the process as simple and informative as possible.

Our goal is to assist patients whose lives can be improved by the therapeutic use of medicinal marijuana, in conjunction with traditional medical care and/or alternative therapies including: acupressure, Chinese herbology, tai-chi, acupuncture, massage, qi qong, and yoga. We at MediCann strive to provide the highest quality safe and legal solutions for healthy living at the convenience of patients instead of doctors.

MediCann helps patients take an active role in their health by offering up to date information on alternative therapies and practices, as well as on medical research and current legal events regarding medicinal marijuana. By working closely with our legal team, we are able to provide a safe and reliable service for qualified patients in need of a physician's recommendation for medicinal marijuana.

Supporting your choices in healthcare

MediCann's licensed physicians use the best standards of care in compliance with the California Medical Board. MediCann has every confidence in the skill, experience and best judgment our physicians use to evaluate patients for health conditions that may benefit from the use of medical marijuana.

Join Our FREE
Email Mailing List

Exhibit C

The Evaluation

MediCann takes the stress and fear out of obtaining a medical cannabis recommendation and ID card. Your well-being is our primary concern. You'll be impressed with the courteous service, comfortable surroundings and highly trained professional physicians at all MediCann clinics.



Patients either come to us through referrals from their own doctor or are evaluated by MediCann physicians at our clinics. Upon verification of an illness, disease or physical problem for which cannabis may provide benefit, you will be issued verification papers—your recommendation—that you can use to obtain cannabis at a dispensary or to show to law enforcement agents, if necessary.

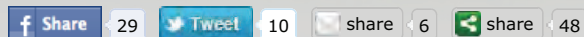
You will need to provide verified proof of identity and

California residency. Accepted methods of verification include:

- Valid California ID (DMV issued California driver's license or Identification card)
- Valid Passport or Out of State ID with proof of California residency (utility bill, lease, car or voter registration)
- Valid Passport or Out of State ID with temporary DMV form
- Expired California ID with temporary DMV form
- Valid Government-issued ID
- Valid Resident Card for California
- Temporary DMV form with any photo ID
- Military Card with proof of residency
- Any "other" ID must be Government issued
- We *do not* accept Birth Certificates.

You will also receive a MediCann ID card following your visit that will be mailed to an address that you provide.

The MediCann ID card is provided at no-extra cost to all MediCann patients. If you do not receive your card within this time period, contact us at **866-632-6627** and ask to speak to the Card Department.



Medical Cannabis Evaluations

- [The Evaluation](#)
- [Medicann ID Card](#)
- [Become A Member](#)

Find A Location

- [Anaheim Clinic](#)
- [Chatsworth Clinic](#)
- [Concord Clinic](#)
- [Cotati Clinic](#)
- [Elk Grove Clinic](#)
- [Eureka Clinic](#)
- [Fresno Clinic](#)
- [Long Beach Clinic](#)
- [Modesto Clinic](#)
- [North Highlands Clinic](#)
- [Oakland Clinic](#)
- [Redding Clinic](#)
- [Sacramento Clinic](#)
- [San Diego Clinic](#)
- [San Francisco Clinic](#)
- [San Jose Clinic](#)
- [Santa Cruz Clinic](#)
- [Santa Rosa Clinic](#)
- [Soquel Clinic](#)
- [Ukiah Clinic](#)
- [West Hollywood Clinic](#)

Corporate Headquarters

1814 Franklin Street, #300
Oakland, CA 94612

About Us

[Who We Are](#)
[Founder Message](#)
[Management Team](#)
[Careers](#)

Community

[Newsletter](#)
[Events](#)
[Medical Board](#)
[Resources](#)
[Law Enforcement](#)

Medical Conditions

[Prescription Drug Alternative](#)
[Chronic Pain](#)
[Back Pain](#)
[Arthritis](#)
[Migraine Headaches](#)

Evaluations

[The Evaluation](#)
[Medicann ID Card](#)
[Become A Member](#)

FAQs

Research

[Medical Marijuana Benefits](#)
[Clinical Pharmacology](#)
[Use of Cannabis](#)
[Research By Experts](#)
[Science Of Medical Use](#)

Locations A-O

[Anaheim Clinic](#)
[Chatsworth Clinic](#)
[Concord Clinic](#)
[Cotati Clinic](#)
[Elk Grove Clinic](#)

Locations R-Z

[Redding Clinic](#)
[Sacramento Clinic](#)
[San Diego Clinic](#)
[San Francisco Clinic](#)
[San Jose Clinic](#)

Press	Medicann's Blog	Muscle Spasms	History Of Medical Use	Eureka Clinic	Santa Cruz Clinic
Press Releases	Become A Member	Depression	Contact Us	Fresno Clinic	Santa Rosa Clinic
Medicann In The News	Patient Testimonials	Anxiety		Long Beach Clinic	Soquel Clinic
Downloads		Insomnia		Modesto Clinic	Ukiah Clinic
		Other Therapeutic Uses		North Highlands Clinic	West Hollywood Clinic
				Oakland Clinic	

Exhibit D



SCHEDULE AN APPOINTMENT ONLINE

VERIFY PATIENT

Home About Us Community Evaluations Medical Conditions Press Research Locations Contact Us Blog

- The Evaluation
- MediCann ID Card
- Become A Member

Locations

Enter your address or zip code in the field below or you can select a city from the dropdown menu to find a MediCann Clinic in California near you:

Address

-Search By City-

Radius

Search Locations



Find A Location

- [Anaheim Clinic](#)
- [Chatsworth Clinic](#)
- [Concord Clinic](#)
- [Cotati Clinic](#)
- [Elk Grove Clinic](#)
- [Eureka Clinic](#)
- [Fresno Clinic](#)
- [Long Beach Clinic](#)
- [Modesto Clinic](#)
- [North Highlands Clinic](#)
- [Oakland Clinic](#)
- [Redding Clinic](#)
- [Sacramento Clinic](#)
- [San Diego Clinic](#)
- [San Francisco Clinic](#)
- [San Jose Clinic](#)
- [Santa Cruz Clinic](#)
- [Santa Rosa Clinic](#)
- [Soquel Clinic](#)
- [Ukiah Clinic](#)
- [West Hollywood Clinic](#)

Corporate Headquarters

1814 Franklin Street, #300
Oakland, CA 94612

Enter Your Address or Zip Code in the Field Above or You Can Select a City Near You From the Dropdown Menu.

Facebook Share 7 | Twitter Tweet 2 | Email share 5 | RSS share 109

About Us

[Who We Are](#)

[Founder Message](#)

[Management Team](#)

[Careers](#)

Press

[Press Releases](#)

[Medicann In The News](#)

[Downloads](#)

Community

[Newsletter](#)

[Events](#)

[Medical Board](#)

[Resources](#)

[Law Enforcement](#)

[Medicann's Blog](#)

[Become A Member](#)

[Patient Testimonials](#)

Medical Conditions

[Prescription Drug Alternative](#)

[Chronic Pain](#)

[Back Pain](#)

[Arthritis](#)

[Migraine Headaches](#)

[Muscle Spasms](#)

[Depression](#)

[Anxiety](#)

[Insomnia](#)

[Other Therapeutic Uses](#)

Evaluations

[The Evaluation](#)

[Medicann ID Card](#)

[Become A Member](#)

FAQs

Contact Us

Research

[Medical Marijuana Benefits](#)

[Clinical Pharmacology](#)

[Use of Cannabis](#)

[Research By Experts](#)

[Science Of Medical Use](#)

[History Of Medical Use](#)

Locations A-O

[Anaheim Clinic](#)

[Chatsworth Clinic](#)

[Concord Clinic](#)

[Cotati Clinic](#)

[Elk Grove Clinic](#)

[Eureka Clinic](#)

[Fresno Clinic](#)

[Long Beach Clinic](#)

[Modesto Clinic](#)

[North Highlands Clinic](#)

[Oakland Clinic](#)

Locations R-Z

[Redding Clinic](#)

[Sacramento Clinic](#)

[San Diego Clinic](#)

[San Francisco Clinic](#)

[San Jose Clinic](#)

[Santa Cruz Clinic](#)

[Santa Rosa Clinic](#)

[Soquel Clinic](#)

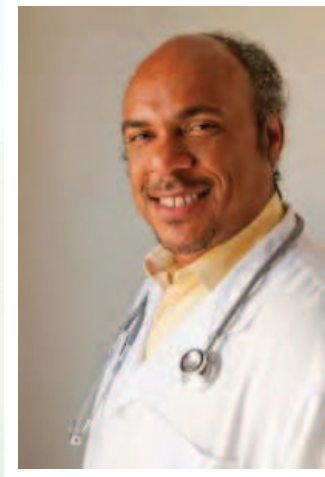
[Ukiah Clinic](#)

[West Hollywood Clinic](#)

Exhibit E

Message From Our Founder

As a physician, I am delighted (but not surprised) at the many ailments that can be successfully treated with cannabis. Cannabis contains more than 80 unique compounds. Most have therapeutic qualities, especially for pain relief. Clinical testing and anecdotal evidence has shown cannabis to be an effective alternative to potentially dangerous prescription drugs for back pain, Parkinson's Disease, PTSD, multiple sclerosis, migraine headaches, cancer and the effects of chemotherapy, anxiety and insomnia—just to name a few.






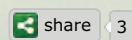
In combination with other safe, holistic therapies cannabis frequently surpasses the effectiveness of traditional pharmaceutical drugs. At MediCann we often recommend several complementary therapies to treat our more than 200,000 patients in California.

Our goal is to be the "ambassadors" in the field of alternative healing. Our website has been created to be your "go to" source for information about the use of medical cannabis, alternative therapies, news on recent breakthroughs in holistic care and health tips to improve your quality of

life.

Unlike many in this industry, our focus is on our patients. Your welfare is what drives us to be the best.

Dr. Jean Talleyrand

 2
  1
  0
  3

About Us

- [Who We Are](#)
- [Message From Our Founder](#)
- [Management Team](#)
- [Careers](#)

Find A Location

- [Anaheim Clinic](#)
- [Chatsworth Clinic](#)
- [Concord Clinic](#)
- [Cotati Clinic](#)
- [Elk Grove Clinic](#)
- [Eureka Clinic](#)
- [Fresno Clinic](#)
- [Long Beach Clinic](#)
- [Modesto Clinic](#)
- [North Highlands Clinic](#)
- [Oakland Clinic](#)
- [Redding Clinic](#)
- [Sacramento Clinic](#)
- [San Diego Clinic](#)
- [San Francisco Clinic](#)
- [San Jose Clinic](#)
- [Santa Cruz Clinic](#)
- [Santa Rosa Clinic](#)
- [Soquel Clinic](#)
- [Ukiah Clinic](#)
- [West Hollywood Clinic](#)

Corporate Headquarters

1814 Franklin Street, #300
Oakland, CA 94612

About Us

- [Who We Are](#)
- [Founder Message](#)
- [Management Team](#)
- [Careers](#)

Press

Community

- [Newsletter](#)
- [Events](#)
- [Medical Board](#)
- [Resources](#)
- [Law Enforcement](#)
- [Medicann's Blog](#)
- [Become A Member](#)

Medical Conditions

- [Prescription Drug Alternative](#)
- [Chronic Pain](#)
- [Back Pain](#)
- [Arthritis](#)
- [Migraine Headaches](#)
- [Muscle Spasms](#)
- [Depression](#)

Evaluations

- [The Evaluation](#)
- [Medicann ID Card](#)
- [Become A Member](#)

FAQs

Contact Us

Research

- [Medical Marijuana Benefits](#)
- [Clinical Pharmacology](#)
- [Use of Cannabis](#)
- [Research By Experts](#)
- [Science Of Medical Use](#)
- [History Of Medical Use](#)

Locations A-O

- [Anaheim Clinic](#)
- [Chatsworth Clinic](#)
- [Concord Clinic](#)
- [Cotati Clinic](#)
- [Elk Grove Clinic](#)
- [Eureka Clinic](#)
- [Fresno Clinic](#)

Locations R-Z

- [Redding Clinic](#)
- [Sacramento Clinic](#)
- [San Diego Clinic](#)
- [San Francisco Clinic](#)
- [San Jose Clinic](#)
- [Santa Cruz Clinic](#)
- [Santa Rosa Clinic](#)

[Press Releases](#)

[Medicann In The News](#)

[Downloads](#)

[Patient Testimonials](#)

[Anxiety](#)

[Insomnia](#)

[Other Therapeutic Uses](#)

[Long Beach Clinic](#)

[Modesto Clinic](#)

[North Highlands Clinic](#)

[Oakland Clinic](#)

[Soquel Clinic](#)

[Ukiah Clinic](#)

[West Hollywood Clinic](#)

Exhibit F


[SCHEDULE AN APPOINTMENT ONLINE](#)
[VERIFY PATIENT](#)
[Home](#) [About Us](#) [Community](#) [Evaluations](#) [Medical Conditions](#) [Press](#) [Research](#) [Locations](#) [Contact Us](#) [Blog](#)
[The Evaluation](#)
[MediCann ID Card](#)
[Become A Member](#)

Who We Are

MediCann, founded in 2004, offers alternative healthcare therapies, including medical cannabis consultations, at clinics throughout California. Under the guidelines outlined in Proposition 215, the Compassionate Use Act, passed by California voters in 1996, medical cannabis is legal in the state of California under specified conditions. Qualified patients receive a physician's recommendation and a recognized MediCann medical cannabis patient ID card that allows them to legally use cannabis in California.

MediCann is a physician-driven, highly professional company dedicated to helping people. While we are a for-profit corporation, our mission is to never deny a patient in need. All of our physicians are experienced, highly trained, compassionate and professional. Our clinics are attractive, inviting, comfortable environments. You'll feel welcome and under no pressure.

Besides our expertise in the therapeutic use of cannabis, we also offer other alternative care therapies through affiliated providers:

MASSAGE

ACUPUNCTURE

BIO-FEEDBACK

CHIROPRACTIC TREATMENT

NUTRITION

NATUROPATHY

HOMEOPATHY

NUTRITIONAL COUNSELING

Often a combination of therapies is the best route to successful treatment.

MediCann also engages in ongoing research to develop new therapeutic uses for cannabis. For example, we are now testing the topical use of a cannabis lotion to treat joint pain. In an evolving industry, MediCann has proven to be the company with the highest standards and professionalism. Helping our patients manage their physical challenges is our number one goal.

[f Share](#) 13
 [Tweet](#) 0
 [share](#) 1
 [share](#) 14

About Us

- [Who We Are](#)
- [Message From Our Founder](#)
- [Management Team](#)
- [Careers](#)

Find A Location

- [Anaheim Clinic](#)
- [Chatsworth Clinic](#)
- [Concord Clinic](#)
- [Cotati Clinic](#)
- [Elk Grove Clinic](#)
- [Eureka Clinic](#)
- [Fresno Clinic](#)
- [Long Beach Clinic](#)
- [Modesto Clinic](#)
- [North Highlands Clinic](#)
- [Oakland Clinic](#)
- [Redding Clinic](#)
- [Sacramento Clinic](#)
- [San Diego Clinic](#)
- [San Francisco Clinic](#)
- [San Jose Clinic](#)
- [Santa Cruz Clinic](#)
- [Santa Rosa Clinic](#)
- [Soquel Clinic](#)
- [Ukiah Clinic](#)
- [West Hollywood Clinic](#)

Corporate Headquarters

1814 Franklin Street, #300
Oakland, CA 94612

About Us

[Who We Are](#)
[Founder Message](#)
[Management Team](#)
[Careers](#)

Press

Community

[Newsletter](#)
[Events](#)
[Medical Board](#)
[Resources](#)
[Law Enforcement](#)
[Medicann's Blog](#)
[Become A Member](#)

Medical Conditions

[Prescription Drug Alternative](#)
[Chronic Pain](#)
[Back Pain](#)
[Arthritis](#)
[Migraine Headaches](#)
[Muscle Spasms](#)
[Depression](#)

Evaluations

[The Evaluation](#)
[Medicann ID Card](#)
[Become A Member](#)

FAQs

Contact Us

Research

[Medical Marijuana Benefits](#)
[Clinical Pharmacology](#)
[Use of Cannabis](#)
[Research By Experts](#)
[Science Of Medical Use](#)
[History Of Medical Use](#)

Locations A-O

[Anaheim Clinic](#)
[Chatsworth Clinic](#)
[Concord Clinic](#)
[Cotati Clinic](#)
[Elk Grove Clinic](#)
[Eureka Clinic](#)
[Fresno Clinic](#)

Locations R-Z

[Redding Clinic](#)
[Sacramento Clinic](#)
[San Diego Clinic](#)
[San Francisco Clinic](#)
[San Jose Clinic](#)
[Santa Cruz Clinic](#)
[Santa Rosa Clinic](#)

[Press Releases](#)

[Medicann In The News](#)

[Downloads](#)

[Patient Testimonials](#)

[Anxiety](#)

[Insomnia](#)

[Other Therapeutic Uses](#)

[Long Beach Clinic](#)

[Modesto Clinic](#)

[North Highlands Clinic](#)

[Oakland Clinic](#)

[Soquel Clinic](#)

[Ukiah Clinic](#)

[West Hollywood Clinic](#)

Exhibit G



WIKIPEDIA
The Free Encyclopedia

Article **Discussion** Read Edit View history

- Main page
- Contents
- Featured content
- Current events
- Random article
- Donate to Wikipedia

- Interaction
 - Help
 - About Wikipedia
 - Community portal
 - Recent changes
 - Contact Wikipedia

- Toolbox
- Print/export

- Languages
 - Deutsch
 - Français
 - 日本語
 - Norsk (bokmål)
 - Српски / Srpski
 - Srpskohrvatski / Српскохрватски
 - Suomi
 - Svenska

Medical cannabis

From Wikipedia, the free encyclopedia
(Redirected from Medical marijuana)

This article's lead section **may not adequately summarize its contents**. Please consider expanding the lead to provide an accessible overview of the article's key points. *(June 2011)*

Medical cannabis refers to (a) the use of parts of the herb cannabis (also referred to as **medical marijuana**) as a physician-recommended form of medicine or herbal therapy, or to synthetic forms of specific cannabinoids such as THC as a physician-recommended form of medicine.^[*citation needed*]

The *Cannabis* plant from which the cannabis drug is derived has a long history of medicinal use, with evidence dating back to 2,737 BCE.^[1]

Contents [hide]

- 1 Use
- 2 Clinical applications
- 3 Recent studies
 - 3.1 Alzheimer's disease
 - 3.2 Mental Disorders
 - 3.3 Lung cancer and chronic obstructive pulmonary disease
 - 3.4 Breast cancer
 - 3.5 HIV/AIDS
 - 3.6 Brain cancer
 - 3.7 Opioid dependence
 - 3.8 Controlling ALS Symptoms
 - 3.9 Spasticity in multiple sclerosis
 - 3.10 Treatment of inflammatory skin disease
- 4 Medicinal compounds
 - 4.1 Tetrahydrocannabinol
 - 4.2 Cannabidiol
 - 4.3 Cannabinol
 - 4.4 β-Caryophyllene
 - 4.5 Cannabigerol
- 5 Pharmacologic THC and THC derivatives
- 6 Criticism
- 7 Harm reduction
- 8 Organizational positions
- 9 History
 - 9.1 Ancient China and Taiwan
 - 9.2 Ancient Egypt



American Cannabis Indica purchased at a Medical Cannabis dispensary.



American Hashish purchased at a Medical Cannabis dispensary.

- 9.3 Ancient India
- 9.4 Ancient Greece
- 9.5 South East Asia
- 9.6 Medieval Islamic world

- 10 Modern history
- 11 National and international regulations
 - 11.1 Austria
 - 11.2 Canada
 - 11.3 Germany
 - 11.4 Spain
 - 11.5 United Kingdom
 - 11.6 United States

- 12 See also
- 13 References
- 14 Further reading
- 15 External links



Cannabis Indica fluid extract, American Druggists Syndicate, pre-1937.

Use

[\[edit\]](#)

The medicinal value of cannabis is controversial. A large majority of national governments do not recognize the use of plant parts from the plant *Cannabis Sativa* as something that doctors can recommend to their patients. A number of these governments, including the U.S. government allows, however, in varying degrees, treatment with one or more specific, synthetic **cannabinoids** for one or more disorders.

Supporters of medical cannabis argue that cannabis does have several well-documented beneficial effects.^{[2][3][4][5]} Among these are: the amelioration of **nausea** and **vomiting**, stimulation of hunger in chemotherapy and AIDS patients, lowered intraocular eye pressure (shown to be effective for treating **glaucoma**), as well as gastrointestinal illness. Its effectiveness as an **analgesic** has been suggested—and disputed—as well.

There are several methods for **administration of dosage**, including **vaporizing** or smoking dried buds, drinking, or eating extracts, and taking capsules. The comparable efficacy of these methods was the subject of an investigative study^[5] conducted by the **National Institutes of Health**.

Synthetic cannabinoids are available as prescription drugs in some countries. Examples are **Marinol**(The United States and Canada) and **Cesamet**(Canada, Mexico, the United Kingdom, and the United States).

While cannabis for recreational use is illegal in all parts of the world, though decriminalized in some, at least some use as a medicine is legal in a number of territories, including Canada, Austria,

Germany, the Netherlands, Spain, Israel, Italy, Finland, and Portugal. In the United States, federal law outlaws all use of herb parts from Cannabis, while some states have approved use of herb parts from Cannabis as medical cannabis in conflict with federal law. The United States Supreme Court has ruled in *United States v. Oakland Cannabis Buyers' Coop* and *Gonzales v. Raich* that the federal government has a right to regulate and criminalize cannabis, even for medical purposes.

Clinical applications

[edit]

A 2002 review of medical literature by Franjo Grotenhermen state that medical cannabis have established effects in the treatment of nausea, vomiting, premenstrual syndrome, unintentional weight loss, insomnia, and lack of appetite. Other "relatively well-confirmed" effects were in the treatment of "spasticity, painful conditions, especially neurogenic pain, movement disorders, asthma, [and] glaucoma".^[6]

Preliminary findings indicate that cannabis-based drugs could prove useful in treating inflammatory bowel disease, migraines, fibromyalgia, and related conditions.^[7]

Medical cannabis has also been found to relieve certain symptoms of multiple sclerosis^[8] and spinal cord injuries^{[9][10][11]} by exhibiting antispasmodic and muscle-relaxant properties as well as stimulating appetite.

Other studies state that cannabis or cannabinoids may be useful in treating alcohol abuse,^[12] amyotrophic lateral sclerosis,^{[13][14]} collagen-induced arthritis,^[15] asthma,^[16] atherosclerosis,^[17] bipolar disorder,^{[18][19]} colorectal cancer,^[20] HIV-Associated Sensory Neuropathy^[21] depression,^{[22][23][24][25]} dystonia,^[26] epilepsy,^{[27][28][29]} digestive diseases,^[30] gliomas,^{[31][32]} hepatitis C,^[33] Huntington's disease,^[34] leukemia,^[35] skin tumors,^[36] methicillin-resistant *Staphylococcus aureus* (MRSA),^[37] Parkinson's disease,^[38] pruritus,^{[39][40]} posttraumatic stress disorder (PTSD),^[41] psoriasis,^[42] sickle-cell disease,^[43] sleep apnea,^[44] and anorexia nervosa.^[45] Controlled research on treating Tourette syndrome with a synthetic version of tetrahydrocannabinol (brand name Marinol), the main psychoactive chemical found in cannabis, showed the patients taking Marinol had a beneficial response without serious adverse effects;^{[46][47]} other studies have shown that cannabis "has no effects on tics and increases the individuals inner tension".^[48] Case reports found that marijuana helped reduce tics, but validation of these results requires longer, controlled studies on larger samples.^{[49][50]}



"Victoria", the United States' first legal medical marijuana plant grown by The Wo/Men's Alliance for Medical Marijuana.^[citation needed]

Recent studies

[edit]

Alzheimer's disease

[edit]

Research done by the Scripps Research Institute in California shows that the active ingredient in marijuana, THC, prevents the formation of deposits in the brain associated with Alzheimer's disease. THC was found to prevent an enzyme called acetylcholinesterase from accelerating the formation of "Alzheimer plaques" in the brain more effectively than commercially marketed drugs. THC is also more effective at blocking clumps of protein that can inhibit memory and cognition in Alzheimer's patients, as reported in *Molecular Pharmaceutics*.^[51]

Mental Disorders

[edit]

There has been evidence that smoking marijuana can have a positive effect on disorders such as

Schizophrenia, bipolar disorder, or depression. Studies have shown that there are actual negative effects to this thought. In patients with bipolar disorder subjects have been shown to actually become better after smoking marijuana increasing the rate at which these patients go from high to low. In the case of depression many users have reported that their moods have become better. Research done on lab rats and animals has shown that marijuana can act as an anti-depressant but in other studies done on humans this is not the case, actually pushing the subjects further into their depression. A study of 50,000 Swedish soldiers who had smoked at least once were twice as likely to develop schizophrenia as those who had not smoked.^[52]

A study by Keele University commissioned by the British government found that between 1996 and 2005 there had been significant reductions in the incidence and prevalence of schizophrenia. From 2000 onwards there were also significant reductions in the prevalence of psychoses.

The authors say this data is "not consistent with the hypothesis that increasing cannabis use in earlier decades is associated with increasing schizophrenia or psychoses from the mid-1990s onwards".^[53]

Lung cancer and chronic obstructive pulmonary disease [edit]

The evidence to date is conflicting as to whether smoking cannabis increases the risk of developing lung cancer or chronic obstructive pulmonary disease (COPD) among people who do not smoke tobacco. In 2006 a study by Hashibe, Morgenstern, Cui, Tashkin, *et al.* suggested that smoking cannabis does not, by itself, increase the risk of lung cancer. Several subsequent studies have found results suggesting the reverse, unfortunately many of these were not completed with proper scientific controls and have subsequently been discredited. Many studies did report a strongly synergistic effect, however, between tobacco use and smoking cannabis such that tobacco smokers who also smoked cannabis dramatically increased their already very high risk of developing lung cancer or chronic obstructive pulmonary disease by as much as 300%. Some of these research results follow below:

- In 2006, Hashibe, Morgenstern, Cui, Tashkin, *et al.* presented the results from a study involving 2,240 subjects that showed non-tobacco users who smoked marijuana did not exhibit an increased incidence of lung cancer or head-and-neck malignancies. These results were supported even among very long-term, very heavy users of marijuana.^[54]

Tashkin, a pulmonologist who has studied marijuana for 30 years, said, "It's possible that tetrahydrocannabinol (THC) in marijuana smoke may encourage apoptosis, or programmed cell death, causing cells to die off before they have a chance to undergo malignant transformation". He further commented that "We hypothesized that there would be a positive association between marijuana use and lung cancer, and that the association would be more positive with heavier use. What we found instead was no association at all, and even a suggestion of some protective effect."^{[unreliable medical source?][55][unreliable medical source?][56]}

- A case-control study of lung cancer in adults 55 years of age and younger found that the risk of lung cancer increased 8% (95% confidence interval (CI) 2–15) for each joint-year of cannabis smoking, after adjustment for confounding variables including cigarette smoking, and 7% (95% CI 5–9) for each pack-year of cigarette smoking, after adjustment for confounding variables including cannabis smoking.^[57]
- A 2008 study by Hii, Tam, Thompson, and Naughton found that marijuana smoking leads to asymmetrical bullous disease, often in the setting of normal CXR and lung function. In subjects who smoke marijuana, these pathological changes occur at a younger age (approximately 20 years earlier) than in tobacco smokers.^[58]
- Researchers from the University of British Columbia presented a study at the American Thoracic Society 2007 International Conference showing that smoking marijuana and tobacco together

more than tripled the risk of developing COPD over just smoking tobacco alone.^{[unreliable medical source?][59]} Similar findings were released in April 2009 by the Vancouver Burden of Obstructive Lung Disease Research Group. The study reported that smoking both tobacco and marijuana synergistically increased the risk of respiratory symptoms and COPD. Smoking only marijuana, however, was not associated with an increased risk of respiratory symptoms of COPD.^{[unreliable medical source?][60][61]} In a related commentary, pulmonary researcher Donald Tashkin wrote, "...we can be close to concluding that marijuana smoking by itself does not lead to COPD".^[62]

Breast cancer

[edit]

According to a 2007 study at the California Pacific Medical Center Research Institute, cannabidiol (CBD) may stop breast cancer from spreading throughout the body.^[63] These researchers believe their discovery may provide a non-toxic alternative to chemotherapy while achieving the same results minus the painful and unpleasant side effects. The research team says that CBD works by blocking the activity of a gene called Id-1, which is believed to be responsible for a process called metastasis, which is the aggressive spread of cancer cells away from the original tumor site.^[63]

HIV/AIDS

[edit]

Investigators at Columbia University published clinical trial data in 2007 showing that HIV/AIDS patients who inhaled cannabis four times daily experienced substantial increases in food intake with little evidence of discomfort and no impairment of cognitive performance. They concluded that smoked marijuana has a clear medical benefit in HIV-positive patients.^{[64][65]} In another study in 2008, researchers at the University of California, San Diego School of Medicine found that marijuana significantly reduces HIV-related neuropathic pain when added to a patient's already-prescribed pain management regimen and may be an "effective option for pain relief" in those whose pain is not controlled with current medications. Mood disturbance, physical disability, and quality of life all improved significantly during study treatment.^[66] Despite management with opioids and other pain modifying therapies, neuropathic pain continues to reduce the quality of life and daily functioning in HIV-infected individuals. Cannabinoid receptors in the central and peripheral nervous systems have been shown to modulate pain perception. No serious adverse effects were reported, according to the study published by the American Academy of Neurology.^[67] A study examining the effectiveness of different drugs for HIV associated neuropathic pain found that smoked Cannabis was one of only three drugs that showed evidence of efficacy.^[68]

Brain cancer

[edit]

A study by Complutense University of Madrid found the chemicals in marijuana promotes the death of brain cancer cells by essentially helping them feed upon themselves in a process called autophagy. The research team discovered that cannabinoids such as THC had anticancer effects in mice with human brain cancer cells and in people with brain tumors. When mice with the human brain cancer cells received the THC, the tumor shrank. Using electron microscopes to analyze brain tissue taken both before and after a 26- to 30-day THC treatment regimen, the researchers found that THC eliminated cancer cells while leaving healthy cells intact.^[69] The patients did not have any toxic effects from the treatment; previous studies of THC for the treatment of cancer have also found the therapy to be well tolerated. However, the mechanisms which promote THC's tumor cell-killing action are unknown.^[69]

Opioid dependence

[edit]

Injections of THC eliminate dependence on opiates in stressed rats, according to a research team at the *Laboratory for Physiopathology of Diseases of the Central Nervous System* (France) in the journal *Neuropsychopharmacology*.^[70] Deprived of their mothers at birth, rats become hypersensitive

to the rewarding effect of morphine and heroin (substances belonging to the opiate family), and rapidly become dependent. When these rats were administered THC, they no longer developed typical morphine-dependent behavior. In the **striatum**, a region of the brain involved in drug dependence, the production of endogenous **enkephalins** was restored under THC, whereas it diminished in rats stressed from birth which had not received THC. Researchers believe the findings could lead to therapeutic alternatives to existing substitution treatments.^[70]

In humans, drug treatment subjects who use cannabis intermittently are found to be more likely to adhere to treatment for opioid dependence.^[71] Historically, similar findings were reported by Edward Birch, who, in 1889, reported success in treating opiate and chloral addiction with cannabis.^[72]

Controlling ALS Symptoms

[edit]

Recent research has been conducted on if the use of marijuana could control some of the symptoms of ALS or Lou Gehrig Disease. A survey was conducted on 131 people who suffered from ALS. The survey asked if the subjects had used marijuana in the last 12 months to control some of their symptoms. The survey resulted in 13 people who had used the drug in some form to control symptoms. The subjects all concluded that the symptoms of appetite loss, depression, pain, spasticity, drooling, and weakness.^[73]

Spasticity in multiple sclerosis

[edit]

A review of six **randomized controlled trials** of a combination of **THC** and **CBD** extracts for the treatment of MS related muscle spasticity reported, "Although there was variation in the outcome measures reported in these studies, a trend of reduced spasticity in treated patients was noted." The authors postulated that "cannabinoids may provide neuroprotective and anti-inflammatory benefits in MS."^[74] A small study done on whether or not marijuana could be used to control tremors of MS patients was conducted. The study found that there was no noticeable difference of the tremors in the patients. Although there was no difference in the tremors the patients felt as if their symptoms had lessened and their quality of life had improved. The researchers concluded that the mood enhancing or cognitive effects that cannabis has on the brain could have given the patients the effect that their tremors were getting better.^[75]

Treatment of inflammatory skin disease

[edit]

The abundant distribution of cannabinoid receptors on skin nerve fibers and mast cells provides implications for an anti-inflammatory, anti-nociceptive action of cannabinoid receptor agonists and suggests their putatively broad therapeutic potential ^[75]

Medicinal compounds

[edit]

Cannabis contains over 300 compounds. At least 66 of these are **cannabinoids**,^{[76][77]} which are the basis for medical and scientific use of **cannabis**. This presents the research problem of isolating the effect of specific compounds and taking account of the interaction of these compounds.^[78]

Cannabinoids can serve as appetite stimulants, **antiemetics**, **antispasmodics**, and have some **analgesic** effects.^[79] Five important cannabinoids found in the cannabis plant are tetrahydrocannabinol, cannabidiol, cannabinol, β -caryophyllene, and cannabigerol.

Tetrahydrocannabinol

[edit]

Main article: [Tetrahydrocannabinol](#)

Tetrahydrocannabinol (THC) is the primary compound responsible for the psychoactive effects of cannabis. The compound is a mild analgesic, and cellular research has shown the compound has antioxidant activity.^[80] THC is believed to interfere with parts of the brain normally controlled by the endogenous cannabinoid neurotransmitter, **anandamide**.^{[81][82]} Anandamide is believed to play a role

in pain sensation, memory, and sleep.

Cannabidiol

[edit]

Main article: Cannabidiol

Cannabidiol (CBD), is a major constituent of medical cannabis. CBD represents up to 40% of extracts of the medical cannabis plant.^[83] Cannabidiol has been shown to relieve convulsion, inflammation, anxiety, cough and congestion, nausea, and inhibits cancer cell growth.^[84] Recent studies have shown cannabidiol to be as effective as atypical antipsychotics in treating schizophrenia.^[85] Because cannabidiol relieves the aforementioned symptoms, cannabis strains with a high amount of CBD may benefit people with multiple sclerosis, frequent anxiety attacks and Tourette syndrome.^{[74][84][86]}

Cannabinol

[edit]

Main article: Cannabinol

Cannabinol (CBN) is a therapeutic cannabinoid found in *Cannabis sativa* and *Cannabis indica*.^[87] It is also produced as a metabolite, or a breakdown product, of tetrahydrocannabinol (THC).^[88] CBN acts as a weak agonist of the CB₁ and CB₂ receptors, with lower affinity in comparison to THC.^{[89][90]}

β-Caryophyllene

[edit]

Main article: Caryophyllene

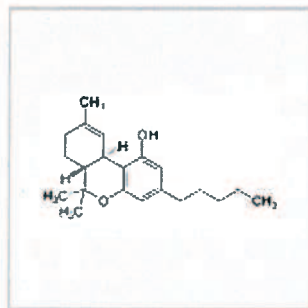
Part of the mechanism by which medical cannabis has been shown to reduce tissue inflammation is via the compound β-caryophyllene.^[91] A cannabinoid receptor called CB2 plays a vital part in reducing inflammation in humans and other animals.^[91] β-Caryophyllene has been shown to be a selective activator of the CB2 receptor.^[91] β-Caryophyllene is especially concentrated in cannabis essential oil, which contains about 12–35% β-caryophyllene.^[91]

Cannabigerol

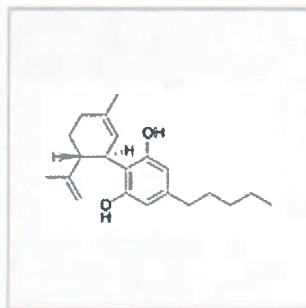
[edit]

Main article: Cannabigerol

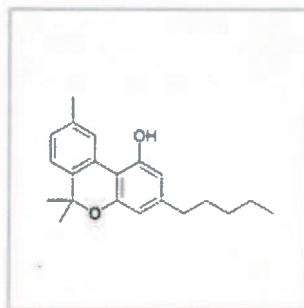
Like cannabidiol, cannabigerol is not psychoactive. Cannabigerol has been shown to relieve intraocular pressure, which may be of benefit in the treatment of glaucoma.^{[92][93]}



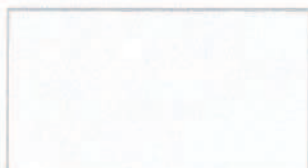
Tetrahydrocannabinol (THC).

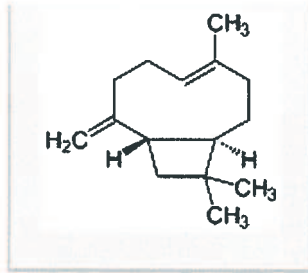


Cannabidiol (CBD) is known to relieve convulsion, aiding those with diseases such as multiple sclerosis.

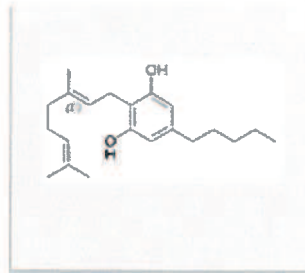


Cannabinol (CBN).





β -Caryophyllene has important anti-inflammatory properties.



Cannabigerol.

Pharmacologic THC and THC derivatives

[edit]

In the USA, the FDA has approved several cannabinoids for use as medical therapies: **dronabinol** (Marinol) and **nabilone**. These medicines are taken orally.

These medications are usually used when first line treatments for nausea and vomiting associated with cancer chemotherapy fail to work. In extremely high doses and in rare cases "psychotomimetic" side effects are possible. The other commonly used antiemetic drugs are not associated with these side effects.

Canasol is a cannabis-based medication for glaucoma that relieves **intraocular pressure** symptoms associated with late-stage glaucoma.

It was created by an optomolgist, Dr. Albert Lockhart and Dr. Manley E. West, and began distribution in 1987.^{[94][95]} As of 2003, it was still being distributed in the United Kingdom, several US states, and several Caribbean nations.^[96]

It is notable for being one of the first cannabis-containing pharmaceuticals to be developed for the **modern pharmaceutical market** and being one of the few such pharmaceuticals to have ever been legally marketed in the United States.^{[95][97]}

The prescription drug **Sativex**, an extract of cannabis administered as a sublingual spray, has been approved in **Canada** for the adjunctive treatment (use along side other medicines) of both **multiple sclerosis** and **cancer related pain**.^{[98][99]} Sativex has also been approved in the United Kingdom, New Zealand, and the Czech Republic, and is expected to gain approval in other European countries.^{[100][101][102]} William Notcutt is one of the chief researchers that has developed Sativex, and he has been working with GW and founder Geoffrey Guy since the company's inception in 1998. Notcutt states that the use of MS as the disease to study "had everything to do with politics."^[103]

Medication	Approval	Country	Licensed indications	Cost
Nabilone	1985	USA, Canada	Nausea of cancer chemotherapy that has failed to respond adequately to other antiemetics	\$4000.00 U.S. for a year's supply (in Canada) ^[104]
Canasol	1987	USA, Canada, several Caribbean nations	Introcular pressure associated with late-stage Glaucoma	
	1985	USA Canada	Nausea and vomiting associated with cancer chemotherapy in patients who have failed to respond adequately to	\$652 U.S. for 30 doses @

Marinol		(1992)	conventional treatments	10 mg online ^[105]
	1992	USA	Anorexia associated with AIDS–related weight loss ^[106]	
Sativex	1995	Canada	Adjunctive treatment for the symptomatic relief of neuropathic pain in multiple sclerosis in adults	\$9,351 Canadian per year ^[107]
	1997	Canada	Pain due to cancer	

Criticism

[edit]

One of the major criticisms of cannabis as medicine is opposition to smoking as a method of consumption. However, smoking is no longer necessary due to the development of healthier methods. Today, medicinal marijuana patients can use vaporizers, where the essential marijuana compounds are extracted and inhaled. This is somewhat similar to steaming vegetables to avoid cancerous by-products that are produced at higher temperatures. In addition, edible marijuana, which is produced in various baked goods, is also available, and has demonstrated longer lasting effects.

The United States Food and Drug Administration (FDA) issued an advisory against *smoked* medical marijuana stating that, "marijuana has a high potential for abuse, has no currently accepted medical use in treatment in the United States, and has a lack of accepted safety for use under medical supervision. Furthermore, there is currently sound evidence that smoked marijuana is harmful."^[108] The National Institute on Drug Abuse NIDA state that "Marijuana itself is an unlikely medication candidate for several reasons: (1) it is an unpurified plant containing numerous chemicals with unknown health effects; (2) it is typically consumed by smoking further contributing to potential adverse effects; and (3) its cognitive impairing effects may limit its utility".^[109]

The Institute of Medicine, run by the United States National Academy of Sciences, conducted a comprehensive study in 1999 to assess the potential health benefits of cannabis and its constituent cannabinoids. The study concluded that smoking cannabis is not recommended for the treatment of any disease condition, but did conclude that nausea, appetite loss, pain and anxiety can all be mitigated by marijuana. While the study expressed reservations about smoked marijuana due to the health risks associated with smoking, the study team concluded that until another mode of ingestion was perfected that could provide the same relief as smoked marijuana, there was no alternative. In addition, the study pointed out the inherent difficulty in marketing a non-patentable herb. Pharmaceutical companies will not substantially profit unless there is a patent. For those reasons, the Institute of Medicine concluded that there is little future in smoked cannabis as a medically approved medication. The report also concluded that for certain patients, such as the terminally ill or those with debilitating symptoms, the long-term risks are not of great concern.^{[110][111]}

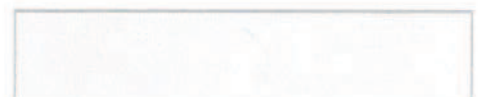
Marinol was less effective than the steroid megestrol in helping cancer patients regain lost appetites.^[112] A phase III study found no difference in effects of an oral cannabis extract or THC on appetite and quality of life (QOL) in patients with cancer-related anorexia-cachexia syndrome (CACS) to placebo.^[113]

"Citing the dangers of marijuana and the lack of clinical research supporting its medicinal value" the American Society of Addiction Medicine in March 2011 issued a white paper recommending a halt to using marijuana as a medicine in U.S. states where it has been declared legal.^{[114][115]}

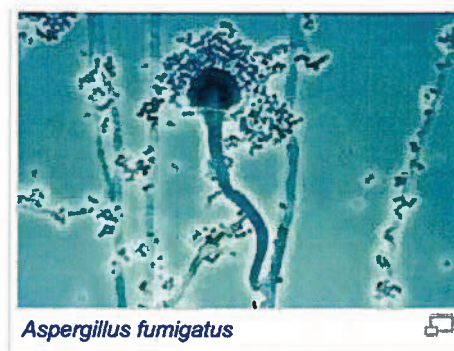
Harm reduction

[edit]

The harm caused by smoking can be minimized or eliminated by the use of a vaporizer^[116] or ingesting the



drug in an edible form. Vaporizers are devices that heat the active constituents to a temperature below the ignition point of the cannabis, so that their vapors can be inhaled. Combustion of plant material is avoided, thus preventing the formation of carcinogens such as polyaromatic hydrocarbons, benzene and carbon monoxide. A pilot study led by Donald Abrams of UC San Francisco showed that vaporizers eliminate the release of irritants and toxic compounds, while delivering equivalent amounts of THC into the bloodstream.^[117]



Aspergillus fumigatus

In order to kill microorganisms, especially the molds *A. fumigatus*, *A. flavus* and *A. niger*, Levitz and Diamond suggested baking marijuana at 150 °C (302 °F) for five minutes. They also found that tetrahydrocannabinol (THC) was not degraded by this process.^[118]

Organizational positions

[edit]

A number of medical organizations have endorsed reclassification of marijuana to allow for further study. These include, but are not limited to:

- The American Medical Association^{[119][120]}
- The American College of Physicians – America's second largest physicians group^[121]
- Leukemia & Lymphoma Society – America's second largest cancer charity^[122]
- American Academy of Family Physicians opposes the use of marijuana except under medical supervision^[123]

Other medical organizations recommend a halt to using marijuana as a medicine in U.S.

- The American Society of Addiction Medicine^{[114][115]}

History

[edit]

Ancient China and Taiwan

[edit]

Cannabis, called *má* 麻 or *dà má* 大麻 (with "big; great") in Chinese, was used in Taiwan for fiber starting about 10,000 years ago.^[124] The botanist Li Hui-Lin wrote that in China, "The use of Cannabis in medicine was probably a very early development. Since ancient men used hemp seed as food, it was quite natural for them to also discover the medicinal properties of the plant."^[125] The oldest Chinese pharmacopeia, the (ca. 100 CE) *Shennong Bencaojing* 神農本草經 ("Shennong's Materia Medica Classic"), describes *dama* "cannabis".



The use of cannabis, at least as fiber, has been shown to go back at least 10,000 years in Taiwan. "Dà má" (Pinyin pronunciation) is the Chinese expression for cannabis, the first character meaning "big" and the second character meaning "hemp."

The flowers when they burst (when the pollen is scattered) are called 麻蕒 [*mafēn*] or 麻勃 [*mábo*]. The best time for gathering is the 7th day of the 7th month. The seeds are gathered in the 9th month. The seeds which have entered the soil are injurious to man. It grows in [Taishan] (in [Shandong] ...). The flowers, the fruit (seed) and the leaves are officinal. The leaves and the fruit are said to be poisonous, but not the flowers and the kernels of the seeds.^[126]

Cannabis is one of the 50 "fundamental" herbs in traditional Chinese medicine,^[127] and is prescribed

to treat diverse indications.

Every part of the hemp plant is used in medicine; the dried flowers (勃), the achenia (賁), the seeds (麻仁), the oil (麻油), the leaves, the stalk, the root, and the juice. The flowers are recommended in the 120 different forms of (風 *feng*) disease, in menstrual disorders, and in wounds. The achenia, which are considered to be poisonous, stimulate the nervous system, and if used in excess, will produce hallucinations and staggering gait. They are prescribed in nervous disorders, especially those marked by local anaesthesia. The seeds, by which is meant the white kernels of the achenia, are used for a great variety of affections, and are considered to be tonic, demulcent, alterative, laxative, emmenagogue, diuretic, anthelmintic, and corrective. They are made into a congee by boiling with water, mixed with wine by a particular process, made into pills, and beaten into a paste. A very common mode of exhibition, however, is by simply eating the kernels. It is said that their continued use renders the flesh firm and prevents old age. They are prescribed internally in fluxes, post-partum difficulties, aconite poisoning, vermillion poisoning, constipation, and obstinate vomiting. Externally they are used for eruptions, ulcers, favus, wounds, and falling of the hair. The oil is used for falling hair, sulfur poisoning, and dryness of the throat. The leaves are considered to be poisonous, and the freshly expressed juice is used as an anthelmintic, in scorpion stings, to stop the hair from falling out and to prevent it from turning grey. They are especially thought to have antiperiodic properties. The stalk, or its bark, is considered to be diuretic, and is used with other drugs in gravel. The juice of the root is used for similar purposes, and is also thought to have a beneficial action in retained placenta and post-partum hemorrhage. An infusion of hemp (for the preparation of which no directions are given) is used as a demulcent drink for quenching thirst and relieving fluxes.^[128]

In the early 3rd century CE, [Hua Tuo](#) was the first person known to use cannabis as an anesthetic. He reduced the plant to powder and mixed it with wine for administration.^[129]

Ancient Egypt

[edit]

The Ebers Papyrus (ca. 1,550 BCE) from Ancient Egypt describes medical marijuana.^[130] Other ancient Egyptian papyri that mention medical marijuana are the Ramesseum III Papyrus (1700 BC), the Berlin Papyrus (1300 BC) and the Chester Beatty Medical Papyrus VI (1300 BC).^[131] The ancient Egyptians even used hemp (cannabis) in suppositories for relieving the pain of hemorrhoids.^[132] The egyptologist Lise Manniche notes the reference to "plant medical marijuana" in several Egyptian texts, one of which dates back to the eighteenth century BCE^[133]

Ancient India

[edit]

Surviving texts from ancient India confirm that cannabis' psychoactive properties were recognized, and doctors used it for a variety of illnesses and ailments. These included insomnia, headaches, a whole host of gastrointestinal disorders, and pain: cannabis was frequently used to relieve the pain of childbirth.^[134]

Ancient Greece

[edit]

The Ancient Greeks used cannabis not only for human medicine, but also in veterinary medicine to dress wounds and sores on their horses.^[135]

In humans, dried leaves of cannabis were used to treat nose bleeds, and cannabis seeds were used to expel

^[135]

tapeworms. The most frequently described use of cannabis in humans was to steep green seeds of cannabis in either water or wine, later taking the seeds out and using the warm extract to treat inflammation and pain resulting from obstruction of the ear.^[135]

In the 5th century BCE Herodotus, a Greek historian, described how the Scythians of the Middle East used cannabis in steam baths.^[135]

South East Asia

[edit]

Patani from Asia are primary natural producers of the diuretic, antiemetic, antiepileptic, anti-inflammatory, pain killing and antipyretic properties of *Cannabis sativa*, and used it extensively for 'Kopi Kapuganja' and 'Pecel Ganja', as recreation food, drinks and relaxing medication for centuries.

Medieval Islamic world

[edit]

In the medieval Islamic world, Arabic physicians made use of the diuretic, antiemetic, antiepileptic, anti-inflammatory, pain killing and antipyretic properties of *Cannabis sativa*, and used it extensively as medication from the 8th to 18th centuries.^[136]

Modern history

[edit]

An Irish physician, William Brooke O'Shaughnessy, is credited with introducing the therapeutic use of cannabis to Western medicine. He was Assistant-Surgeon and Professor of Chemistry at the Medical College of Calcutta, and conducted a cannabis experiment in the 1830s, first testing his preparations on animals, then administering them to patients in order to help treat muscle spasms, stomach cramps or general pain.^[137]

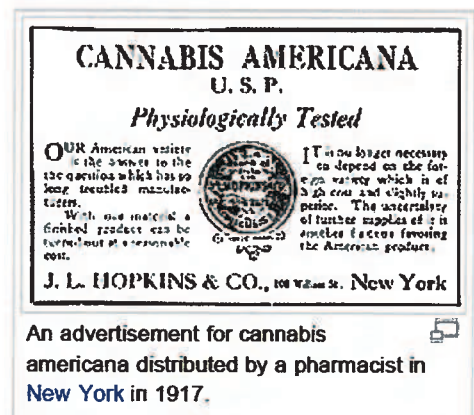
Cannabis as a medicine became common throughout much of the Western world by the 19th century. It was used as the primary pain reliever until the invention of aspirin.^[138] Modern medical and scientific inquiry began with doctors like O'Shaughnessy and Moreau de Tours, who used it to treat melancholia and migraines, and as a sleeping aid, analgesic and anticonvulsant.

By the time the United States banned cannabis in a federal law, the 1937 Marijuana Tax Act, the plant was no longer extremely popular.^[139]^[citation needed] Skepticism about cannabis arose in response to the bill.^[citation needed] The situation was exacerbated by the stereotypes promoted by the media, that the drug was used primarily by Mexican and African immigrants.^[139]

Later in the century, researchers investigating methods of detecting cannabis intoxication discovered that smoking the drug reduced intraocular pressure.^[140] In 1955 the antibacterial effects were described at the Palacký University of Olomouc. Since 1971 Lumír Ondřej Hanuš was growing marijuana on two large fields in authority of the University. The marijuana extracts were then used at



Cannabis sativa from Vienna
Dioscurides, 512 AD



An advertisement for cannabis americana distributed by a pharmacist in New York in 1917.

the University hospital as a cure for aphthae and haze.^[141] In 1973 physician Tod H. Mikuriya reignited the debate concerning cannabis as medicine when he published "Marijuana Medical Papers". High intraocular pressure causes blindness in glaucoma patients, so he hypothesized that using the drug could prevent blindness in patients. Many Vietnam War veterans also found that the drug prevented muscle spasms caused by spinal injuries suffered in battle.^[142] Later medical use focused primarily on its role in preventing the wasting syndromes and chronic loss of appetite associated with chemotherapy and AIDS, along with a variety of rare muscular and skeletal disorders.

In 1964, Dr. Albert Lockhart and Manley West began studying the health effects of traditional marijuana use in Jamaican communities. They discovered that Rastafarians had unusually low glaucoma rates and local fishermen were washing their eyes with cannabis extract in the belief that it would improve their sight. Lockhart and West developed, and in 1987 gained permission to market, the pharmaceutical Canasol: one of the first to cannabis extracts. They continued to work with cannabis throughout the years, developing more pharmaceuticals and eventually receiving the Jamaican Order of Merit for their work.^[143]

Later, in the 1970s, a synthetic version of THC was produced and approved for use in the United States as the drug Marinol. It was delivered as a capsule, to be swallowed. Patients complained that the violent nausea associated with chemotherapy made swallowing capsules difficult. Further, along with ingested cannabis, capsules are harder to dose-titrate accurately than smoked cannabis because their onset of action is so much slower. Smoking has remained the route of choice for many patients because its onset of action provides almost immediate relief from symptoms and because that fast onset greatly simplifies titration. For these reasons, and because of the difficulties arising from the way cannabinoids are metabolized after being ingested, oral dosing is probably the least satisfactory route for cannabis administration.^[144] Relatedly, some studies have indicated that at least some of the beneficial effects that cannabis can provide may derive from synergy among the multiplicity of cannabinoids and other chemicals present in the dried plant material.^[145] Such synergy is, by definition, impossible with respect to the use of single-cannabinoid drugs like Marinol.

During the 1970s and 1980s, six U.S. states' health departments performed studies on the use of medical cannabis. These are widely considered some of the most useful and pioneering studies on the subject.^[citation needed] Voters in eight states showed their support for cannabis prescriptions or recommendations given by physicians between 1996 and 1999, including Alaska, Arizona, California, Colorado, Maine, Michigan, Nevada, Oregon, and Washington, going against policies of the federal government.^[146]

In May 2001, "The Chronic Cannabis Use in the Compassionate Investigational New Drug Program: An Examination of Benefits and Adverse Effects of Legal Clinical Cannabis" (Russo, Mathre, Byrne et al.) was completed. This three-day examination of major body functions of four of the five living US federal cannabis patients found "mild pulmonary changes" in two patients.^[147]

On October 7, 2003, a U.S. patent entitled "Cannabinoids as Antioxidants and Neuroprotectants" (#6,630,507) was awarded to the United States Department of Health and Human Services, based on research done at the National Institute of Mental Health (NIMH), and the National Institute of Neurological Disorders and Stroke (NINDS). This patent claims that cannabinoids are "useful in the treatment and prophylaxis of wide variety of oxidation associated diseases, such as ischemic, age-related, inflammatory and autoimmune diseases. The



Cannabis female flowers closeup with trichomes (white). These plant parts contain the highest concentration of medicinal compounds.

cannabinoids are found to have particular application as neuroprotectants, for example in limiting neurological damage following ischemic insults, such as stroke and trauma, or in the treatment of neurodegenerative diseases, such as Alzheimer's disease, Parkinson's disease and HIV dementia."^{[148][149]}

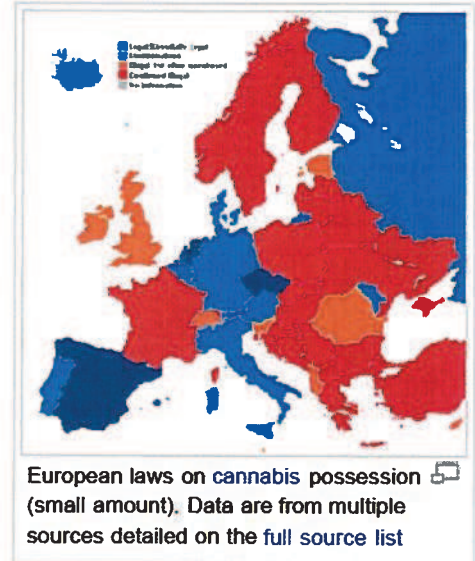
National and international regulations

[edit]

Main article: Legal and medical status of cannabis

Cannabis is in Schedule IV of the United Nations' Single Convention on Narcotic Drugs, making it subject to special restrictions. Article 2 provides for the following, in reference to Schedule IV drugs:^[150]

A Party shall, if in its opinion the prevailing conditions in its country render it the most appropriate means of protecting the public health and welfare, prohibit the production, manufacture, export and import of, trade in, possession or use of any such drug except for amounts which may be necessary for medical and scientific research only, including clinical trials therewith to be conducted under or subject to the direct supervision and control of the Party.



The convention thus allows countries to outlaw cannabis for all non-research purposes but lets nations choose to allow medical and scientific purposes if they believe total prohibition is not the most appropriate means of protecting health and welfare. The convention requires that states that permit the production or use of medical cannabis must operate a licensing system for all cultivators, manufacturers and distributors and ensure that the total cannabis market of the state shall not exceed that required "for medical and scientific purposes."^[150]

Austria

[edit]

In Austria both Δ^9 -THC and pharmaceutical preparations containing Δ^9 -THC are listed in annex V of the Narcotics Decree (*Suchtgiftverordnung*).^[151] Compendial formulations are manufactured upon prescription according to the German *Neues Rezeptur-Formularium*.^{[152][153]}

On July 9, 2008, the Austrian Parliament approved cannabis cultivation for scientific and medical uses.^[154] Cannabis cultivation is controlled by the Austrian Agency for Health and Food Safety (*Österreichische Agentur für Gesundheit und Ernährungssicherheit, AGES*).^[155]

Canada

[edit]

In Canada, the regulation on access to marijuana for medical purposes, established by Health Canada in July 2001, defines two categories of patients eligible for access to medical cannabis. Category 1 covers any symptoms treated within the context of providing compassionate end-of-life care or the symptoms associated with medical conditions listed below:

- severe pain and/or persistent muscle spasms from multiple sclerosis, from a spinal cord injury, from spinal cord disease,
- severe pain, cachexia, anorexia, weight loss, and/or severe nausea from cancer or HIV/AIDS infection,
- severe pain from severe forms of arthritis, or
- seizures from epilepsy.

Category 2 is for applicants who have debilitating symptom(s) of medical condition(s), other than those described in Category 1. The application of eligible patients must be supported by a medical practitioner.^[156]

The cannabis distributed by Health Canada is provided under the brand CannaMed by the company Prairie Plant Systems Inc. In 2006, 420 kg of CannaMed cannabis was sold, representing an increase of 80% over the previous year.^[157] However, patients complain of the single strain selection as well as low potency, providing a pre-ground product put through a wood chipper (which deteriorates rapidly) as well as gamma irradiation and foul taste and smell.^[158]

It is also legal for patients approved by Health Canada to grow their own cannabis for personal consumption, and it's possible to obtain a production license as a person designated by a patient. Designated producers were permitted to grow a cannabis supply for only a single patient, however. That regulation and related restrictions on supply were found unconstitutional by the Federal Court of Canada in January, 2008. The court found that these regulations did not allow a sufficient legal supply of medical cannabis, and thus forced many patients to purchase their medicine from unauthorized, black market sources. This was the eighth time in the previous ten years that the courts ruled against Health Canada's regulations restricting the supply of the medicine.^[159]

In May, 2009, Health Canada revised their earlier regulations to permit licensed, designated producers to grow cannabis for a maximum of two patients. The move was called a "mockery" of the court's intention by lawyer Ron Marzel, who represented plaintiffs in the successful challenge in Federal Court to Health Canada's previously existing rules. Marzel has announced plans to ask the court to overturn all prohibitions on cannabis use if Health Canada refuses to create regulations that will allow an adequate legal supply for use by medically-authorized patients.^[159]

In Canada there are four forms of medical marijuana. The first one is a cannabis extract called Sativex that contains THC and cannabidiol in a spray form. The second is a synthetic or manmade THC called dronabinol marketed as Marinol. The third also a synthetic version of THC called nabilone that is called Cesamet on the markets. The fourth product is the herbal form of cannabis often referred to as marijuana.^[160]

Germany

[edit]

In Germany dronabinol was rescheduled 1994 from annex I to annex II of the Narcotics Law (*Betäubungsmittelgesetz*) in order to ease research; in 1998 dronabinol was rescheduled from annex II to annex III and since then has been available by prescription,^[161] whereas Δ^9 -THC is still listed in annex I.^[162] Manufacturing instructions for dronabinol containing compendial formulations are described in the *Neues Rezeptur-Formularium*.^[153]

Spain

[edit]

In Spain, since the late 1990s and early 2000s, medical cannabis underwent a process of progressive decriminalization and legalisation. The parliament of the region of Catalonia is the first in Spain have voted unanimously in 2001 legalizing medical marijuana, it is quickly followed by parliaments of Aragon and the Balearic Islands.^[citation needed] The Spanish Penal Code prohibits the sale of cannabis but it does not prohibit consumption. Until early 2000, the Penal Code did not distinguish between therapeutic use of cannabis and recreational use, however, several court decisions show that this distinction is increasingly taken into account by the judges. From 2006, the sale of seed is legalized,^[citation needed] the sale and public consumption remains illegal, and private cultivation and use are permitted.^{[163][164]}

Several studies have been conducted to study the effects of cannabis on patients suffering from diseases like cancer, AIDS, multiple sclerosis, seizures or asthma. This research was conducted by various Spanish agencies at the Universidad Complutense de Madrid headed by Manuel Guzman, the hospital of La Laguna in Tenerife led neurosurgeon Luis González Feria or the University of

Barcelona.^[citation needed]

Several cannabis consumption clubs and user associations have been established throughout Spain. These clubs, the first of which was created in 1991, are non-profit associations who grow cannabis and sell it at cost to its members. The legal status of these clubs is uncertain: in 1997, four members of the first club, the Barcelona Ramón Santos Association of Cannabis Studies, were sentenced to 4 months in prison and a 3000 euro fine, while at about the same time, the court of Bilbao ruled that another club was not in violation of the law. The Andalusian regional government also commissioned a study by criminal law professors on the "Therapeutic use of cannabis and the creation of establishments of acquisition and consumption. The study concluded that such clubs are legal as long as they distribute only to a restricted list of legal adults, provide only the amount of drugs necessary for immediate consumption, and not earn a profit. The Andalusian government never formally accepted these guidelines and the legal situation of the clubs remains insecure. In 2006 and 2007, members of these clubs were acquitted in trial for possession and sale of cannabis and the police were ordered to return seized crops.^[164]

United Kingdom

[edit]

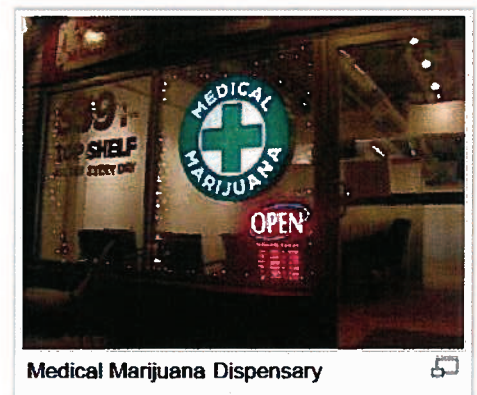
In the **United Kingdom**, if you are arrested or taken to court for possession of cannabis, you are asked if there are any mitigating factors to explain why it is in your possession. It is unknown whether this is solely a formality, or if an excuse of medical usage has ever been used successfully to reduce the penalty issued. However, in the **United Kingdom**, possession of small quantities of cannabis does not usually warrant an arrest or court appearance (street cautions or fines are often given out instead). Under UK law, certain cannabinoids are permitted medically,^[165] but these are strictly controlled with many provisos under the **Misuse of drugs act 1971** (in the 1985 amendments). The British Medical Associations official stance is "users of cannabis for medical purposes should be aware of the risks, should enroll for clinical trials, and should talk to their doctors about new alternative treatments; but we do not advise them to stop."^[165]

United States

[edit]

Main article: Medical cannabis in the United States

In the **United States** federal level of government, cannabis *per se* has been made criminal by implementation of the **Controlled Substances Act** which classifies marijuana as a **Schedule I drug**, the strictest classification on par with **heroin**, **LSD** and **Ecstasy**, and the **Supreme Court** ruled in 2005 that the **Commerce Clause** of the **U.S. Constitution** allowed the government to ban the use of cannabis, including medical use. The **United States Food and Drug Administration** states "marijuana has a high potential for abuse, has no currently accepted medical use in treatment in the **United States**, and has a lack of accepted safety for use under medical supervision".^{[108][166]}



Medical Marijuana Dispensary

Sixteen states have legalized medical marijuana: **Alaska**,^[167] **Arizona**,^[168] **California**,^[169] **Colorado**,^[170] **Hawaii**,^[171] **Maine**,^[172] **Michigan**,^[173] **Montana**,^[174] **Nevada**,^[175] **New Jersey**,^[176] **New Mexico**,^[177] **Oregon**,^[178] **Rhode Island**,^[179] **Vermont**,^[180] **Virginia**,^[181] **Washington**,^[182] and **Washington D.C.** Maryland allows for reduced penalties if cannabis use has a medical basis.^[183] Despite its legality in Washington, an employee can be still be fired if they test positive on a drug test, despite having a doctor's prescription.^[184] California, Colorado, New Mexico, Maine, Rhode Island, Montana, and Michigan are currently the only states to utilize dispensaries to sell medical cannabis. California's medical marijuana industry took in about \$2 billion a year and generated \$100

million in state sales taxes during 2008^[185] with an estimated 2,100 dispensaries, co-operatives, wellness clinics and taxi delivery services in the sector colloquially known as "cannabusiness".^[186]

On 19 October 2009 the US Deputy Attorney General issued a US Department of Justice memorandum to "All United States Attorneys" providing clarification and guidance to federal prosecutors in US States that have enacted laws authorizing the medical use of marijuana. The document is intended solely as "a guide to the exercise of investigative and prosecutorial discretion and as guidance on resource allocation and federal priorities." The US Deputy Attorney General David W. Ogden provided seven criteria, the application of which acts as a guideline to prosecutors and federal agents to ascertain whether a patient's use, or their caregivers' provision, of medical marijuana "represents part of a recommended treatment regimen consistent with applicable state law", and recommends against prosecuting patients using medical cannabis products according to state laws. Not applying those criteria, the Dep. Attorney General Ogden concludes, would likely be "an inefficient use of limited federal resources". The memorandum does not change any laws. Sale of cannabis remains illegal under federal law. The U.S. Food and Drug Administration's position, that marijuana has no accepted value in the treatment of any disease in the United States, has also remained the same.^[187]

The Health and Human Services Division of the federal government holds a patent for medical marijuana. The patent, "Cannabinoids as antioxidants and neuroprotectants", issued October 2003^[148] reads: "Cannabinoids have been found to have antioxidant properties, unrelated to NMDA receptor antagonism. This new found property makes cannabinoids useful in the treatment and prophylaxis of wide variety of oxidation associated diseases, such as ischemic, age-related, inflammatory and autoimmune diseases. The cannabinoids are found to have particular application as neuroprotectants, for example in limiting neurological damage following ischemic insults, such as stroke and trauma, or in the treatment of neurodegenerative diseases, such as Alzheimer's disease, Parkinson's disease and HIV dementia..."^[188]













See also

[edit]

- **American Alliance for Medical Cannabis**
- Chinese herbology
- Legality of cannabis by country
- Multidisciplinary Association for Psychedelic Studies
- Tilden's Extract

References

[edit]

1. [^] Mohamed Ben Amar (2006). "Cannabinoids in medicine: A review of their therapeutic potential" . *Journal of Ethnopharmacology* **105** (1–2): 1–25. doi:10.1016/j.jep.2006.02.001 . PMID 16540272 . Retrieved 8 April 2010.
2. [^] Aggarwal SK, Carter GT, Sullivan MD, ZumBrunnen C, Morrill R, Mayer JD (2009). "Medicinal use of cannabis in the United States: historical perspectives, current trends, and future directions" . *J Opioid Manag* **5** (3): 153–68. PMID 19662925 . Lay summary  – *SF Weekly* (15 September 2009).
3. [^] "IACM 5th Conference on Cannabinoids in Medicine"  (PDF). International Association for Cannabis as Medicine. Retrieved 2011-07-28.
4. [^] Joy, Janet E.; Watson, Stanley J.; Benson, John A., eds (1999). *Marijuana and Medicine: Assessing the Science Base* . Washington, D.C.: National Academies Press. p. 13 . ISBN 978-0-309-07155-0. OCLC 246585475 .
5. [^] ^a ^b "Workshop on the Medical Utility of Marijuana" . National Institutes of Health. 1997. Retrieved 26 April 2009.
6. [^] Grotenhermen, Franjo (2002). "Review of Therapeutic Effects" . *Cannabis and Cannabinoids: Pharmacology, Toxicology and Therapeutic Potential*. New York City: Haworth Press. p. 124. ISBN 978-0-7890-1508-2.
7. [^] Russo EB (2004). "Clinical endocannabinoid deficiency (CECD): can this concept explain therapeutic benefits of cannabis in migraine, fibromyalgia, irritable bowel syndrome and other treatment-resistant

conditions?"  *Neuro Endocrinology Letters* **25** (1–2): 31–9. PMID 15159679 .

8. ^ Zajicek J, Fox P, Sanders H, *et al.* (2003). "Cannabinoids for treatment of spasticity and other symptoms related to multiple sclerosis (CAMS study): multicentre randomised placebo-controlled trial" . *Lancet* **362** (9395): 1517–26. doi:10.1016/S0140-6736(03)14738-1 . PMID 14615106 .
9. ^ "Spinal Cord Injury and Disease" . *Therapeutic Uses of Marijuana*. Medical Marijuana Information Resource Centre. Retrieved 9 August 2009.
10. ^ Maurer M, Henn V, Dittrich A, Hofmann A (1990). "Delta-9-tetrahydrocannabinol shows antispastic and analgesic effects in a single case double-blind trial". *European Archives of Psychiatry and Clinical Neuroscience* **240** (1): 1–4. doi:10.1007/BF02190083 . PMID 2175265 .
11. ^ Kogel RW, Johnson PB, Chintam R, Robinson CJ, Nernchausky BA (1995). "Treatment of Spasticity in Spinal Cord Injury with Dronabinol, a Tetrahydrocannabinol Derivative". *American Journal of Therapeutics* **2** (10): 799–805. doi:10.1097/00045391-199510000-00012 . PMID 11854790 .
12. ^ Thanos PK, Dimitrakakis ES, Rice O, Gifford A, Volkow ND (2005). "Ethanol self-administration and ethanol conditioned place preference are reduced in mice lacking cannabinoid CB1 receptors". *Behavioural Brain Research* **164** (2): 206–13. doi:10.1016/j.bbr.2005.06.021 . PMID 16140402 .
13. ^ Carter GT, Rosen BS (2001). "Marijuana in the management of amyotrophic lateral sclerosis". *The American Journal of Hospice & Palliative Care* **18** (4): 264–70. doi:10.1177/104990910101800411 . PMID 11467101 .
14. ^ Weydt P, Hong S, Witting A, Möller T, Stella N, Kliot M (2005). "Cannabinol delays symptom onset in SOD1 (G93A) transgenic mice without affecting survival". *Amyotrophic Lateral Sclerosis and Other Motor Neuron Disorders* **6** (3): 182–4. doi:10.1080/14660820510030149 . PMID 16183560 .
15. ^ Malfait AM, Gallily R, Sumariwalla PF, *et al.* (2000). "The nonpsychoactive cannabis constituent cannabidiol is an oral anti-arthritic therapeutic in murine collagen-induced arthritis" (Free full text). *Proceedings of the National Academy of Sciences of the United States of America* **97** (17): 9561–6. doi:10.1073/pnas.160105897 . PMC 16904 . PMID 10920191 .
16. ^ Tashkin DP, Shapiro BJ, Lee YE, Harper CE (1975). "Effects of smoked marijuana in experimentally induced asthma" . *The American Review of Respiratory Disease* **112** (3): 377–86. PMID 1099949 .
17. ^ Steffens, S; Veillard, NR; Arnaud, C; Pelli, G; Burger, F; Staub, C; Karsak, M; Zimmer, A *et al.* (16 April 2005). "Cannabis may help keep arteries clear". *New Scientist* **434** (7034): 782. doi:10.1038/nature03389 . PMID 15815632 .
18. ^ Grinspoon L, Bakalar JB (1998). "The use of cannabis as a mood stabilizer in bipolar disorder: anecdotal evidence and the need for clinical research" . *Journal of Psychoactive Drugs* **30** (2): 171–7. PMID 9692379 .
19. ^ Ashton CH, Moore PB, Gallagher P, Young AH (2005). "Cannabinoids in bipolar affective disorder: a review and discussion of their therapeutic potential". *Journal of Psychopharmacology* **19** (3): 293–300. doi:10.1177/0269881105051541 . PMID 15888515 .
20. ^ Patsos HA, Hicks DJ, Dobson RR, *et al.* (2005). "The endogenous cannabinoid, anandamide, induces cell death in colorectal carcinoma cells: a possible role for cyclooxygenase 2". *Gut* **54** (12): 1741–50. doi:10.1136/gut.2005.073403 . PMC 1774787 . PMID 16099783 .
21. ^ Abrams, D.I., MD; Jay, C.A., MD (2007). "Cannabis in painful HIV-Associated Sensory Neuropathy" . *Neurology* **68** (7): 515–521. doi:10.1212/01.wnl.0000253187.66183.9c . PMID 17296917 . Retrieved 2/3/2011.
22. ^ Bambico FR, Katz N, Debonnel G, Gobbi G (2007). "Cannabinoids elicit antidepressant-like behavior and activate serotonergic neurons through the medial prefrontal cortex" (Free full text). *The Journal of Neuroscience* **27** (43): 11700–11. doi:10.1523/JNEUROSCI.1636-07.2007 . PMID 17959812 . Lay summary  – *Fox News Channel* (25 October 2007).
23. ^ Denson TF, Earleywine M (April 2006). "Decreased depression in marijuana users" . *Addictive Behaviors* **31** (4): 738–42. doi:10.1016/j.addbeh.2005.05.052 . PMID 15964704 .
24. ^ Jiang W, Zhang Y, Xiao L, *et al.* (2005). "Cannabinoids promote embryonic and adult hippocampus neurogenesis and produce anxiolytic- and antidepressant-like effects" (Free full text). *The Journal of Clinical Investigation* **115** (11): 3104–16. doi:10.1172/JCI25509 . PMC 1253627 . PMID 16224541 .
25. ^ El-Remessy AB, Al-Shabrawey M, Khalifa Y, Tsai NT, Caldwell RB, Liou GI (2006). "Neuroprotective and blood-retinal barrier-preserving effects of cannabidiol in experimental diabetes" (Free full text). *The*

American Journal of Pathology **168** (1): 235–44. doi:10.2353/ajpath.2006.050500 [PMID 1592672](#) [PMID 16400026](#) [PMID 16400026](#).

26. [^] Fox SH, Kellett M, Moore AP, Crossman AR, Brotchie JM (2002). "Randomised, double-blind, placebo-controlled trial to assess the potential of cannabinoid receptor stimulation in the treatment of dystonia". *Movement Disorders* **17** (1): 145–9. doi:10.1002/mds.1280 [PMID 11835452](#) [PMID 11835452](#).
27. [^] "Cannabis could be used to treat epilepsy" [PMID 11835452](#). Telegraph. 2011-04-10. Retrieved 2011-04-20.
28. [^] Marsicano G, Goodenough S, Monory K, *et al.* (2003). "CB1 cannabinoid receptors and on-demand defense against excitotoxicity". *Science* **302** (5642): 84–8. doi:10.1126/science.1088208 [PMID 14526074](#) [PMID 14526074](#).
29. [^] Bacci A, Huguenard JR, Prince DA (2004). "Long-lasting self-inhibition of neocortical interneurons mediated by endocannabinoids". *Nature* **431** (7006): 312–6. doi:10.1038/nature02913 [PMID 15372034](#) [PMID 15372034](#). Lay summary [PMID 15372034](#) – *Science Daily* (16 September 2004).
30. [^] Di Carlo G, Izzo AA (2003). "Cannabinoids for gastrointestinal diseases: potential therapeutic applications". *Expert Opinion on Investigational Drugs* **12** (1): 39–49. doi:10.1517/13543784.12.1.39 [PMID 12517253](#) [PMID 12517253](#).
31. [^] Lorente M, Carracedo A, Torres S, *et al.* (2009). "Amphiregulin is a factor for resistance of glioma cells to cannabinoid-induced apoptosis". *Glia* **57** (13): NA. doi:10.1002/glia.20856 [PMID 19229996](#) [PMID 19229996](#).
32. [^] Ramer R, Hinz B (2008). "Inhibition of cancer cell invasion by cannabinoids via increased expression of tissue inhibitor of matrix metalloproteinases-1" (Free full text). *Journal of the National Cancer Institute* **100** (1): 59–69. doi:10.1093/jnci/djm268 [PMID 18159069](#) [PMID 18159069](#).
33. [^] Sylvestre DL, Clements BJ, Malibu Y (2006). "Cannabis use improves retention and virological outcomes in patients treated for hepatitis C". *European Journal of Gastroenterology & Hepatology* **18** (10): 1057–63. doi:10.1097/01.meg.0000216934.22114.51 [PMID 16957511](#) [PMID 16957511](#).
34. [^] Iuvone, T.; Esposito, G.; De Filippis, D.; Scuderi, C.; Steardo, L. (2009). "Cannabidiol: A Promising Drug for Neurodegenerative Disorders?". *CNS Neuroscience & Therapeutics* **15** (1): 65–75. doi:10.1111/j.1755-5949.2008.00065.x [PMID 19228180](#) [PMID 19228180](#). edit
35. [^] Powles T, te Poele R, Shamash J, *et al.* (2005). "Cannabis-induced cytotoxicity in leukemic cell lines: the role of the cannabinoid receptors and the MAPK pathway" (Free full text). *Blood* **105** (3): 1214–21. doi:10.1182/blood-2004-03-1182 [PMID 15454482](#) [PMID 15454482](#).
36. [^] Casanova ML, Blázquez C, Martínez-Palacio J, *et al.* (2003). "Inhibition of skin tumor growth and angiogenesis in vivo by activation of cannabinoid receptors" (Free full text). *The Journal of Clinical Investigation* **111** (1): 43–50. doi:10.1172/JCI16116 [PMID 151833](#) [PMID 151833](#). [PMID 12511587](#) [PMID 12511587](#).
37. [^] Appendino G, Gibbons S, Giana A, Pagani A, Grassi G, Stavri M, Smith E, Rahman MM (2008). "Antibacterial Cannabinoids from *Cannabis sativa*: A Structure—Activity Study" [PMID 18681481](#) (PDF). *J Nat Prod* **71** (8): 1427–30. doi:10.1021/np8002673 [PMID 18681481](#) [PMID 18681481](#). Retrieved 6 November 2010. Lay summary [PMID 18681481](#) – *WebMD* (4 September 2008).
38. [^] Kreitzer AC, Malenka RC (2005). "Endocannabinoid-mediated rescue of striatal LTD and motor deficits in Parkinson's disease models". *Nature* **445** (7128): 643–7. doi:10.1038/nature05506 [PMID 17287809](#) [PMID 17287809](#). Lay summary [PMID 17287809](#) – *Stanford University School of Medicine* (7 February 2007).
39. [^] Szepietowski JC, Szepietowski T, Reich A (2005). "Efficacy and tolerance of the cream containing structured physiological lipids with endocannabinoids in the treatment of uremic pruritus: a preliminary study". *Acta Dermatovenerologica Croatica* **13** (2): 97–103. [PMID 16324422](#) [PMID 16324422](#).
40. [^] Bergasa NV (2005). "The pruritus of cholestasis". *Journal of Hepatology* **43** (6): 1078–88. doi:10.1016/j.jhep.2005.09.004 [PMID 16253381](#) [PMID 16253381](#).
41. [^] Ganon-Elazar E, Akirav I (2009). "Cannabinoid receptor activation in the basolateral amygdala blocks the effects of stress on the conditioning and extinction of inhibitory avoidance.". *J. Neurosci* **29** (36): 11078–88. doi:10.1523/JNEUROSCI.1223-09.2009 [PMID 19741114](#) [PMID 19741114](#). Lay summary [PMID 19741114](#) – *PsychCentral* (5 Nov 2009).
42. [^] Wilkinson, J. D.; Williamson, E. M. (2007). "Cannabinoids inhibit human keratinocyte proliferation through a non-CB1/CB2 mechanism and have a potential therapeutic value in the treatment of psoriasis". *Journal of Dermatological Science* **45** (2): 87–92. doi:10.1016/j.jdemsci.2006.10.009 [PMID 17157480](#) [PMID 17157480](#). edit
43. [^] Howard, J.; Anie, K. A.; Holdcroft, A.; Kom, S.; Davies, S. C. (2005). "Cannabis use in sickle cell disease: A questionnaire study". *British Journal of Haematology* **131** (1): 123–128. doi:10.1111/j.1365-

2141.2005.05723.x [↗](#). PMID 16173972 [↗](#). edit

44. [^] Carley DW, Paviovic S, Janelidze M, Radulovacki M (2002). "Functional role for cannabinoids in respiratory stability during sleep" [↗](#) (Free full text). *Sleep* **25** (4): 391–8. PMID 12071539 [↗](#).
45. [^] Grotenhermen, Russo. Cannabis and Cannabinoids: Pharmacology, Toxicology, and Therapeutic Potential . New York: The Hawthorn Integrative Healing Press, 2002,. Grotenhermen, "Review of Therapeutic Effects." Chapter 11, p. 128
46. [^] Singer HS (2005). "Tourette's syndrome: from behaviour to biology". *Lancet Neurol* **4** (3): 149–59. doi:10.1016/S1474-4422(05)01012-4 [↗](#). PMID 15721825 [↗](#).
47. [^] Singer HS (March 2005). "Tourette's syndrome: from behaviour to biology". *The Lancet Neurology* **4** (3): 149–59. doi:10.1016/S1474-4422(05)01012-4 [↗](#). PMID 15721825 [↗](#).
48. [^] Robertson MM (March 2000). "Tourette syndrome, associated conditions and the complexities of treatment.". *Brain : a journal of neurology* **123 Pt 3**: 425–62. doi:10.1093/brain/123.3.425 [↗](#). PMID 10686169 [↗](#).
49. [^] Sandyk R, Awerbuch G (1988). "Marijuana and Tourette's syndrome.". *Journal of clinical psychopharmacology* **8** (6): 444–5. doi:10.1097/00004714-198812000-00021 [↗](#). PMID 3235704 [↗](#).
50. [^] Müller-Vahl KR, Kolbe H, Dengler R (1997). "Gilles de la Tourette syndrome. Effect of nicotine, alcohol and marihuana on clinical symptoms.". *Der Nervenarzt* **68** (12): 985–9. PMID 9465342 [↗](#).
51. [^] Eubanks LM, Rogers CJ, Beuscher AE, *et al.* (2006). "A molecular link between the active component of marijuana and Alzheimer's disease pathology" (Free full text). *Molecular Pharmaceutics* **3** (6): 773–7. doi:10.1021/mp060066m [↗](#). PMC 2562334 [↗](#). PMID 17140265 [↗](#).
52. [^] "Medical marijuana and the mind". *Harvard Mental Health Letter* **26** (10): 1–3. 2010.
53. [^] "Friser, M., *et al.*, Assessing the impact of cannabis use on trends in diagnosed schizophrenia in the United Kingdom from 1996 to 2005, *Schizophr. Res.* (2009)" [↗](#). Keele University. 2009. doi:10.1016/j.schres.2009.05.031 [↗](#). Retrieved 30 May 2009.
54. [^] Hashibe M, Morgenstern H, Cui Y, Tashkin D, *et al.* (2006). "Marijuana use and the risk of lung and upper aerodigestive tract cancers: results of a population-based case-control study". *Cancer Epidemiol. Biomarkers Prev.* **15** (10): 1829–34. doi:10.1158/1055-9965.EPI-06-0330 [↗](#). PMID 17035389 [↗](#). Lay summary [↗](#).
55. [^][\[unreliable medical source?\]](#) Osterweil, Neil (24 May 2006). "ATS: Marijuana Smoking Found Non-Carcinogenic" [↗](#). MedPage Today. Retrieved 12 August 2009.
56. [^][\[unreliable medical source?\]](#) Kaufman, Marc (26 May 2006). "Study Finds No Cancer-Marijuana Connection" [↗](#). *The Washington Post*. Retrieved 12 August 2009.
57. [^] Aldington S, Harwood M, Cox B, *et al.* (2008). "Cannabis use and risk of lung cancer: a case-control study.". *European Respiratory Journal* **31** (1): 280–6. doi:10.1183/09031936.00065707 [↗](#). PMC 2516340 [↗](#). PMID 18238947 [↗](#). Lay summary [↗](#).
58. [^] Hii SW, Tam JD, Thompson BR, Naughton MT (2008). "Bullous lung disease due to marijuana.". *Respirology* **13** (1): 122–7. doi:10.1111/j.1440-1843.2007.01186.x [↗](#). PMID 18197922 [↗](#). Lay summary [↗](#).
59. [^][\[unreliable medical source?\]](#)American Thoracic Society (21 May 2007). "Marijuana Worsens COPD Symptoms in Current Cigarette Smokers" [↗](#). Press release. Retrieved 11 August 2009.
60. [^][\[unreliable medical source?\]](#)"Marijuana smoking increases risk of COPD for tobacco smokers" [↗](#). PhysOrg.com. 13 April 2009. Retrieved 12 August 2009.
61. [^] Tan, WC; Lo, C; Jong, A; Xing, L; Fitzgerald, MJ; Vollmer, WM; Buist, SA; Sin, DD *et al.*; *et al.* for the Vancouver Burden of Obstructive Lung Disease (BOLD) Research Group (14 April 2009). "Marijuana and chronic obstructive lung disease: a population-based study" [↗](#) (PDF). *CMAJ* (Toronto: Canadian Medical Association) **180** (8): 814–20. doi:10.1503/cmaj.081040 [↗](#). PMC 2665947 [↗](#). PMID 19364790 [↗](#). Retrieved 15 August 2009.
62. [^] Tashkin, Donald P. (14 April 2009). "Does smoking marijuana increase the risk of chronic obstructive pulmonary disease?" [↗](#) (PDF). *CMAJ* (Toronto: Canadian Medical Association) **180** (8): 797–8. doi:10.1503/cmaj.090142 [↗](#). PMC 2665954 [↗](#). PMID 19364782 [↗](#). Retrieved 16 August 2009.
63. ^{^ a b} McAllister SD, Christian RT, Horowitz MP, Garcia A, Desprez PY (2007). "Cannabidiol as a novel inhibitor of Id-1 gene expression in aggressive breast cancer cells" (Free full text). *Molecular Cancer Therapeutics* **6** (11): 2921–7. doi:10.1158/1535-7163.MCT-07-0371 [↗](#). PMID 18025276 [↗](#). Lay summary [↗](#) – *BBC News* (19 November 2007).

64. ^a Haney M, Gunderson EW, Rabkin J, *et al.* (2007). "Dronabinol and marijuana in HIV-positive marijuana smokers. Caloric intake, mood, and sleep". *Journal of Acquired Immune Deficiency Syndromes* **45** (5): 545–54. doi:10.1097/QAI.0b013e31811ed205 [↗](#). PMID 17589370 [↗](#).
65. ^a Abrams DI, Hilton JF, Leiser RJ, *et al.* (2003). "Short-term effects of cannabinoids in patients with HIV-1 infection: a randomized, placebo-controlled clinical trial". *Annals of Internal Medicine* **139** (4): 258–66. PMID 12965981 [↗](#).
66. ^a Ellis RJ, Toperoff W, Vaida F, *et al.* (2009). "Smoked medicinal cannabis for neuropathic pain in HIV: a randomized, crossover clinical trial". *Neuropsychopharmacology* **34** (3): 672–80. doi:10.1038/npp.2008.120 [↗](#). PMID 18688212 [↗](#).
67. ^a Abrams DI, Jay CA, Shade SB, *et al.* (2007). "Cannabis in painful HIV-associated sensory neuropathy: a randomized placebo-controlled trial". *Neurology* **68** (7): 515–21. doi:10.1212/01.wnl.0000253187.66183.9c [↗](#). PMID 17296917 [↗](#).
68. ^a Phillips TJ, Cherry CL, Cox S, Marshall SJ, Rice AS (2010). "Pharmacological treatment of painful HIV-associated sensory neuropathy: a systematic review and meta-analysis of randomised controlled trials". *PLoS ONE* **5** (12): e14433. doi:10.1371/journal.pone.0014433 [↗](#). PMC 3010990 [↗](#). PMID 21203440 [↗](#).
69. ^{a a b} Salazar M, Carracedo A, Salanueva IJ, *et al.* (2009). "Cannabinoid action induces autophagy-mediated cell death through stimulation of ER stress in human glioma cells". *The Journal of Clinical Investigation* **119** (5): 1359–72. doi:10.1172/JCI37948 [↗](#). PMC 2673842 [↗](#). PMID 19425170 [↗](#). Lay summary [↗](#) – *HealthDay* (1 April 2009).
70. ^{a a b} Morel LJ, Giros B, Daugé V (2009). "Adolescent Exposure to Chronic Delta-9-Tetrahydrocannabinol Blocks Opiate Dependence in Maternally Deprived Rats". *Neuropsychopharmacology* **34** (11): 2469–76. doi:10.1038/npp.2009.70 [↗](#). PMID 19553915 [↗](#). Lay summary [↗](#) – *PhysOrg.com* (7 July 2009).
71. ^a Raby WN, Carpenter KM, Rothenberg J, *et al.* (July 2009). "Intermittent marijuana use is associated with improved retention in naltrexone treatment for opiate-dependence". *The American Journal on Addictions* **18** (4): 301–8. doi:10.1080/10550490902927785 [↗](#). PMC 2753886 [↗](#). PMID 19444734 [↗](#).
72. ^a Mikuriya TH (1969). "Marijuana in medicine: past, present and future". *California Medicine* **110** (1): 34–40. PMC 1503422 [↗](#). PMID 4883504 [↗](#).
73. ^{a a b} De-Vries, Kay; Anita J Green (17). "Cannabis use in palliative care – an examination of the evidence and the implications for nurses" [↗](#). *Journal of Clinical Nursing* **19** (19): 2454–2462. doi:10.1111/j.1365-2702.2010.03274.x [↗](#). PMID 20920073 [↗](#).
74. ^{a a b} Lakhan SE, Rowland M (2009). "Whole plant cannabis extracts in the treatment of spasticity in multiple sclerosis: a systematic review". *BMC Neurology* **9**: 59. doi:10.1186/1471-2377-9-59 [↗](#). PMC 2793241 [↗](#). PMID 19961570 [↗](#).
75. ^a Ständer, Sonja; Martin Schmelz, Dieter Metze, Thomas Luger, Roman Rukwied (2005). "Distribution of cannabinoid receptor 1 (CB1) and 2 (CB2) on sensory nerve fibers and adnexal structures in human skin" [↗](#). *Journal of Dermatological Science* **38**: 177–188.
76. ^a Downer EJ, Campbell VA (Jan 2010). "Phytocannabinoids, CNS cells and development: A dead issue?". *Drug and Alcohol Review* **29** (1): 91–98. doi:10.1111/j.1465-3362.2009.00102.x [↗](#). PMID 20078688 [↗](#).
77. ^a Burns TL, Ineck JR (Feb 2006). "Cannabinoid analgesia as a potential new therapeutic option in the treatment of chronic pain". *The Annals of Pharmacotherapy* **40** (2): 251–260. doi:10.1345/aph.1G217 [↗](#). PMID 16449552 [↗](#).
78. ^a Kohn, David (5 November 2004). "Researchers buzzing about marijuana-derived medicines" [↗](#). *San Francisco Chronicle*. Retrieved 26 April 2009.
79. ^a Ben Amar M (April 2006). "Cannabinoids in medicine: A review of their therapeutic potential" [↗](#). *Journal of Ethnopharmacology* **105** (1–2): 1–25. doi:10.1016/j.jep.2006.02.001 [↗](#). PMID 16540272 [↗](#).
80. ^a Hampson AJ, Grimaldi M, Axelrod J, Wink D. (July 1998). "Cannabidiol and (-)Δ9-tetrahydrocannabinol are neuroprotective antioxidants" [↗](#). *PNAS* **95** (14): 8268–73. Bibcode 1998PNAS...95.8268H [↗](#). doi:10.1073/pnas.95.14.8268 [↗](#). PMC 20965 [↗](#). PMID 9653176 [↗](#). Retrieved 15 May 2011.
81. ^a Devane WA, Hanus L, Breuer A, Pertwee RG, Stevenson LA, Griffin G, Gibson D, Mandelbaum A, Etinger A, Mechoulam R (December 1992). "Isolation and structure of a brain constituent that binds to

- the cannabinoid receptor". *Science* **258** (5090): 1946–1949. doi:10.1126/science.1470919 [↗](#). PMID 1470919 [↗](#).
82. [^] Mechoulam R, Fride E (1995). "The unpaved road to the endogenous brain cannabinoid ligands, the anandamides". In Pertwee RG. *Cannabinoid receptors*. Boston: Academic Press. pp. 233–258. ISBN 0-12-551460-3.
 83. [^] Griie, L (1976). "A comparative study on some chemical and biological characteristics of various samples of cannabis resin". *Bulletin on Narcotics* **14**: 37–46.
 84. [^] ^a ^b Mechoulam R, Peters M, Murillo-Rodriguez E, Hanus LO (2007). "Cannabidiol—recent advances". *Chemistry & Biodiversity* **4** (8): 1678–92. doi:10.1002/cbdv.200790147 [↗](#). PMID 17712814 [↗](#).
 85. [^] Zuardi AW, Crippa JA, Hallak JE, Moreira FA, Guimarães FS (2006). "Cannabidiol, a Cannabis sativa constituent, as an antipsychotic drug" [↗](#). *Brazilian Journal of Medical and Biological Research* **39** (4): 421–9. doi:10.1590/S0100-879X2006000400001 [↗](#). PMID 16612464 [↗](#).
 86. [^] Sandyk, R.; Awerbuch, G. (1988). "Marijuana and Tourette's syndrome". *Journal of clinical psychopharmacology* **8** (6): 444–445. doi:10.1097/00004714-198812000-00021 [↗](#). PMID 3235704 [↗](#). edit
 87. [^] Kamiol IG, Shirakawa I, Takahashi RN, Knobel E, Musty RE (1975). "Effects of delta9-tetrahydrocannabinol and cannabiniol in man". *Pharmacology* **13** (6): 502–12. doi:10.1159/000136944 [↗](#). PMID 1221432 [↗](#).
 88. [^] McCallum ND, Yagen B, Levy S, Mechoulam R (1975). "Cannabiniol: a rapidly formed metabolite of delta-1- and delta-6-tetrahydrocannabinol". *Experientia* **31** (5): 520–1. PMID 1140243 [↗](#).
 89. [^] Mahadevan A, Siegel C, Martin BR, Abood ME, Beletskaya I, Razdan RK (2000). "Novel cannabiniol probes for CB1 and CB2 cannabinoid receptors". *Journal of Medicinal Chemistry* **43** (20): 3778–85. doi:10.1021/jm001572 [↗](#). PMID 11020293 [↗](#).
 90. [^] Petitet F, Jeantaud B, Reibaud M, Imperato A, Dubroeuq MC (1998). "Complex pharmacology of natural cannabinoids: evidence for partial agonist activity of delta9-tetrahydrocannabinol and antagonist activity of cannabidiol on rat brain cannabinoid receptors" [↗](#). *Life Sciences* **63** (1): PL1–6. doi:10.1016/S0024-3205(98)00238-0 [↗](#). PMID 9667767 [↗](#).
 91. [^] ^a ^b ^c ^d Gertsch J, Leonti M, Raduner S, *et al.* (2008). "Beta-caryophyllene is a dietary cannabinoid" (Free full text). *Proceedings of the National Academy of Sciences of the United States of America* **105** (26): 9099–104. doi:10.1073/pnas.0803601105 [↗](#). PMC 2449371 [↗](#). PMID 18574142 [↗](#).
 92. [^] Colasanti, B. (1990). "A comparison of the ocular and central effects of delta 9-tetrahydrocannabinol and cannabigerol". *Journal of ocular pharmacology* **6** (4): 259–269. PMID 1965836 [↗](#). edit
 93. [^] Colasanti, B.; Craig, C.; Allara, R. (1984). "Intraocular pressure, ocular toxicity and neurotoxicity after administration of cannabiniol or cannabigerol". *Experimental eye research* **39** (3): 251–259. PMID 6499952 [↗](#). edit
 94. [^] M E West and J Homi. "Cannabis as a medicine." *Br. J. Anaesth.* (1996) 76(1): 167 doi:10.1093/bja/76.1.167-a
 95. [^] ^a ^b Dr Farid F. Youssef. "Cannabis Unmasked: What it is and why it does what it does". UWIToday: June 2010. http://sta.uwi.edu/uwitoday/archive/june_2010/article9.asp [↗](#)
 96. [^] Evans, T. "Ganja-based eyedrops a hot sell." *Jamaica Gleaner*: August 24, 2003.
 97. [^] Eulalee Thompson. "Seeing through ganja". *The Jamaica Gleaner*: January 29, 2001 <http://jamaica-gleaner.com/gleaner/20010129/news/news2.html> [↗](#)
 98. [^] Koch, Wendy (23 June 2005). "Spray alternative to pot on the market in Canada" [↗](#). *USA Today*. Retrieved 16 August 2009.
 99. [^] "Sativex – Investigational Cannabis-Based Treatment for Pain and Multiple Sclerosis Drug Development Technology" [↗](#). SPG Media. Retrieved 2008-08-08.
 100. [^] Cooper, Rachel."GW Pharmaceuticals launches world's first prescription cannabis drug in Britain" [↗](#) *The Telegraph*. 21 June 2010. Retrieved 15 May 2011.
 101. [^] "Sativex Approved in New Zealand" [↗](#) GW Pharmaceuticals. 3 Nov.2010. Retrieved 15 May 2011.
 102. [^] "Sativex Approved in the Czech Republic" [↗](#) GW Pharmaceuticals. 15 April 2011. Retrieved 15 May 2011.
 103. [^] Greenberg, Gary (2005). "Respectable Reefer" [↗](#). *Mother Jones*. Retrieved 15 August 2009.
 104. [^] Skrabek RQ, Galimova L, Ethans K, Perry D (2008). "Nabilone for the treatment of pain in fibromyalgia". *The Journal of Pain* **9** (2): 164–73. doi:10.1016/j.jpain.2007.09.002 [↗](#). PMID 17974490 [↗](#).

Lay summary [↗](#) – *News-Medical.Net* (17 February 2008).

105. [^] "ALL PRICES FOR: Marinol – Brand Version : 10 mg" [↗](#). PharmacyChecker.com. Retrieved 2009-08-15.
106. [^] Food and Drug Administration (23 December 1992). "FDA approves new indication for Dronabinol" [↗](#). Press release. Archived from [\[http://www.fda.gov/bbs/topics/ANSWERS/ANS00457.html the original\]](http://www.fda.gov/bbs/topics/ANSWERS/ANS00457.html) on 6 May 1997. Retrieved 15 August 2009.
107. [^] "Sativex: CEDAC Final Recommendation on Reconsideration and Reasons for Recommendation" [↗](#). Canadian Agency for Drugs and Technologies in Health. 27 September 2007. Retrieved 16 August 2009.
108. ^{^ a b} Food and Drug Administration (20 April 2006). "Inter-Agency Advisory Regarding Claims That Smoked Marijuana Is a Medicine" [↗](#). Press release. Retrieved 9 August 2009.
109. [^] Nida: Marijuana, An Update from the National Institute on Drug Abuse, February, 2011 [↗](#)
110. [^] Minnesotans for Compassionate Care (11 March 2009). "Medical Marijuana Passes House Civil Justice Committee Without Dissent" [↗](#). Press release. Retrieved 10 August 2009.
111. [^] Joy, Janet E.; Watson, Stanley J.; Benson, John A., eds (1999). *Marijuana and Medicine: Assessing the Science Base* [↗](#). Washington, D.C.: National Academies Press. ISBN 978-0-309-07155-0. OCLC 246585475 [↗](#).
112. [^] Jatoi A, Windschitl HE, Loprinzi CL, *et al.* (2002). "Dronabinol versus megestrol acetate versus combination therapy for cancer-associated anorexia: a North Central Cancer Treatment Group study" (PDF). *Journal of Clinical Oncology* (Alexandria, VA: American Society of Clinical Oncology) **20** (2): 567–73. doi:10.1200/JCO.20.2.567 [↗](#). PMID 11786587 [↗](#). Lay summary [↗](#) – *Medscape* (30 January 2002).
113. [^] Strasser, F; Strasser, F; Luftner, D; Possinger, K; Ernst, G; Ruhstaller, T; Meissner, W; Ko, YD *et al.*; Luftner D, Possinger K, *et al.* (20 July 2006). "Comparison of Orally Administered Cannabis Extract and Delta-9-Tetrahydrocannabinol in Treating Patients With Cancer-Related Anorexia-Cachexia Syndrome: A Multicenter, Phase III, Randomized, Double-Blind, Placebo-Controlled Clinical Trial From the Cannabis-In-Cachexia-Study-Group". *Journal of Clinical Oncology* (Alexandria, VA: American Society of Clinical Oncology) **24** (21): 3394–3400. doi:10.1200/JCO.2005.05.1847 [↗](#). PMID 16849753 [↗](#).
114. ^{^ a b} "American Society of Addiction Medicine Rejects Use of 'Medical Marijuana,' Citing Dangers and Failure To Meet Standards of Patient Care, March 23, 2011" [↗](#). Maryland: Pnewswire.com. Retrieved 2011-04-20.
115. ^{^ a b} "Medical Marijuana, American Society of Addiction Medicine, 2010" [↗](#). Asam.org. 2010-04-01. Retrieved 2011-04-20.
116. [^] "MAPS/CanORML vaporizer and waterpipe studies" [↗](#). Maps.org. Retrieved 2009-11-14.
117. [^] Abrams DI, Vizoso HP, Shade SB, Jay C, Kelly ME, Benowitz NL (2007). "Vaporization as a smokeless cannabis delivery system: a pilot study". *Clinical Pharmacology and Therapeutics* **82** (5): 572–8. doi:10.1038/sj.clpt.6100200 [↗](#). PMID 17429350 [↗](#).
118. [^] Levitz SM, Diamond RD (1991). "Aspergillosis and marijuana". *Annals of Internal Medicine* **115** (7): 578–9. PMID 1652910 [↗](#).
119. [^] "AMA Urges Reclassifying Marijuana" [↗](#). Americans for Safe Access. Retrieved 10 January 2010.
120. [^] "Use of Cannabis for Medicinal Purposes" [↗](#). *Report 3 of the Council on Science and Public Health (I-09)*. American Medical Assn. Retrieved 10 January 2010.
121. [^] "Supporting Research into the Therapeutic Role of Marijuana" [↗](#) (PDF). The American College of Physicians. 2008. Retrieved 15 August 2009.
122. [^] "Medical Marijuana Endorsements and Statements of Support" [↗](#). Marijuana Policy Project. 2007. Archived from the original [↗](#) on 14 March 2008. Retrieved 29 January 2008.
123. [^] "Marijuana: Policy & Advocacy" [↗](#). American Academy of Family Physicians. 2009. Retrieved 6 October 2009.
124. [^] Abel, Ernest L. (1980). "Cannabis in the Ancient World" [↗](#). *Marihuana: the first twelve thousand years*. New York City: Plenum Publishers. ISBN 978-0-306-40496-2. ^[page needed]
125. [^] Li, Hui-Lin (1974). "An Archaeological and Historical Account of Cannabis in China", *Economic Botany* **28.4**:437–448, p. 444.
126. [^] Bretschneider, Emil (1895). *Botanicon Sinicum: Notes on Chinese Botany from Native and Western Sources. Part III, Botanical Investigations in the Materia Medica of the Ancient Chinese*. Kelly & Walsh.

127. ^ Wong, Ming (1976). *La Médecine chinoise par les plantes*. Paris: Tchou. OCLC 2646789  [\[page needed\]](#)
128. ^ Smith, Frederick Porter (1911). *Chinese Materia Medica: Vegetable Kingdom*. Shanghai: American Presbyterian Mission Press. pp. 90–91.
129. ^ de Crespigny, Rafe (2007). *A Biographical Dictionary of Later Han to the Three Kingdoms (23–220 CE)*. Leiden: Brill Publishers. p. 332. ISBN 978-90-04-15605-0. OCLC 71779118 
130. ^ "The Ebers Papyrus The Oldest (confirmed) Written Prescriptions For Medical Marihuana era 1,550 BC"  www.onlinepot.org. Retrieved 2008-06-10.
131. ^ "History of Cannabis"  www.reefermadnessmuseum.org. Archived from the original  on 2008-05-25. Retrieved 2008-07-09.
132. ^ Pain, Stephanie (2007-12-15). "The Pharaoh's pharmacists"  *New Scientist* (Reed Business Information Ltd.).
133. ^ Lise Manniche, *An Ancient Egyptian Herbal*, University of Texas Press, 1989, ISBN 978-0-292-70415-2  [\[page needed\]](#)
134. ^ Touw M (1981). "The religious and medicinal uses of Cannabis in China, India and Tibet"  *Journal of Psychoactive Drugs* **13** (1): 23–34. PMID 7024492 
135. ^ [a](#) [b](#) [c](#) [d](#) "The Haworth Press Online Catalog: Article Abstract"  www.haworthpress.com. Retrieved 2009-01-18.
136. ^ Lozano, Indalecio (2001). "The Therapeutic Use of Cannabis sativa (L.) in Arabic Medicine". *Journal of Cannabis Therapeutics* **1** (1): 63–70. doi:10.1300/J175v01n01_05 
137. ^ Mack, Allyson; Janet Elizabeth Joy (2001). *Marijuana as Medicine?: The Science Beyond the Controversy*. National Academy Press.
138. ^ "History of Cannabis"  BBC News. 2 November 2001. Retrieved 10 August 2009.
139. ^ [a](#) [b](#) "Marijuana – The First Twelve Thousand Years – Reefer Racism"  Druglibrary.org. Retrieved 2009-04-26.
140. ^ "Golden Guide"  www.zauberpilz.com.
141. ^ **(Czech)** "Nad léčivými jointy s Lumírem Hanušem"  blisty.cz. Retrieved 2011-05-03.
142. ^ Zimmerman, Bill; Nancy Crumpacker and Rick Bayer (1998). *Is Marijuana the Right Medicine for You? : A Factual Guide to Medical Uses of Marijuana*. Keats Publishing. ISBN 0879839066.  [\[page needed\]](#)
143. ^ Dr Farid F. Youssef. "Cannibis Unmasked: What it is and why it does what it does". UWIToday: June 2010. http://sta.uwi.edu/uwitoday/archive/june_2010/article9.asp 
144. ^ Baker, D.; Pryce, G., Giovannoni, G., Thompson, A.J. (2003). "The therapeutic potential of cannabis"  *Lancet Neurology* **2** (5): 291–98. doi:10.1016/S1474-4422(03)00381-8 . PMID 12849183 . Retrieved 15 August 2009.
145. ^ McPartland, John M.; Russo, Ethan B.. "Cannabis and Cannabis Extracts: Greater Than the Sum of Their Parts?"  *Journal of Cannabis Therapeutics*. International Association for Cannabis as Medicine.
146. ^ Mack, Alison ; Joy, Janet (2001). *Marijuana As Medicine*. National Academy Press. ISBN 0309065313.  [\[page needed\]](#)
147. ^ Russo, Ethan; Mathre, Mary Lynn; Byrne, Al; Velin, Robert; Bach, Paul J; Sanchez-ramos, Juan; Kirlin, Kristin A (2002). "Chronic Cannabis Use in the Compassionate Investigational New Drug Program: An Examination of Benefits and Adverse Effects of Legal Clinical Cannabis"  (PDF). *Journal of Cannabis Therapeutics* (The Haworth Press) **2** (1): 3. doi:10.1300/J175v02n01_02 
148. ^ [a](#) [b](#) US patent 6630507  [Hampson, Aidan J.; Axelrod, Julius; Grimaldi, Maurizio, "Cannabinoids as antioxidants and neuroprotectants", issued 2003-10-07](#)
149. ^ Cannabinoids as Antioxidants and Neuroprotectants  [U.S. Patent #6,630,507 at Patentstorm web site.](#)
150. ^ [a](#) [b](#) "Single Convention on Narcotic Drugs, 1961 As amended by the 1972 Protocol"  (PDF). *International Narcotics Control Board*. United Nations. 13 March 1961. pp. 2–3. Retrieved 17 August 2009.
151. ^ **(German)** "Verordnung der Bundesministerin für Arbeit, Gesundheit und Soziales über den Verkehr und die Gebarung mit Suchtgiften – SV)"  [Bundesministerium für Arbeit, Gesundheit und Soziales. 2011. Retrieved 25 March 2011.](#)
152. ^ **(German)** Valenta, Claudia (2005). "Magistrale Problem-Rezepturen"  *Österreichische*

- Apothekerzeitung* (Vienna: Österreichische Apotheker-Verlagsges.m.b.H.) (5). Retrieved 30 July 2009.
153. ^{a b} (German) ABDA – Bundesvereinigung Deutscher Apothekerverbände (21 April 2008). "Rezepturhinweise: Dronabinol- und Cannabis-Zubereitungen"  (PDF). *Pharmazeutische Zeitung* (Eschborn: Govi-Verlag Pharmazeutischer Verlag GmbH). Retrieved 30 July 2009.
 154. ^a "AFP: Austria allows cannabis for medical purposes" . afp.google.com. Retrieved 21 July 2008.
 155. ^a (German) "Änderung des Suchtmittelgesetzes – SMG"  (PDF). *Bundesgesetzblatt für die Republik Österreich* (Vienna: Österreichischer Bundesverlag). 19 December 2008. Retrieved 30 July 2009.
 156. ^a "Frequently Asked Questions – Medical Use of Marijuana" . Health Canada. 13 June 2005. Retrieved 23 September 2009.
 157. ^a "More pot, please: Demand booming for Prairie Plant's marijuana" . CBC News. 23 October 2006. Retrieved 23 September 2009.
 158. ^a Capler, Rielle (2007). "A Review of the Cannabis Cultivation Contract between Health Canada and Prairie Plant Systems" . British Columbia Compassion Club Society. Retrieved 23 September 2009.
 159. ^{a b} Kari, Shannon (June 1, 2009). "Court challenge aims to legalize all cannabis use; Advocates say previous rule a 'mockery'.". *National Post* (Toronto): p. A.6. ProQuest Newsstand, Document ID: 1739130721.
 160. ^a Collet, J.P; Shapiro, S., Tongtong, W., & Ware, M. A. (2008). "effects of medical cannabinoids: a systematic review". *Canadian Medical Association Journal* **178** (13): 1669–1678.
 161. ^a Grotenhermen, Franjo (Spring 2002). "The Medical Use of Cannabis in Germany" . *Journal of Drug Issues* **32** (2): 607–34.
 162. ^a (German) "Gesetz über den Verkehr mit Betäubungsmitteln (Betäubungsmittelgesetz – BtMG)"  (PDF). Bundesministerium der Justiz. 19 January 2009. Retrieved 30 July 2009.
 163. ^a Hidalgo, Susana. "El debate sobre el cannabis no espabila." *Público.es* [1] 
 164. ^{a b} Pérez-Lanzac C. *El cannabis pelea por un espacio legal*. El País. Sep. 12 2008. [2] 
 165. ^{a b} The Committee Office, House of Lords. "House of Lords – Science and Technology – Ninth Report" . Parliament.the-stationery-office.co.uk. Retrieved 2010-10-20.
 166. ^a "The DEA Position On Marijuana" . Drug Enforcement Administration. 2006. Archived from the original  on 28 August 2010. Retrieved 11 August 2009.
 167. ^a "Marijuana Registry" . Alaska Health and Social Services. Retrieved 2009-10-08.
 168. ^a "Arizona Becomes 15th State to Approve Medical Marijuana" . *The New York Times*. Associated Press. 2010-11-14. Retrieved 2010-11-15
 169. ^a "Medical Marijuana Program" . California Department of Public Health. Retrieved 2009-10-08.
 170. ^a "Colorado Medical Marijuana Registry" . Colorado Department of Public Health and Environment. Retrieved 2009-10-08.
 171. ^a "Narcotics Enforcement Division" . Hawaii Department of Public Safety. Retrieved 2009-10-08.
 172. ^a Nemitz, Bill (2009-02-26). "Maine's cannabis contradiction" . *Portland Press Herald*. Archived from the original  on 2009-05-02. Retrieved 2009-10-08.
 173. ^a "Michigan Medical Marijuana Program" . Michigan Department of Community Health. Retrieved 2009-10-08.
 174. ^a "Montana Medical Marijuana Program" . Montana Department of Public Health and Human Services. Retrieved 2009-10-08.
 175. ^a "Medical Marijuana" . Nevada Department of Health and Human Services. Retrieved 2009-10-08.
 176. ^a Kocieniewski, David (11-01-2010). "New Jersey Lawmakers Pass Medical Marijuana Bill" . nytimes.com. Retrieved 15 May 2010.
 177. ^a "Medical Cannabis Program" . New Mexico Department of Health. Retrieved 2009-10-08.
 178. ^a "Oregon Medical Marijuana Program (OMMP)" . State of Oregon – Department of Human Services. Retrieved 2009-10-07.
 179. ^a "Medical Marijuana Program (MMP)" . Rhode Island Department of Health. Retrieved 2009-10-08.
 180. ^a "Vermont Marijuana Registry: A Guide for Patients and Physicians" . Vermont Criminal Information Center. Retrieved 2009-10-08.
 181. ^a "§ 18.2–251.1. Possession or distribution of marijuana for medical purposes permitted" . Virginia Department of Health. Retrieved 2010-08-30.
 182. ^a "Medical Marijuana Frequently Asked Questions" . Washington State Department of Health. Retrieved 2009-10-08.

183. ^ "US medical cannabis policy eased" [↗](#). *BBC News*. 20 October 2009. Retrieved 30 October 2009.
184. ^ "Employers now able to fire medical marijuana users legally in Washington" [↗](#). *MedicalMarijuanaBill.com*. 13-06-2011. Retrieved 31-07-2011.
185. ^ Mitchell, Dan (31 May 2008). "Legitimizing Marijuana" [↗](#). *The New York Times*. Retrieved 11 August 2009.
186. ^ The Times – California dreaming of full marijuana legalisation [↗](#), *The Times*, September 28, 2009
187. ^ "19 Oct. 2009; Office of the Deputy Attorney General, US Dept. of Justice, Washington D.C. 20530. Memorandum for Selected United States Attorneys. Subject: Investigations and Prosecutions in States Authorizing the Medical Use of Marijuana" [↗](#) (PDF). Retrieved 2010-10-20.
188. ^ Billy, Michael (7 July 2008). "Opinion: US Government Holds Patent For Medical Marijuana, Shows Hipocrisy" [↗](#). *DigitalJournal.com*. Retrieved 11 August 2009.

Further reading

[edit]

- Iversen, Leslie L. (2000). *The Science of Marijuana*. Oxford University Press. ISBN 0-19-513123-1.
- 2009 Conference on Cannabinoids in Medicine, International Association for Cannabis as Medicine [↗](#)
- Cabral, Guy A. (2001). "Marijuana and Cannabinoids: Effects on Infections, Immunity, and AIDS". *Journal of Cannabis Therapeutics* **1** (3–4): 61–85. doi:10.1300/J175v01n03_06 [↗](#). See also its alternate publication: Cabral, Guy A. (2001). "Marijuana and cannabinoids: effects on infections, immunity, and AIDS" [↗](#). In Ethan Russo. *Cannabis therapeutics in HIV/AIDS*. Routledge. pp. 61–85. ISBN 978-0-7890-1699-7.
- Grotenhermen, Russo "Cannabis and cannabinoids: pharmacology, toxicology, and therapeutic potential".
- Watson SJ, Benson JA, Joy JE (2000). "Marijuana and medicine: assessing the science base: a summary of the 1999 Institute of Medicine report". *Archives of General Psychiatry* **57** (6): 547–52. doi:10.1001/archpsyc.57.6.547 [↗](#). PMID 10839332 [↗](#).
- "References on Multiple Sclerosis and Marijuana" [↗](#). *Schaffer Library of Drug Policy*.
- Tashkin, Donald P. (2001). "Effects of Smoked Marijuana on the Lung and Its Immune Defenses: Implications for Medicinal Use in HIV-Infected Patients" [↗](#). In Ethan Russo. *Cannabis therapeutics in HIV/AIDS*. New York City: Haworth Press. pp. 87–102. ISBN 978-0-7890-1699-7.
- Wujastyk, Dominik (12 September 2001). "Cannabis in Traditional Indian Herbal Medicine" [↗](#). Retrieved 23 September 2009.
- Joy, Janet E.; Watson, Stanley J.; Benson, John A., eds (1999). *Marijuana and Medicine: Assessing the Science Base* [↗](#). Washington, D.C.: National Academies Press. ISBN 978-0-309-07155-0. OCLC 246585475 [↗](#).
- Zuardi AW (2006). "History of cannabis as a medicine: a review" [↗](#). *Revista Brasileira de Psiquiatria* **28** (2): 153–7. doi:10.1590/S1516-44462006000200015 [↗](#). PMID 16810401 [↗](#).
- Martinez, Martin (4 August 2008). "History of Medical Cannabis" [↗](#). Retrieved 23 September 2009.
- "'Medical' Marijuana – The Facts" [↗](#). Drug Enforcement Administration.
- Rees, Cliff; Arias, Jalayne (17 May 2011). "Medical Marijuana Laws: Public Health or Blowing Smoke?" [↗](#). Retrieved 17 May 2011.
- Aggarwal, Sunil K.; Carter, Gregory T.; Sullivan, Mark D.; ZumBrunnen, Craig; Morrill, Richard; Mayer, Jonathan D. (2009). "Medicinal use of cannabis in the United States: historical perspectives, current trends, and future directions" [↗](#). *Journal of Opioid Management* **5** (3): 153–68. PMID 19662925 [↗](#). Lay summary [↗](#) – *SF Weekly* (15 September 2009).

External links

[edit]

- Medical Cannabis [↗](#), article by Dr Tato Grasso in [www.theglobaldispatches.com](#).
- Medical cannabis [↗](#) at the Open Directory Project, links to websites about medical cannabis.
- The Center for Medicinal Cannabis Research of the University of California [↗](#).
- Bibliography on the use of medical cannabis in recent history [↗](#) *Advances in the History of Psychology*, York University.
- The Forbidden Medicine [↗](#), an independent site operated by Harvard Medical School faculty members James Bakalar and Lester Grinspoon.

v · d · e	Cannabis	[hide]
General	Cultivation · Legality (by country) · Plant (<i>Indica</i> · <i>Sativa</i> · <i>Ruderalis</i>)	
Preparations	Bhang · Cannabis foods · Cannabis tea · Green Dragon · Hashish (Charas) · Hash oil · Kief	
Usage	Industrial use (hemp) · Medical cannabis · Recreational use · Religious and spiritual use of cannabis	
Effects	Short-term · Long-term (dependence · withdrawal · respiratory disease) · Cannabidiol · Cannabinoids · Delta-9-tetrahydrocannabinol (Δ9-THC) · Endocannabinoid system	
Notable strains	Acapulco Gold · BC Bud · Holland's Hope · G-13 · Kush · Netherlands Weed · Northern Lights · Panama Red · Purple Haze · Quebec Gold · Skunk · White Widow	
Organizations	AAMC · AMMA · ASA · BLCC · Buyers Club · CCRMG · CRC · DPA · FCA · GMM · LCA · LEAP · MAPS · MPP · NORML · OUNORML · Political Parties · POT · SAFER · SSDP · Therapeutics Alliance	
Culture	4/20 · Films · Magazines (<i>Cannabis Culture</i> · <i>High Times</i>) · Music	
Cannabis portal		

Rate this page View page ratings
What's this?

Trustworthy Objective Complete Well-written

★ ★ ★ ★ ★ ★ ★ ★ ★ ★ ★ ★ ★ ★ ★ ★ ★ ★ ★ ★

I am highly knowledgeable about this topic (optional)

Categories: [Antiemetics](#) | [Antioxidants](#) | [Medical ethics](#) | [Medicinal plants](#) | [Medicinal herbs and fungi](#) | [Medicinal use of cannabis](#) | [Healthcare reform](#) | [Pharmaceuticals policy](#)

This page was last modified on 9 August 2011 at 01:42.

Text is available under the [Creative Commons Attribution-ShareAlike License](#); additional terms may apply. See [Terms of use](#) for details.

Wikipedia® is a registered trademark of the Wikimedia Foundation, Inc., a non-profit organization.

[Contact us](#)

[Privacy policy](#) [About Wikipedia](#) [Disclaimers](#) [Mobile view](#)



Exhibit H

UNITED STATES PATENT AND TRADEMARK OFFICE

SERIAL NO: 78/591947

APPLICANT: Lucia Clearwater

78591947

CORRESPONDENT ADDRESS:
LUCIA CLEARWATER
PO BOX 813
VOLCANO, HI 96785-0813

RETURN ADDRESS:
Commissioner for Trademarks
P.O. Box 1451
Alexandria, VA 22313-1451

MARK: MAUI WOWIE MEDICINALS

CORRESPONDENT'S REFERENCE/DOCKET NO : N/A

CORRESPONDENT EMAIL ADDRESS:

Please provide in all correspondence:

1. Filing date, serial number, mark and applicant's name.
2. Date of this Office Action.
3. Examining Attorney's name and Law Office number.
4. Your telephone number and e-mail address.

OFFICE ACTION

RESPONSE TIME LIMIT: TO AVOID ABANDONMENT, THE OFFICE MUST RECEIVE A PROPER RESPONSE TO THIS OFFICE ACTION WITHIN 6 MONTHS OF THE MAILING OR E-MAILING DATE.

Serial Number 78/591947

The assigned examining attorney has reviewed the referenced application and determined the following.

No Conflicting Marks Noted

The Office records have been searched and no similar registered or pending mark has been found that would bar registration under Trademark Act Section 2(d), 15 U.S.C. §1052(d). TMEP §704.02.

Mark May Not Be Lawful Because of Goods

The applicant's goods may not be lawful goods in trade. When the sale or transportation of any product for which registration of a trademark is sought is regulated under an Act of Congress, the Patent and Trademark Office may make appropriate inquiry as to compliance with such Act for the sole purpose of determining lawfulness of the commerce recited in the application. TMEP §907.

Here, the federal Controlled Substances Act (CSA), 84 Stat. 1242, 21 U. S. C. §801 *et seq.* prevents individuals from possessing, obtaining, or manufacturing cannabis for their personal medical use.

The applicant must answer the following questions. Does the applicant's goods contain, at all or in part, any marijuana? What kinds of substances are in applicant's goods? 37 C.F.R. Section 2.61(b). Applicant must specify whether the wording "MAUI WOWIE" has any significance in the pharmaceutical or veterinary preparation, dietetic substances, baby food or dressing materials trade or industry or as applied to the goods described in the application. 37 C.F.R. §2.61(b).

The examining attorney may request the applicant to furnish information. 37 C.F.R. §2.61(b). The examining attorney has an affirmative duty to seek out information necessary for proper examination. *Bart Schwartz International Textiles, Ltd. v. Federal Trade Commission*, 289 F.2d 665, 129 USPQ 258 (C.C.P.A. 1961), aff'g 121 USPQ 99 (TTAB 1959).

Mark is Merely Descriptive

Registration is refused because the proposed mark merely describes a feature of the goods and the goods themselves. Trademark Act Section 2(e)(1), 15 U.S.C. §1052(e)(1); TMEP §§1209 *et seq.*

A mark is merely descriptive under Trademark Act Section 2(e)(1), 15 U.S.C. §1052(e)(1), if it describes an ingredient, quality, characteristic, function, feature, purpose or use of the relevant goods. *In re Gyulay*, 820 F.2d 1216, 3 USPQ2d 1009 (Fed. Cir. 1987); *In re Bed & Breakfast Registry*, 791 F.2d 157, 229 USPQ 818 (Fed. Cir. 1986); *In re MetPath Inc.*, 223 USPQ 88 (TTAB 1984); *In re Bright&Crest, Ltd.* 204 USPQ 591 (TTAB 1979); TMEP §1209.01(b). A mark that describes an intended user of a product is also merely descriptive within the meaning of Section 2(e)(1). *Hunter Publishing Co. v. Caulfield Publishing Ltd.*, 1 USPQ2d 1996 (TTAB 1986); *In re Camel Mfg. Co., Inc.*, 222 USPQ 1031 (TTAB 1984); *In re Gentex Corp.*, 151 USPQ 435 (TTAB 1966).

The determination of whether a mark is merely descriptive is considered in relation to the identified goods, not in the abstract. *In re Polo International Inc.*, 51 USPQ2d 1061 (TTAB 1999) (Board found that DOC in DOC-CONTROL would be understood to refer to the "documents" managed by applicant's software, not "doctor" as shown in dictionary definition); *In re Digital Research Inc.*, 4 USPQ2d 1242 (TTAB 1987) (CONCURRENT PC-DOS found merely descriptive of "computer programs recorded on disk;" it is unnecessary that programs actually run "concurrently," as long as relevant trade clearly uses the denomination "concurrent" as a descriptor of this particular type of operating system); *In re Venture Lending Associates*, 226 USPQ 285 (TTAB 1985); *In re American Greetings Corp.*, 226 USPQ 365, 366 (TTAB 1985) ("Whether consumers could guess what the product is from consideration of the mark alone is not the test"); TMEP §1209.01(b).

A term need not describe all of the purposes, functions, characteristics or features of the goods to be merely descriptive. For the purpose of a Section 2(e)(1) analysis, it is sufficient that the term describe only one attribute of the goods to be found merely descriptive. *In re H.U.D.D.L.E.*, 216 USPQ 358 (TTAB 1982); *In re MBAssociates*, 180 USPQ 338 (TTAB 1973); TMEP §1209.01(b).

The applicant applied to register the mark MAUI WOWIE MEDICINALS for pharmaceutical and veterinary preparations, dietetic substances adapted for medical use, food for babies, materials for dressings. The term MAUI WOWIE is defined as potent marijuana from or purported to be from Maui. See attached definition from www.encyarta.msn.com. MEDICINALS is defined as something "used to cure disease or relieve pain." See attached definition from www.m-w.com (Merriam-Webster Online Dictionary).

The term MAUI WOWIE MEDICINALS is merely descriptive as it immediately names a feature of the applicant's goods and the goods themselves and does nothing else. Accordingly, the mark is refused

registration of the Principal Register under Section 2(e)(1). Until the legality of the goods is addressed, amendment to the Supplemental Register will not be an option.

Although the examining attorney has refused registration, the applicant may respond to the refusal to register by submitting evidence and arguments in support of registration.

If the applicant chooses to respond to the refusal to register, the applicant must also respond to the following issues.

Disclaimer

The applicant must insert a disclaimer of MEDICINALS in the application, as that term is generic for the goods. Trademark Act Section 6, 15 U.S.C. §1056; TMEP §§1213 and 1213.03(a). See above definition.

A properly worded disclaimer should read as follows:

No claim is made to the exclusive right to use MEDICINALS apart from the mark as shown.

Identification of Goods

The identifications of all of the applicant's goods except for "food for babies" are unacceptable as indefinite because they do not identify the goods specifically enough. TMEP §1402.01. The examining attorney has included guidance and suggestions for an acceptable identification below. If no amendment is suggested, the identification is acceptable as is. The applicant may adopt the following identification, if accurate.

Pharmaceutical and veterinary preparations for the treatment of _____ (specify disease or condition treated), dietetic substances, namely, foods adapted for medical use, food for babies, materials for dressings, namely, _____ (specify common commercial name, e.g. bandages, gauze).

Please note that, while the identification of goods and/or services may be amended to clarify or limit the goods and/or services, adding to the goods and/or services or broadening the scope of the goods and/or services is not permitted. 37 C.F.R. §2.71(a); TMEP §1402.06. Therefore, applicant may not amend the identification to include goods and/or services that are not within the scope of the goods and/or services set forth in the present identification.

The applicant may wish to consult the on-line identification manual on the PTO homepage for acceptable common names of goods and services.

[http://www.uspto.gov/web/offices/tac/doc/gsmannual/](http://www.uspto.gov/web/offices/tac/doc/gsmmanual/)

Responding to this Letter

Applicant may wish to hire a specialist attorney to assist in prosecuting this application because of the technicalities involved. The Office cannot aid in the selection of a trademark attorney. 37 C.F.R. §2.11. Applicant may wish to consult the Yellow Pages for a listing of attorneys specializing in trademark or intellectual property law, or seek guidance from its local Bar Association attorney-referral service.

Please note that there is no required format or form for responding to this Office action. However, applicant should include the following information on all correspondence with the Office: (1) the name

and law office number of the examining attorney; (2) the serial number of this application; (3) the mailing date of this Office action; and, (4) applicant's telephone number.

When responding to this Office action, applicant must make sure to respond in writing to each refusal and requirement raised. If there is a refusal to register the proposed mark, then applicant may wish to argue against the refusal, i.e., explain why it should be withdrawn and why the mark should register. If there are other requirements, then applicant should simply set forth in writing the required changes or statements and request that the Office enter them into the application record. Applicant must also sign and date its response.

To ensure that its response is considered timely, applicant may wish to add the following completed "certificate of mailing" to the end of its response. Applicant should keep a photocopy of its response with the signed certificate, in case the response is lost or misplaced. See TMEP §§305.02 *et seq.*

CERTIFICATE OF MAILING

I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: Commissioner for Trademarks, 2900 Crystal Drive, Arlington, Virginia 22202-3514, on the date below.

(Typed or Printed Name of Person Signing Certificate)

(Signature)

(Date)

The certificate of mailing procedure does not apply to the initial filing of trademark applications. 37 C.F.R. §2.197(a)(2).

"TMEP" refers to the Trademark Manual of Examining Procedure (3rd ed., Rev. 2, May 2003), available on the United States Patent and Trademark Office website at www.uspto.gov/main/trademarks.htm. This is a detailed guidebook written by the Office to explain the laws and procedures that govern the trademark application, registration and post registration processes.

Contacting the Examining Attorney

The examining attorney can be contacted at the following telephone numbers and fax numbers:

Monday - Friday: 571-272-9171

DIRECT FAX (not for formal responses): 571-273-9171

EMAIL ADDRESS: amy.hella@uspto.gov

NOTE TO APPLICANTS: The examining attorney's email address should be used for informal questions and comments ONLY. See below for instructions on how to respond to this Office Action.

If the applicant has any questions or needs assistance in responding to this Office action, please telephone the assigned examining attorney.

/Amy E. Hella/
Trademark Examining Attorney
Law Office 110
U.S. Patent & Trademark Office
571-272-9171

HOW TO RESPOND TO THIS OFFICE ACTION:

- **ONLINE RESPONSE:** You may respond formally using the Office's Trademark Electronic Application System (TEAS) Response to Office Action form (visit <http://www.uspto.gov/teas/index.html> and follow the instructions, but if the Office Action has been issued via email, you must wait 72 hours after receipt of the Office Action to respond via TEAS).
- **REGULAR MAIL RESPONSE:** To respond by regular mail, your response should be sent to the mailing return address above and include the serial number, law office number and examining attorney's name in your response.

STATUS OF APPLICATION: To check the status of your application, visit the Office's Trademark Applications and Registrations Retrieval (TARR) system at <http://tarr.uspto.gov>.

VIEW APPLICATION DOCUMENTS ONLINE: Documents in the electronic file for pending applications can be viewed and downloaded online at <http://portal.uspto.gov/external/portal/tow>.

GENERAL TRADEMARK INFORMATION: For general information about trademarks, please visit the Office's website at <http://www.uspto.gov/main/trademarks.htm>

FOR INQUIRIES OR QUESTIONS ABOUT THIS OFFICE ACTION, PLEASE CONTACT THE ASSIGNED EXAMINING ATTORNEY SPECIFIED ABOVE.

To: Castellanos, Ramona (angel_28@att.net)
Subject: U.S. TRADEMARK APPLICATION NO. 85139440 - CANNABIS CULTURE COLLECTIVE - N/A
Sent: 12/13/2010 3:31:07 PM
Sent As: ECOM109@USPTO.GOV
Attachments: [Attachment - 1](#)
[Attachment - 2](#)
[Attachment - 3](#)

**UNITED STATES PATENT AND TRADEMARK OFFICE (USPTO)
OFFICE ACTION (OFFICIAL LETTER) ABOUT APPLICANT'S TRADEMARK APPLICATION**

APPLICATION SERIAL NO. 85139440

MARK: CANNABIS CULTURE COLLECTIVE

85139440

CORRESPONDENT ADDRESS:

CASTELLANOS, RAMONA
CASTELLANOS, RAMONA
14964 LAKE LN
NEVADA CITY, CA 95959-9570

CLICK HERE TO RESPOND TO THIS LETTER:
<http://www.uspto.gov/teas/eTEASpageD.htm>

APPLICANT: Castellanos, Ramona

CORRESPONDENT'S REFERENCE/DOCKET

NO:

N/A

CORRESPONDENT E-MAIL ADDRESS:

angel_28@att.net

OFFICE ACTION

STRICT DEADLINE TO RESPOND TO THIS LETTER

TO AVOID ABANDONMENT OF APPLICANT'S TRADEMARK APPLICATION, THE USPTO MUST RECEIVE APPLICANT'S COMPLETE RESPONSE TO THIS LETTER **WITHIN 6 MONTHS** OF THE ISSUE/MAILING DATE BELOW.

ISSUE/MAILING DATE: 12/13/2010

TRADEMARK COUNSEL SUGGESTED

Applicant may wish to hire an attorney to assist in prosecuting this application because of the legal technicalities involved. The Office, however, cannot aid in the selection of an attorney. 37 C.F.R. §2.11. A

applicant may wish to consult a local telephone directory for a listing of attorneys specializing in trademark or intellectual property law, or seek guidance from a local bar association attorney-referral service.

The assigned trademark examining attorney has reviewed the referenced application and has determined the following:

NO SIMILAR MARKS

The trademark examining attorney has searched the Office's database of registered and pending marks and has found no conflicting marks that would bar registration under Trademark Act Section 2(d). TMEP §704.02; *see* 15 U.S.C. §1052(d).

Applicant, however, should note the following refusal.

SECTIONS 1 AND 45 REFUSAL – NOT IN LAWFUL USE IN COMMERCE

THIS REFUSAL ONLY APPLIES TO THE FOLLOWING SERVICES:

“Medical services, namely, providing medical marijuana.”

Registration is refused because the applied-for mark, as used in connection with the goods and/or services identified in the application, is not in lawful use in commerce. Trademark Act Sections 1 and 45, 15 U.S.C. §§1051, 1127.

To qualify for federal trademark/service mark registration, the use of a mark in commerce must be lawful. *Gray v. Daffy Dan's Bargaintown*, 823 F.2d 522, 526, 3 USPQ2d 1306, 1308 (Fed. Cir. 1987) (stating that “[a] valid application cannot be filed at all for registration of a mark without 'lawful use in commerce'”); TMEP §907; *see In re Stellar Int'l, Inc.*, 159 USPQ 48, 50-51 (TTAB 1968); *CreAgri, Inc. v. USANA Health Scis., Inc.*, 474 F.3d 626, 630, 81 USPQ2d 1592, 1595 (9th Cir. 2007). Thus, any goods or services to which the mark is applied must comply with all applicable federal laws. *See In re Midwest Tennis & Track Co.*, 29 USPQ2d 1386, 1386 n.2 (TTAB 1993) (noting that “[i]t is settled that the Trademark Act's requirement of 'use in commerce,' means a 'lawful use in commerce,' and [that the sale or] the shipment of goods in violation of [a] federal statute . . . may not be recognized as the basis for establishing trademark rights” (quoting *Clorox Co. v. Armour-Dial, Inc.*, 214 USPQ 850, 851 (TTAB 1982))); *In re Pepcom Indus., Inc.*, 192 USPQ 400, 401 (TTAB 1976); TMEP §907.

The Controlled Substances Act (CSA) prohibits, among other things, manufacturing, distributing, dispensing, or possessing certain controlled substances, including marijuana and marijuana-based preparations. 21 U.S.C. §§812, 841(a)(1), 844(a); *see also* 21 U.S.C. §802(16) (defining “[marijuana]”). In addition, the CSA makes it unlawful to sell, offer for sale, or use any facility of interstate commerce to transport drug paraphernalia, i.e., “any equipment, product, or material of any kind which is primarily intended or designed for use in manufacturing, compounding, converting, concealing, producing, processing, preparing, injecting, ingesting, inhaling, or otherwise introducing into the human body a controlled substance, possession of which is unlawful under [the CSA].” 21 U.S.C. §863.

Here, the application identifies applicant's relevant services as follows: “Medical services, namely,

providing medical marijuana.”

Applicant's services consist of, or include, items or activities that are prohibited by the CSA, namely, marijuana and the distribution of marijuana.

Because the identified goods and/or services are prohibited by the CSA, the applied-for mark, as used in connection with such goods and/or services, is not in lawful use in commerce.

Although applicant's mark has been refused registration, applicant may respond to the refusal by submitting evidence and arguments in support of registration. If applicant responds to the refusal to register, then applicant must also respond to the requirements set forth below.

CLARIFY ENTITY TYPE

The names of two different individuals appear in the section of the application intended for the trademark owner's name; however, the entity type is set forth as a corporation. Applicant must clarify this inconsistency. TMEP §§803.02(a), 803.03.

If the two individuals are applying together as joint owners and joint applicants, they must amend the entity type from “corporation” to “individual” and each joint applicant must indicate his/her country of citizenship for the record. *See* 15 U.S.C. §1051(a)(2); 37 C.F.R. §2.32(a)(3)(i); TMEP §§803.02(a), 803.03(a), 803.04.

Alternatively, if the two individuals are in fact part of a legally organized corporation, they must set forth the legal name of the corporation and U.S. state or foreign country of incorporation or organization. 37 C.F.R. §2.32(a)(2), (a)(3)(ii); TMEP §§803.02(c), 803.03(c), 803.04.

If, in response to the above request, applicant provides information indicating that it is not the owner of the mark, registration will be refused under Trademark Act Section 1 because the application was void as filed. An application must be filed by the owner of the mark. 15 U.S.C. §1051; 37 C.F.R. §2.71(d); TMEP §§803.01, 803.06, 1201.02(b).

IDENTIFICATION OF SERVICES

The identification of services is indefinite and must be clarified. *See* TMEP §1402.01. Applicant must specify the common commercial or generic name for the services. If the services have no common commercial or generic name, applicant must describe the nature of the services as well as their main purpose, channels of trade, and the intended consumer(s).

Applicant may adopt the following identification, if accurate:

“Medical services, namely, providing medical marijuana in the nature of dispensing of pharmaceuticals; Providing medical information” in International Class 044.

For assistance with identifying and classifying goods and/or services in trademark applications, please see the online searchable *Manual of Acceptable Identifications of Goods and Services* at <http://tess2.uspto.gov/netahtml/tidm.html>. *See* TMEP §1402.04.

An applicant may amend an identification of services only to clarify or limit the services; adding to or broadening the scope of the services is not permitted. 37 C.F.R. §2.71(a); *see* TMEP §§1402.06 *et seq.*, 1402.07 *et seq.*

NO SPECIMEN OF USE

The application is incomplete because it does not include the required specimen showing use of the applied-for mark in commerce for the goods and/or services identified in the application. An application based on Trademark Act Section 1(a) must include a specimen showing the applied-for mark in use in commerce for each class of goods and/or services. Trademark Act Sections 1(a)(1) and 45, 15 U.S.C. §§1051(a)(1), 1127; 37 C.F.R. §§2.34(a)(1)(iv), 2.56(a); TMEP §§904, 904.07(a).

Therefore, applicant must submit the following:

- (1) A specimen (i.e., an example of how applicant actually uses its mark in commerce) for each class of goods and/or services based on use in commerce; and
- (2) The following statement, verified with an affidavit or signed declaration under 37 C.F.R. §2.20: “**The specimen was in use in commerce at least as early as the filing date of the application.**” 37 C.F.R. §2.59(a); TMEP §904.05; *see* 37 C.F.R. §2.193(e)(1). If submitting a specimen requires an amendment to the dates of use, applicant must also verify the amended dates. 37 C.F.R. §2.71(c); TMEP §904.05.

Examples of specimens for services are signs, photographs, brochures, website printouts or advertisements that show the mark used in the actual sale or advertising of the services. *See* TMEP §§1301.04 *et seq.*

To submit a verified substitute specimen online via the Trademark Electronic Application System (TEAS), applicant should do the following: (1) answer “yes” to the TEAS response form wizard question to “submit a new or substitute specimen;” (2) attach a jpg or pdf file of the substitute specimen; (3) select the statement that “The substitute specimen(s) was in use in commerce at least as early as the filing date of the application.”; and (4) sign personally or enter personally his/her electronic signature and date after the declaration at the end of the TEAS response form. *See* 37 C.F.R. §§2.59(a), 2.193(a), (c)-(d), (e)(1); TMEP §§611.01(c), 804.01(b). Please note that these steps appear on different pages of the TEAS response form.

If applicant experiences difficulty in submitting the required substitute specimen, supporting statement and/or declaration, please e-mail TEAS@uspto.gov for technical assistance regarding the TEAS response form.

If applicant cannot satisfy the above requirements, applicant may amend the application from a use in commerce basis under Section 1(a) to an intent to use basis under Section 1(b), for which no specimen is required. *See* TMEP §806.03(c). However, if applicant amends the basis to Section 1(b), registration will not be granted until applicant later amends the application back to use in commerce by filing an acceptable allegation of use with a proper specimen. *See* 15 U.S.C. §1051(c), (d); 37 C.F.R. §§2.76, 2.88; TMEP §1103.

To amend to Section 1(b), applicant must submit the following statement, verified with an affidavit or

signed declaration under 37 C.F.R. §2.20: “**Applicant has had a bona fide intention to use the mark in commerce on or in connection with the goods and/or services listed in the application as of the filing date of the application.**” 37 C.F.R. §2.34(a)(2); TMEP §806.01(b); *see* 15 U.S.C. §1051(b); 37 C.F.R. §§2.35(b)(1), 2.193(e)(1).

Pending receipt of a proper response, registration is refused because applicant has not provided evidence of the applied-for mark in use in commerce as a trademark and/or service mark. Trademark Act Sections 1(a)(1) and 45, 15 U.S.C. §§1051(a)(1), 1127; 37 C.F.R. §§2.34(a)(1)(iv), 2.56(a); TMEP §§904, 904.07(a).

DISCLAIMER REQUIRED

Applicant must additionally disclaim the descriptive wording “CANNABIS” apart from the mark as shown because it merely describes an ingredient, quality, characteristic, function, feature, purpose or use of applicant’s goods and/or services. *See* 15 U.S.C. §§1052(e)(1), 1056(a); *In re Steelbuilding.com*, 415 F.3d 1293, 1297, 75 USPQ2d 1420, 1421 (Fed. Cir. 2005); *In re Gyulay*, 820 F.2d 1216, 1217-18, 3 USPQ2d 1009, 1010 (Fed. Cir. 1987); TMEP §§1213, 1213.03(a). Please see the attached definition from the Merriam-Webster Online Dictionary.

In this case, the term CANNABIS merely describes the subject matter of applicant’s services

A “disclaimer” is a statement that applicant does not claim exclusive rights to an unregistrable component of a mark; it does not affect the appearance of the mark. TMEP §1213. An unregistrable component of a mark includes wording and designs that are merely descriptive of the goods and/or services, and is wording or an illustration that others would need to use to describe or show their goods and services in the marketplace. 15 U.S.C. §1052(e); *see* TMEP §§1209.03(f), 1213.03 *et seq.*

The following is the accepted standard format for a disclaimer:

No claim is made to the exclusive right to use “CANNABIS” and “COLLECTIVE” apart from the mark as shown.

TMEP §1213.08(a)(i).

Failure to comply with a disclaimer requirement can result in a refusal to register the entire mark. TMEP §1213.01(b).

ADDITIONAL INFORMATION REQUIRED

THIS REQUIREMENT ONLY APPLIES TO THE FOLLOWING SERVICES:

“Providing medical information.”

To permit proper examination of the application, applicant must submit additional information about the goods and/or services. *See* 37 C.F.R. §2.61(b); TMEP §814. The requested information should include fact sheets, brochures, advertisements, and/or similar materials relating to the goods and/or services. If such materials are not available, applicant must provide a detailed factual description of the goods and/or services. Any information submitted in response to this requirement must clearly and accurately indicate

the nature of the goods and/or services identified in the application.

In addition, applicant must submit a written statement indicating whether the goods and/or services identified in the application comply with the Controlled Substances Act (CSA), 21 U.S.C. §§801-971. See 37 C.F.R. §2.69; TMEP §907. The CSA prohibits, among other things, manufacturing, distributing, dispensing, or possessing certain controlled substances, including marijuana and marijuana-based preparations. 21 U.S.C. §§812, 841(a)(1), 844(a); see also 21 U.S.C. §802(16) (defining "[marijuana]"). The CSA also makes it unlawful to sell, offer for sale, or use any facility of interstate commerce to transport drug paraphernalia, i.e., "any equipment, product, or material of any kind which is primarily intended or designed for use in manufacturing, compounding, converting, concealing, producing, processing, preparing, injecting, ingesting, inhaling, or otherwise introducing into the human body a controlled substance, possession of which is unlawful under [the CSA]." 21 U.S.C. §863.

Failure to satisfactorily respond to a requirement for information is a ground for refusing registration. See *In re Cheezwhse.com, Inc.*, 85 USPQ2d 1917, 1919 (TTAB 2008); *In re Garden of Eatin' Inc.*, 216 USPQ 355, 357 (TTAB 1982); TMEP §814. Please note that merely stating that information about the goods and services is available on applicant's website is an inappropriate response to the above requirement and is insufficient to make the relevant information properly of record. See *In re Planalytics, Inc.*, 70 USPQ2d 1453, 1457-58 (TTAB 2004).

Applicant is advised that, upon consideration of the information provided by applicant in response to the above requirement, registration of the applied-for mark may be refused on the ground that the mark, as used in connection with the identified goods and/or services, is not in lawful use in commerce. Trademark Act Sections 1 and 45, 15 U.S.C. §§1051, 1127.

RESPONSE GUIDELINES

For this application to proceed toward registration, applicant must explicitly address each refusal and/or requirement raised in this Office action. If the action includes a refusal, applicant may provide arguments and/or evidence as to why the refusal should be withdrawn and the mark should register. Applicant may also have other options for responding to a refusal and should consider such options carefully. To respond to requirements and certain refusal response options, applicant should set forth in writing the required changes or statements.

If applicant does not respond to this Office action within six months of the issue/ mailing date, or responds by expressly abandoning the application, the application process will end, the trademark will fail to register, and the application fee will not be refunded. See 15 U.S.C. §1062(b); 37 C.F.R. §§2.65(a), 2.68(a), 2.209(a); TMEP §§405.04, 718.01, 718.02. Where the application has been abandoned for failure to respond to an Office action, applicant's only option would be to file a timely petition to revive the application, which, if granted, would allow the application to return to live status. See 37 C.F.R. §2.66; TMEP §1714. There is a \$100 fee for such petitions. See 37 C.F.R. §§2.6, 2.66(b)(1).

If applicant has questions about the application or this Office action, please telephone the assigned trademark examining attorney at the telephone number below.

/Robert J. Struck/
Robert J. Struck
Trademark Examining Attorney
Law Office 109
Phone - (571) 272-1513

TO RESPOND TO THIS LETTER: Use the Trademark Electronic Application System (TEAS) response form at <http://teasroa.uspto.gov/roa/>. Please wait 48-72 hours from the issue/ mailing date before using TEAS, to allow for necessary system updates of the application. For *technical* assistance with online forms, e-mail TEAS@uspto.gov.

WHO MUST SIGN THE RESPONSE: It must be personally signed by an individual applicant or someone with legal authority to bind an applicant (i.e., a corporate officer, a general partner, all joint applicants). If an applicant is represented by an attorney, the attorney must sign the response.

PERIODICALLY CHECK THE STATUS OF THE APPLICATION: To ensure that applicant does not miss crucial deadlines or official notices, check the status of the application every three to four months using Trademark Applications and Registrations Retrieval (TARR) at <http://tarr.uspto.gov/>. Please keep a copy of the complete TARR screen. If TARR shows no change for more than six months, call 1-800-786-9199. For more information on checking status, see <http://www.uspto.gov/trademarks/process/status/>.

TO UPDATE CORRESPONDENCE/E-MAIL ADDRESS: Use the TEAS form at <http://www.uspto.gov/teas/eTEASpageE.htm>.

To: Castellanos, Ramona (angel_28@att.net)
Subject: U.S. TRADEMARK APPLICATION NO. 85139440 - CANNABIS CULTURE COLLECTIVE - N/A
Sent: 12/13/2010 3:31:08 PM
Sent As: ECOM109@USPTO.GOV
Attachments:

IMPORTANT NOTICE REGARDING YOUR TRADEMARK APPLICATION

Your trademark application (Serial No. 85139440) has been reviewed. The examining attorney assigned by the United States Patent and Trademark Office (“USPTO”) has written a letter (an “Office Action”) on **12/13/2010** to which you must respond. Please follow these steps:

1. **Read** the Office letter by clicking on this [link](#) OR go to <http://tportal.uspto.gov/external/portal/tow> and enter your serial number to [access](#) the Office letter.

PLEASE NOTE: The Office letter may not be immediately available but will be viewable within 24 hours of this e-mail notification.

2. **Respond** within 6 months, calculated from **12/13/2010** (or sooner if specified in the Office letter), using the Trademark Electronic Application System [Response to Office Action form](#). If you have difficulty using the USPTO website, contact TDR@uspto.gov.

3. **Contact** the examining attorney who reviewed your application with any questions about the content of the office letter:

/Robert J. Struck/
Robert J. Struck
Trademark Examining Attorney
Law Office 109
Phone - (571) 272-1513

WARNING

Failure to file any required response by the applicable deadline will result in the [ABANDONMENT](#) of your application.

Do NOT hit “Reply” to this e-mail notification, or otherwise attempt to e-mail your response, as the USPTO does NOT accept e-mailed responses. Instead, please use the Trademark Electronic Application System [Response to Office Action form](#).

To: Pena, Shekina (jonberi@aol.com)

Subject: U.S. TRADEMARK APPLICATION NO. 85226521 - COMPASSIONATE & COMPLIANT CANNABIS - N/A

Sent: 3/2/2011 2:22:26 PM

Sent As: ECOM108@USPTO.GOV

Attachments: [Attachment - 1](#)
[Attachment - 2](#)
[Attachment - 3](#)
[Attachment - 4](#)
[Attachment - 5](#)
[Attachment - 6](#)
[Attachment - 7](#)
[Attachment - 8](#)
[Attachment - 9](#)
[Attachment - 10](#)
[Attachment - 11](#)
[Attachment - 12](#)
[Attachment - 13](#)
[Attachment - 14](#)
[Attachment - 15](#)
[Attachment - 16](#)
[Attachment - 17](#)
[Attachment - 18](#)
[Attachment - 19](#)
[Attachment - 20](#)
[Attachment - 21](#)
[Attachment - 22](#)
[Attachment - 23](#)
[Attachment - 24](#)
[Attachment - 25](#)
[Attachment - 26](#)
[Attachment - 27](#)
[Attachment - 28](#)
[Attachment - 29](#)
[Attachment - 30](#)
[Attachment - 31](#)
[Attachment - 32](#)
[Attachment - 33](#)
[Attachment - 34](#)

[Attachment - 35](#)
[Attachment - 36](#)
[Attachment - 37](#)
[Attachment - 38](#)
[Attachment - 39](#)
[Attachment - 40](#)
[Attachment - 41](#)
[Attachment - 42](#)
[Attachment - 43](#)
[Attachment - 44](#)
[Attachment - 45](#)
[Attachment - 46](#)
[Attachment - 47](#)
[Attachment - 48](#)
[Attachment - 49](#)
[Attachment - 50](#)
[Attachment - 51](#)

**UNITED STATES PATENT AND TRADEMARK OFFICE (USPTO)
OFFICE ACTION (OFFICIAL LETTER) ABOUT APPLICANT'S TRADEMARK APPLICATION**

APPLICATION SERIAL NO. 85226521

MARK: COMPASSIONATE & COMPLIANT
CANNABIS

85226521

CORRESPONDENT ADDRESS:

PENA, SHEKINA
628 E MICHIGAN AVE
LANSING, MI 48912-1184

CLICK HERE TO RESPOND TO THIS LETTER:
<http://www.uspto.gov/teas/eTEASpageD.htm>

APPLICANT: Pena, Shekina

**CORRESPONDENT'S REFERENCE/DOCKET
NO:**

N/A

CORRESPONDENT E-MAIL ADDRESS:

jonberi@aol.com

OFFICE ACTION

STRICT DEADLINE TO RESPOND TO THIS LETTER

TO AVOID ABANDONMENT OF APPLICANT'S TRADEMARK APPLICATION, THE USPTO MUST RECEIVE APPLICANT'S COMPLETE RESPONSE TO THIS LETTER **WITHIN 6 MONTHS** OF THE

ISSUE/MAILING DATE BELOW.

ISSUE/MAILING DATE: **3/2/2011**

The referenced application has been reviewed by the assigned trademark examining attorney. Applicant must respond timely and completely to the issue(s) below. 15 U.S.C. §1062(b); 37 C.F.R. §§2.62(a), 2.65(a); TMEP §§711, 718.03.

SEARCH RESULTS

The trademark examining attorney has searched the Office's database of registered and pending marks and has found no conflicting marks that would bar registration under Trademark Act Section 2(d). TMEP §704.02; see 15 U.S.C. §1052(d).

REFUSAL – NOT IN LAWFUL USE IN COMMERCE – MARIJUANA-RELATED SERVICES – BASED ON EVIDENCE

Registration is refused because the applied-for mark, as used in connection with the services identified in the application, is not in lawful use in commerce. Trademark Act Sections 1 and 45, 15 U.S.C. §§1051, 1127.

To qualify for federal service mark registration, the use of a mark in commerce must be lawful. *Gray v. Daffy Dan's Bargaintown*, 823 F.2d 522, 526, 3 USPQ2d 1306, 1308 (Fed. Cir. 1987) (stating that “[a] valid application cannot be filed at all for registration of a mark without ‘lawful use in commerce’”); TMEP §907; see *In re Stellar Int'l, Inc.*, 159 USPQ 48, 50-51 (TTAB 1968); *CreAgri, Inc. v. USANA Health Scis., Inc.*, 474 F.3d 626, 630, 81 USPQ2d 1592, 1595 (9th Cir. 2007). Thus, any services to which the mark is applied must comply with all applicable federal laws. See *In re Midwest Tennis & Track Co.*, 29 USPQ2d 1386, 1386 n.2 (TTAB 1993) (noting that “[i]t is settled that the Trademark Act's requirement of ‘‘use in commerce,’’ means a ‘‘lawful use in commerce,’’ and [that the sale or] the shipment of goods in violation of [a] federal statute . . . may not be recognized as the basis for establishing trademark rights’’ (quoting *Clorox Co. v. Armour-Dial, Inc.*, 214 USPQ 850, 851 (TTAB 1982))); *In re Pepcom Indus., Inc.*, 192 USPQ 400, 401 (TTAB 1976); TMEP §907.

The Controlled Substances Act (CSA) prohibits, among other things, manufacturing, distributing, dispensing, or possessing certain controlled substances, including marijuana and marijuana-based preparations. 21 U.S.C. §§812, 841(a)(1), 844(a); see also 21 U.S.C. §802(16) (defining “[marijuana]”). In addition, the CSA makes it unlawful to sell, offer for sale, or use any facility of interstate commerce to transport drug paraphernalia, i.e., “any equipment, product, or material of any kind which is primarily intended or designed for use in manufacturing, compounding, converting, concealing, producing, processing, preparing, injecting, ingesting, inhaling, or otherwise introducing into the human body a controlled substance, possession of which is unlawful under [the CSA].” 21 U.S.C. §863.

In the present case, the application identifies applicant's services as follows:

International Class 44: Consulting in the field of health and wellness to bring about personal happiness; Consulting services in the field of health; Consulting services in the fields of health and nutrition; Counseling services in the fields of health, herbalism, and lifestyle wellness; Counseling services in the fields of health, nutrition and lifestyle wellness; Health care services, namely,

wellness programs

The attached excerpt from applicant's website and the wording contained in the applied-for mark plainly indicates that applicant's identified services include items and/or activities that are prohibited by the CSA, namely, that the applicant is providing medical marijuana and is instructing consumers on how to grow their own marijuana. The attached excerpts from the applicant's own website explain how the applicant's mission is "to provide safe, compliant access to cannabis health care and education." There are tabs on the applicant's webpage where people can barter their services for either medical marijuana or drug paraphernalia. Another tab advertises a "cannabis oil massage." Another tab discusses workshops for "growing medications." Taken as a whole, it is clear that the applicant is not only providing medical marijuana but is also instructing its members on how to grow their own.

Because these services are prohibited by the CSA, the applied-for mark, as used in connection with such services, is not in lawful use in commerce.

Applicant should note the following additional ground for refusal.

SECTION 2(A) REFUSAL – FALSE CONNECTION WITH THE RED CROSS

Registration is refused because the applied-for mark consists of or includes the Red Cross emblem which may falsely suggest a connection with the American National Red Cross and other parties authorized to use this emblem under 18 U.S.C. §706. Trademark Act Section 2(a), 15 U.S.C. §1052(a); *see* TMEP §§1203.03(e), 1205.01.

A false connection with a person or institution under Trademark Act Section 2(a) is presumed when the following four factors can be demonstrated:

- (1) The mark sought to be registered is the same as, or a close approximation of, the name or identity previously used by another person or institution;
- (2) The mark would be recognized as such, in that it points uniquely and unmistakably to that person or institution;
- (3) The person or institution identified in the mark is not connected with the goods sold or services performed by applicant under the mark; and
- (4) The fame or reputation of the named person or institution is of such a nature that a connection with such person or institution would be presumed when applicant's mark is used on its goods and/or services.

In re Peter S. Herrick, P.A., 91 USPQ2d 1505, 1507 (TTAB 2009); *In re MC MC S.r.l.*, 88 USPQ2d 1378, 1379 (TTAB 2008); TMEP §1203.03(e); *see also Univ. of Notre Dame du Lac v. J.C. Gourmet Food Imps. Co.*, 703 F.2d 1372, 1375-77, 217 USPQ 505, 508-10 (Fed. Cir. 1983) (providing foundational principles for the current four-part test used to determine the existence of a false connection).

In this case, the first two factors are demonstrated by the fact that exclusive rights to use the Red Cross emblem were granted by statute to the American National Red Cross and other statutorily authorized parties; therefore, this emblem points uniquely to this institution. *See* 18 U.S.C. §706; TMEP §1205.01. Applicant is not listed as an authorized party in the statute, and the application does not otherwise indicate that applicant is an authorized party; therefore, the third factor is also satisfied. *See* 18 U.S.C. §706;

TMEP §1205.01.

With regard to the last factor, the fame of the institution is such that it is the subject of an international treaty to which the U.S. is a party, the 1949 Geneva Convention, as well as the subject of specific national legislation that provides such parties exclusive rights to use this emblem. *See* TMEP §1205.01. In addition, the fame and reputation of this institution is demonstrated by the attached evidence, which also shows that such emblem is connected to this institution. Therefore, consumers would presume a connection between applicant and the American National Red Cross if the applied-for mark is used in connection with the identified services.

Applicant can overcome this refusal by submitting a written statement that applicant is an authorized party under 18 U.S.C. §706, specifying how applicant is authorized (e.g., applicant is an authorized agent of the American National Red Cross). *See* TMEP §1205.01.

Applicant should note the following additional ground for refusal.

SECTIONS 1, 2, AND 45 REFUSAL – NOT IN LAWFUL USE IN COMMERCE

Registration is refused because the applied-for mark is not in lawful use in commerce. Trademark Act Sections 1 and 45, 15 U.S.C. §§1051, 1127; *see* TMEP §1205.01. The applied-for mark consists of or includes the Red Cross emblem. Exclusive rights to use this emblem have been granted by statute to the American National Red Cross and other authorized parties under 18 U.S.C. §706; however, applicant is not listed as an authorized party in the statute and the application does not otherwise indicate that applicant is an authorized party. *See* TMEP §1205.01.

Applicant can overcome this refusal by submitting a written statement that applicant is an authorized party under 18 U.S.C. §706, specifying how applicant is authorized (e.g., applicant is an authorized agent of the American National Red Cross). *See* TMEP §1205.01.

Applicant must respond to the requirements set forth below.

DISCLAIMER REQUIRED

Applicant must disclaim the descriptive wording “CANNABIS CLUB” and “MEDICAL MARIJUANA” apart from the mark as shown because it merely describes the subject matter of the applicant’s services, namely, an organization for people who are interested in and/or use marijuana for health purposes. *See* 15 U.S.C. §1056(a); TMEP §§1213, 1213.03(a). Please see the attached definitions of “cannabis,” “medical,” “marijuana,” and “club.”

The applicant must also disclaim the design of the caduceus as it merely describes the subject matter of the applicant’s services as being health-related. Please see the attached Internet evidence discussing the caduceus and the attached third party registrations where a design of the caduceus has been disclaimed for similar services.

The computerized printing format for the Office’s *Trademark Official Gazette* requires a standardized format for a disclaimer. TMEP §1213.08(a)(i). The following is the standard format used by the Office:

No claim is made to the exclusive right to use “CANNABIS CLUB,” “MEDICAL MARIJUANA,” and “THE DESIGN OF THE CADUCEUS” apart from the mark as

shown.

TMEP §1213.08(a)(i); *see In re Owatonna Tool Co.*, 231 USPQ 493 (Comm'r Pats. 1983).

The Office can require an applicant to disclaim an unregistrable part of a mark consisting of particular wording, symbols, numbers, design elements, or combinations thereof. 15 U.S.C. §1056(a). Under Trademark Act Section 2(e), the Office can refuse registration of an entire mark if the entire mark is merely descriptive, deceptively misdescriptive, or primarily geographically descriptive of the goods and/or services. 15 U.S.C. §1052(e). Thus, the Office may require an applicant to disclaim a portion of a mark that, when used in connection with the goods and/or services, is merely descriptive, deceptively misdescriptive, primarily geographically descriptive, or otherwise unregistrable (e.g., generic). *See* TMEP §§1213, 1213.03.

Failure to comply with a disclaimer requirement can result in a refusal to register the entire mark. TMEP §1213.01(b).

A “disclaimer” is a statement that applicant does not claim exclusive rights to an unregistrable component of a mark. TMEP §1213. A disclaimer does not affect the appearance of the applied-for mark. *See* TMEP §1213.10.

SPECIMEN IS UNACCEPTABLE

The specimen is not acceptable because it does not show the applied-for mark in use in commerce. An application based on Trademark Act Section 1(a) must include a specimen showing the applied-for mark in use in commerce for each class of services. Trademark Act Sections 1 and 45, 15 U.S.C. §§1051, 1127; 37 C.F.R. §§2.34(a)(1)(iv), 2.56(a); TMEP §§904, 904.07(a).

The specimen consists of an image of the mark on the door of the applicant’s establishment and is not acceptable as evidence of actual service mark use because it is not clear from the specimen what types of services are being offered. In other words, the store front could be for any type of business and the wording in the mark is not specific enough to encompass the applied-for services, namely, “Consulting services in the field of health; Counseling services in the fields of health, nutrition and lifestyle wellness; Wellness and health-related consulting services.” Thus, the specimen fails to show proper use of the applied-for mark in the sale or advertising of the services.

Therefore, applicant must submit the following:

- (1) A substitute specimen showing the mark in use in commerce for each class of services specified in the application; and
- (2) The following statement, verified with an affidavit or signed declaration under 37 C.F.R. §§2.20, 2.33: “**The substitute specimen was in use in commerce at least as early as the filing date of the application.**” 37 C.F.R. §2.59(a); TMEP §904.05. If submitting a substitute specimen requires an amendment to the dates of use, applicant must also verify the amended dates. 37 C.F.R. §2.71(c); TMEP §904.05.

Examples of specimens for services are signs, photographs, brochures, website printouts or advertisements that show the mark used in the actual sale or advertising of the services. *See* TMEP §§1301.04 *et seq.*

If applicant cannot satisfy the above requirements, applicant may amend the application from a use in commerce basis under Section 1(a) to an intent to use basis under Section 1(b), for which no specimen is required. *See* TMEP §806.03(c). However, if applicant amends the basis to Section 1(b), registration will not be granted until applicant later amends the application back to use in commerce by filing an acceptable allegation of use with a proper specimen. *See* 15 U.S.C. §1051(c), (d); 37 C.F.R. §§2.76, 2.88; TMEP §1103.

To amend to Section 1(b), applicant must submit the following statement, verified with an affidavit or signed declaration under 37 C.F.R. §§2.20, 2.33: “ **Applicant has had a bona fide intention to use the mark in commerce on or in connection with the services listed in the application as of the filing date of the application.**” 37 C.F.R. §2.34(a)(2); TMEP §806.01(b); *see* 15 U.S.C. §1051(b); 37 C.F.R. §2.35(b)(1).

Pending receipt of a proper response, registration is refused because the specimen does not show the applied-for mark in use in commerce as a service mark. Trademark Act Sections 1 and 45, 15 U.S.C. §§1051, 1127; 37 C.F.R. §§2.34(a)(1)(iv), 2.56(a); TMEP §§904, 904.07(a).

Sample Declaration if Submitting a Substitute Specimen

The following is a sample declaration for a verified substitute specimen for use in a paper response:

The undersigned being warned that willful false statements and the like are punishable by fine or imprisonment, or both, under 18 U.S.C. §1001, and that such willful false statements and the like may jeopardize the validity of the application or document or any registration resulting therefrom, declares that *the substitute specimen was in use in commerce prior to the expiration of the deadline for filing the statement of use*; all statements made of his/her own knowledge are true; and all statements made on information and belief are believed to be true.

(Signature)

(Print or Type Name and Position)

(Date)

Sample Declaration if Amending to Section 1(b) Intent-to-Use Basis

The undersigned being warned that willful false statements and the like are punishable by fine or imprisonment, or both, under 18 U.S.C. §1001, and that such willful false statements and the like may jeopardize the validity of the application or document or any registration resulting therefrom, declares that he/she is properly authorized to execute this application on behalf of the applicant; he/she believes the applicant to be the owner of the trademark/service mark sought to be registered, or, if the application is being filed under 15 U.S.C. §1051(b), §1126(d) or §1126(e), he/she believes the applicant to be entitled to use such mark in commerce; to the best of his/her knowledge and belief no other person, firm, corporation, or association has the right to use the mark in commerce, either in the identical form thereof or in such near resemblance thereto as to be likely, when used on or in connection with the goods/services of such other person, to cause confusion, or to cause mistake, or to deceive; and that all statements made of his/her own

knowledge are true; and all statements made on information and belief are believed to be true.

(Signature)

(Print or Type Name and Position)

(Date)

RESPONSE GUIDELINES FOR A SPECIMEN REFUSAL

Applicant may respond to the stated specimen refusal by submitting a verified substitute specimen or amending the application to an intent to use filing basis under Trademark Act Section 1(b) by following the suggested directions below for responding either online or by mail.

If applicant responds to this Office action online via the Trademark Electronic Application System (TEAS), applicant should provide a substitute specimen as follows: (1) answer “yes” to the TEAS response form wizard question to “submit a new or substitute specimen;” (2) attach a jpg or pdf file of the substitute specimen; and (3) select the statement that “The substitute specimen(s) was in use in commerce at least as early as the filing date of the application.” However, if applicant is responding by amending the application to a Section 1(b) filing basis, applicant should do the following: (1) answer “yes” to the TEAS response form wizard question to “change filing basis;” (2) uncheck the box for “Filing Basis Section 1(a);” and (3) check the box for “Filing Basis Section 1(b).” Please note that these steps appear on different pages of the TEAS response form.

Whether submitting a substitute specimen or amending the filing basis to Section 1(b), applicant must also personally sign or personally enter his/her electronic signature and date after the declaration at the end of the TEAS response form. *See* 37 C.F.R. §§2.34(a)(2), 2.59(a), 2.193(a), (c)-(d), (e)(1); TMEP §§611.01(c), 804.01(b).

If applicant experiences difficulty in submitting the required substitute specimen, supporting statement and/or declaration, or changing the filing basis, please e-mail TEAS@uspto.gov for technical assistance regarding the TEAS response form.

If applicant responds to this Office action on paper, via regular mail, applicant may provide a verified substitute specimen by checking the first statement below, personally signing and dating the declaration appearing below the statement, and submitting a substitute specimen showing the applied-for mark in use in commerce. *See* 37 C.F.R. §§2.20, 2.59(a), 2.193(a)(1), (d), (e)(1); TMEP §§804.01(b), 904.05. If applicant is responding by amending the application to a Section 1(b) filing basis, applicant may check the second statement below, and personally sign and date the declaration appearing below the statement. *See* 37 C.F.R. §§2.20, 2.34(a)(2), 2.193(a)(1), (d), (e)(1); TMEP §§804.01(b), 806.03(c).

q **The substitute specimen was in use in commerce at least as early as the filing date of the application.**

q **Applicant has had a bona fide intention to use the mark in commerce on or in**

connection with the goods and/or services listed in the application as of the filing date of the application.

The undersigned being warned that willful false statements and the like are punishable by fine or imprisonment, or both, under 18 U.S.C. §1001, and that such willful false statements and the like may jeopardize the validity of the application or document or any registration resulting therefrom, declares that all statements made of his/her own knowledge are true; and all statements made on information and belief are believed to be true.

(Signature)

(Print or Type Name and Position)

(Date)

RESPONSE GUIDELINES

For this application to proceed toward registration, applicant must explicitly address each refusal and/or requirement raised in this Office action. If the action includes a refusal, applicant may provide arguments and/or evidence as to why the refusal should be withdrawn and the mark should register. Applicant may also have other options for responding to a refusal and should consider such options carefully. To respond to requirements and certain refusal response options, applicant should set forth in writing the required changes or statements and request that the Office enter them into the application record.

Applicant's response must be properly signed by (1) the individual applicant (for joint individual applicants, both must sign) or (2) someone with legal authority to bind a juristic applicant (e.g., a corporate officer or general partner). *See* 37 C.F.R. §§2.62(b), 2.193(a), (e)(2)(ii); TMEP §§611.03(b), 611.06 *et seq.*, 712.01. If applicant retains an attorney, the attorney must sign the response. 37 C.F.R. §2.193(e)(2)(i); TMEP §§611.03(b), 712.01. The individual(s) signing must personally sign or personally enter his/her electronic signature. *See* 37 C.F.R. §2.193(a), (e)(2)(ii); TMEP §§611.01(b), 611.02.

If applicant does not respond to this Office action within six months of the issue/ mailing date, or responds by expressly abandoning the application, the application process will end, the trademark will fail to register, and the application fee will not be refunded. *See* 15 U.S.C. §1062(b); 37 C.F.R. §§2.65(a), 2.68(a), 2.209(a); TMEP §§405.04, 718.01, 718.02. In such case, applicant's only option would be to file a timely petition to revive the application, which, if granted, would allow the application to return to live status. *See* 37 C.F.R. §2.66; TMEP §1714. There is a \$100 fee for such petitions. *See* 37 C.F.R. §§2.6, 2.66(b)(1).

TEAS PLUS APPLICANTS MUST SUBMIT DOCUMENTS ELECTRONICALLY OR SUBMIT FEE: Applicants who filed their application online using the reduced-fee TEAS Plus application must continue to submit certain documents online using TEAS, including responses to Office actions. *See* 37 C.F.R. §2.23(a)(1). For a complete list of these documents, see TMEP §819.02(b). In addition, such applicants must accept correspondence from the Office via e-mail throughout the examination process and must maintain a valid e-mail address. 37 C.F.R. §2.23(a)(2); TMEP §§819, 819.02(a). TEAS Plus applicants who do not meet these requirements must submit an additional fee of \$50 per international class of goods and/or services. 37 C.F.R. §2.6(a)(1)(iv); TMEP §819.04. In appropriate situations and where

all issues can be resolved by amendment, responding by telephone to authorize an examiner's amendment will not incur this additional fee.

Lindsey H. Rubin
/Lindsey H. Rubin/
Trademark Examining Attorney
Law Office 108
Phone: 571-272-4239
Lindsey.Rubin@uspto.gov
(not for formal responses)

TO RESPOND TO THIS LETTER: Use the Trademark Electronic Application System (TEAS) response form at <http://teasroa.uspto.gov/roa/>. Please wait 48-72 hours from the issue/ mailing date before using TEAS, to allow for necessary system updates of the application. For *technical* assistance with online forms, e-mail TEAS@uspto.gov. For questions about the Office action itself, please contact the assigned examining attorney. **Do not respond to this Office action by e-mail; the USPTO does not accept e-mailed responses.**

WHO MUST SIGN THE RESPONSE: It must be personally signed by an individual applicant or someone with legal authority to bind an applicant (i.e., a corporate officer, a general partner, all joint applicants). If an applicant is represented by an attorney, the attorney must sign the response.

PERIODICALLY CHECK THE STATUS OF THE APPLICATION: To ensure that applicant does not miss crucial deadlines or official notices, check the status of the application every three to four months using Trademark Applications and Registrations Retrieval (TARR) at <http://tarr.uspto.gov/>. Please keep a copy of the complete TARR screen. If TARR shows no change for more than six months, call 1-800-786-9199. For more information on checking status, see <http://www.uspto.gov/trademarks/process/status/>.

TO UPDATE CORRESPONDENCE/E-MAIL ADDRESS: Use the TEAS form at <http://www.uspto.gov/teas/eTEASpageE.htm>.