



Medical Marijuana of Massachusetts

Presentation to Town Of Needham

Board of Selectmen

March 22, 2016

Organizational Chart

Medical Marijuana of Massachusetts

Board of Directors

Jonathan Herlihy, Trexler Topping, MD,
Lianne Ankner, Esq., James Vaccaro,
One Vacant Independent Board Member

CEO/President
Jonathan Herlihy

Chief Medical
Officer
Trexler Topping, MD

Compliance
Officer/General
Counsel/Clerk
Lianne Ankner, Esq.,

Chief Operating
Officer
Kevin O'Reilly

Director of
Security &
Anti-Diversion
Joseph Flaherty, Esq.

DPH Application Process

August 16, 2013	MMM Submitted Phase One Application
October 2013	MMM Approved to Proceed to Phase Two
November 21, 2013	MMM Submitted Phase Two Application
January 31, 2014	3 Provisional RMD License Granted to MMM MMM Received the Top Score by the Independent Panel
June 27, 2014	DPH's Rescission of MMM's 3 RMDs
April 27, 2015	Superior Court Ordered DPH to Vacate MMM's Notice of Non-Selection and Directed DPH to Act on MMM's Applications in a Manner Consistent with the Memorandum of Decision and Order
October 9, 2015	DPH Re-issues Provisional Certificates of Registration for: Plymouth Cultivation and Dispensary, Mashpee Dispensary, and DPH Invites MMM to Submit a Siting Profile for a Third Dispensary



Security and Anti-Diversion

- MMM Director of Security Joseph Flaherty, Esq.
 - Mr. Flaherty will work with the Host Communities' Police & Fire Departments to insure:
 - That the Dispensaries will be properly secured at all times.
 - That patients' and staff members' safety is a priority.
 - That adolescents and those under 21 cannot gain access to the Dispensary.
 - MMM's policy is to limit all sales of medical marijuana to no more than one ounce per patient visit.
 - Uphold all of DPH's Security Requirements in the operation of an RMD and Cultivation & Processing Facility.

Triple M

Purpose of Management Company

1. At the time of MMM's submission of their RMD Applications:
 - a. No bank in the Commonwealth would Loan Funds to an RMD Applicant.
 - b. Banks in the Commonwealth would NOT permit an RMD to have an operating account.
2. MMM's Executive Management Team could not obtain personal loans from a bank as the loans were for an RMD.
3. MMM required capital to operate the RMDs and Cultivation including real estate, build-out, equipment, staff and operating expenses.
4. Triple M was Formed to raise the Capital and to Serve as MMM's Bank.
5. Triple M Raised Financing from Private Individuals to Fund MMM's Start-up and Operating Expenses.

Relationship Between MMM & Triple M

MMM

- Holds DPH Certificate of Registration to Operate RMD
- Cultivate and Dispense Marijuana for Medical Use
- Management Fee Paid to Triple M is 18% of Gross Revenue based on projected patients and expenses
- MMM Reviews Management Agreement on Annual Basis

Triple M

- Provides Turn-key Management Services to MMM
- Finances MMM by Lending \$1.39M in Start-up Funds & Provides \$1.0M Line of Credit
- Interest Rate of 8%
- Management Agreement Initial Term is for 5 years
- With 5 Year Renewal

MMM - Proposed Initial Product Line

#	Proposed Strains With Current Names	Primary Base	THC	CBD	Patients Reported Benefits Use of Medical Marijuana for the Following Conditions
1	Mother of Berries	Indicia	14.6%	0.6%	Gastrointestinal Problems
2	Cannatonic X	Indica	1.4%	15.0%	Pain, Insomnia, Anxiety
3	CG4	Indica	3.0%	4.2%	Inflammation, Pain
4	Harlequin Jo (aka Freedom Baby)	Indica	3.2%	8.9%	Pain, Insomnia, Relaxation
5	Midflight	Indica	6.6%	10.9%	Pain, Fibromyalgia
6	Skywalker X	Indica	15.8%	0.5%	Nausea, Multiple Sclerosis
7	Grand Daddy Purple	Indica	16.2%	0.1%	Chrons Disease, Restless Legs
8	White Rhino	Indica	18.1%	0.1%	Insomnia, Stress
9	Mammoth	Indica	25.7%	0.1%	Pain
10	Plant 60	Sativa	2.7%	1.6%	Nausea, Relaxation
11	Twinkle (aka ACDC)	Sativa	8.5%	17.0%	Seizures, Inhibits Cancer

Marijuana Plant Pharmacological Properties

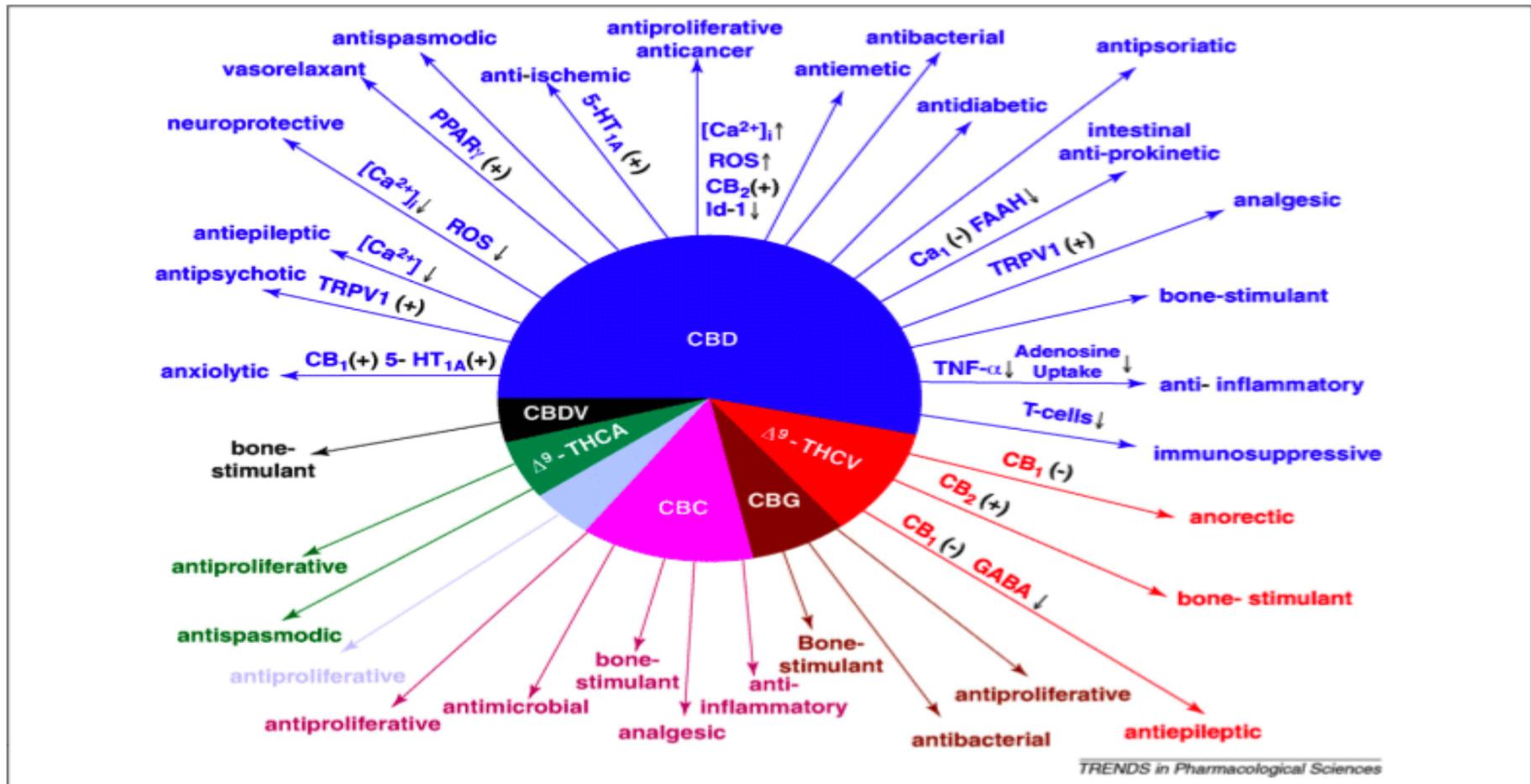


Figure 1. Pharmacological actions of non-psychoactive cannabinoids (with the indication of the proposed mechanisms of action).
Abbreviations: Δ^9 -THC, Δ^9 -tetrahydrocannabinol; Δ^9 -THC, Δ^9 -tetrahydrocannabinol; CBN, cannabiniol; CBD, cannabidiol; Δ^9 -THCV, Δ^9 -tetrahydrocannabivarin; CBC, cannabichromene; CBG, cannabigerol; Δ^9 -THCA, Δ^9 -tetrahydrocannabinolic acid; CBDA, cannabidiolic acid; TRPV1, transient receptor potential vanilloid type 1; PPAR γ , peroxisome proliferator-activated receptor γ ; ROS, reactive oxygen species; 5-HT $_{1A}$, 5-hydroxytryptamine receptor subtype 1A; FAAH, fatty acid amide hydrolase. (+), direct or indirect activation; \uparrow , increase; \downarrow , decrease.

Lab Test Results of Product Twinkle (aka ACDC)

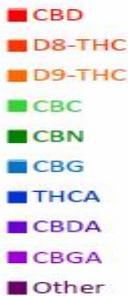
CANNABINOID PROFILE [Procedure WI-10-04]:

This test method was performed in accordance with the requirements of ISO/IEC 17025. These results relate only to the test article listed in this report. Reports may not be reproduced except in their entirety.

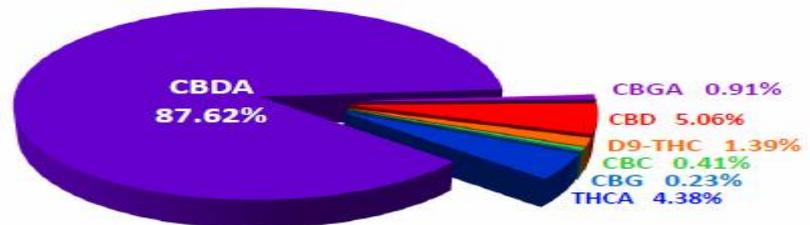


Test	Weight %	Conc.
CBD	0.98%	9.78 mg/g
Δ8-THC	< 0.01%	< 0.01 mg/g
Δ9-THC	0.27%	2.68 mg/g
CBC	0.08%	0.80 mg/g
CBN	< 0.01%	< 0.01 mg/g
CBG	0.04%	0.44 mg/g
THCA	0.85%	8.47 mg/g
CBDA	16.94%	169.38 mg/g
CBGA*	0.18%	1.76 mg/g
Other	< 0.01%	< 0.01 mg/g
Max THC	1.01%	10.11 mg/g
Max CBD	15.83%	158.33 mg/g
Total Active	1.37%	13.70 mg/g
Total	19.33%	193.31 mg/g

*CBGA values are semi-quantitative, based on analyte response relative to THCA.



Total Cannabinoid



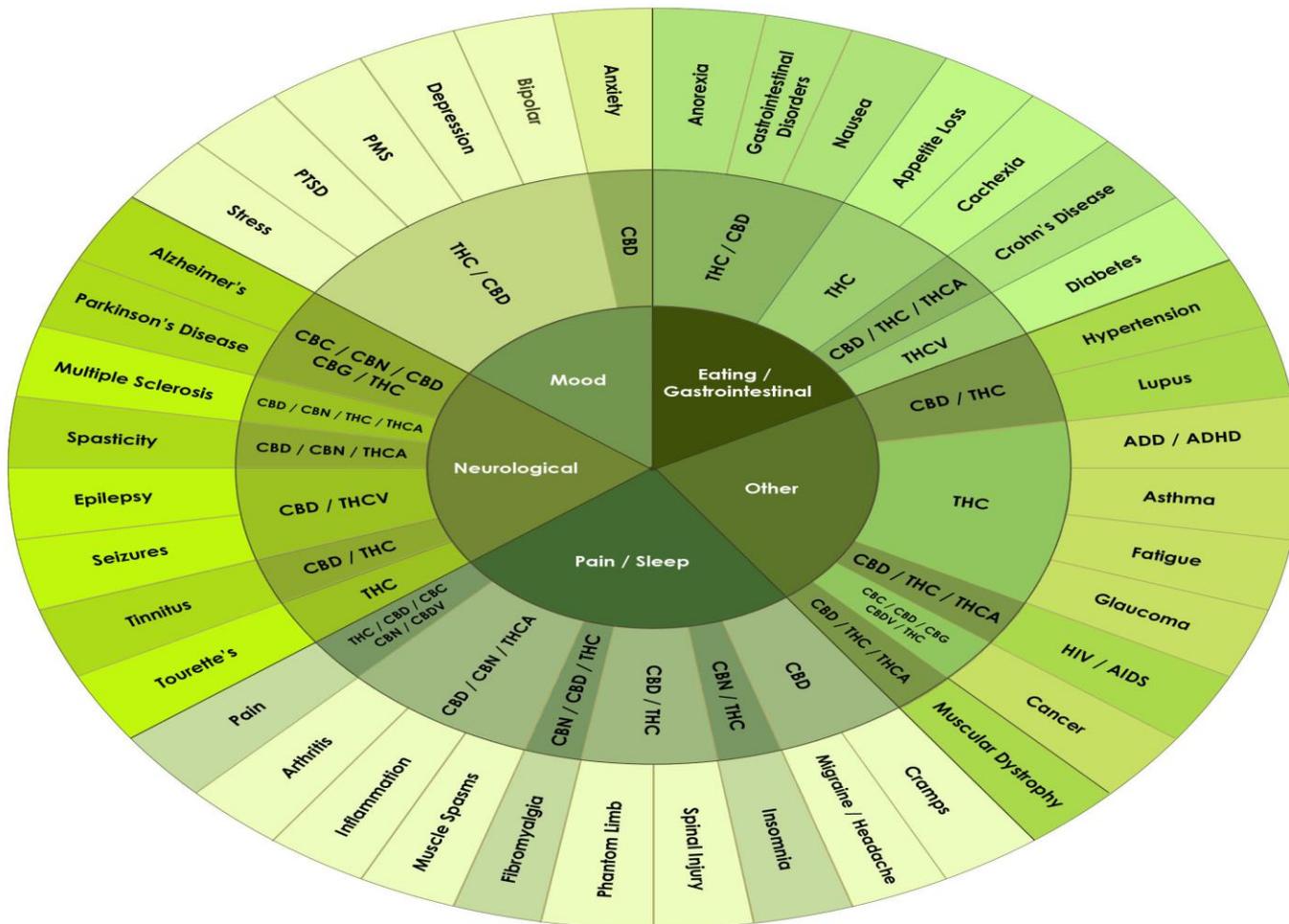
VISUAL AND MICROSCOPIC INSPECTION [Procedure WI-10-03]:

Inspection Comments: None



Medical Marijuana Patient Reported Experiences

SOME PATIENTS HAVE REPORTED THAT THEY HAVE EXPERIENCED ALLEVIATION OF CERTAIN SYMPTOMS ASSOCIATED WITH CONDITIONS SUCH AS THE FOLLOWING



Research

Original Investigation

Medical Cannabis Laws and Opioid Analgesic Overdose Mortality in the United States, 1999-2010

Marcus A. Bachhuber, MD; Brendan Saloner, PhD; Chinazo O. Cunningham, MD, MS; Colleen L. Barry, PhD, MPP

RESULTS Three states (California, Oregon, and Washington) had medical cannabis laws effective prior to 1999. Ten states (Alaska, Colorado, Hawaii, Maine, Michigan, Montana, Nevada, New Mexico, Rhode Island, and Vermont) enacted medical cannabis laws between 1999 and 2010. States with medical cannabis laws had a 24.8% lower mean annual opioid overdose mortality rate (95% CI, -37.5% to -9.5%; $P = .003$) compared with states without medical cannabis laws. Examination of the association between medical cannabis laws and opioid analgesic overdose mortality in each year after implementation of the law showed that such laws were associated with a lower rate of overdose mortality that generally strengthened over time: year 1 (-19.9%; 95% CI, -30.6% to -7.7%; $P = .002$), year 2 (-25.2%; 95% CI, -40.6% to -5.9%; $P = .01$), year 3 (-23.6%; 95% CI, -41.1% to -1.0%; $P = .04$), year 4 (-20.2%; 95% CI, -33.6% to -4.0%; $P = .02$), year 5 (-33.7%; 95% CI, -50.9% to -10.4%; $P = .008$), and year 6 (-33.3%; 95% CI, -44.7% to -19.6%; $P < .001$). In secondary analyses, the findings remained similar.

CONCLUSIONS AND RELEVANCE Medical cannabis laws are associated with significantly lower state-level opioid overdose mortality rates. Further investigation is required to determine how medical cannabis laws may interact with policies aimed at preventing opioid analgesic overdose.



MMM's – Needham Application (Slide 1 of 3)

MMM's application To the Town Of Needham:

1. Patient Visits by Appointment Only. No Walk-ins.
2. Limit on Purchases to 1 Ounce of Medical Marijuana per-day.
3. MMM will not have Edibles in the form of Candy, Baked Goods or Soda.
4. All Medical Marijuana & Receipts Removed from the Facility at the Close of Business.
5. Free Home Deliveries to Needham Residents.
6. Two MMM Staff Members in Delivery Vehicles:
 - Driver/Security who stays with vehicle; and
 - Dispensary Staff Member with hand-held electronic device to Access MMM System and DPH Interoperable Database at time of Home Delivery.

MMM's Application Includes the Following: *(Continued)*

7. All Staff & Patient Parking on-site at 85 Wexford Street.
8. Needham Resident - Director of Community Outreach.
9. Needham Resident - MMM Board of Directors.
10. Community Host Agreement to Provide Annual Donations to Town of Needham.
11. MMM Profits Distributed to MMM Charitable Foundation to Benefit the Town of Needham as well as the other Two Host Communities.

MMM's Application Includes the Following: *(Continued)*

12. MMM's Executive Management Team & Board of Directors are All Massachusetts Residents and have been for All or a Majority of their Professional Careers.

13. Triple M's 45 Investors:
 - 31 (69%) are Licensed Massachusetts Physicians and All are Massachusetts Residents.
 - 13 (29%) are Non-physicians and are Massachusetts Residents.
 - 1 (2%) is from out-of-state who owns 0.3% of Triple M.
 - 99.7% of Triple M's Capital Raised to-date Contributed by Massachusetts Residents.



Medical Marijuana of Massachusetts

Thanks the Board of Selectmen for
the Opportunity to Present this
Evening