

**MINUTES FOR THE MEETING OF THE BOARD OF THE
BOSTON PUBLIC HEALTH COMMISSION
Wednesday, November 16, 2016**

A meeting of the Board of the Boston Public Health Commission ("Commission") was held on Wednesday, November 16, 2016 in the Hayes Conference Room, 2nd floor, 1010 Massachusetts Avenue, Boston, MA 02118.

Board Members Present:

Francis J. Doyle, Esq., Chair
Monica Valdes Lupi, JD, MPH, Executive Director
Harold Cox
Myechia Minter-Jordan, MD, MPH
Kate Walsh

Also Present Were:

Kathryn DeYoung and Danica Lee, Denver, Colorado (via conference call), Ilyitch N. Táborá, Noor Jandali, Rachel Gauss, Kay Lazar, Rebecca Dorn, Sophia Montissol, Gin Dumcius, Brandon Barrett, Samantha Dskowski, Madison Louis, Zachary Silber, Lauren Clark, Ali Ragan, Marjorie Nesin, Leon Bethune, Catherine Cairns, Stephanie Knight, Paul Shoemaker, Dave Susich, Jeanne Cannata, Grace Connolly, Huy Nguyen, Debra Paul, Devon McCarley, Alliz Esielonis, Serlin Haley, Andrew Granese, Chief Jimmy Hooley, Bernice Corpuz, Rita Nieves, David Dreher, Debbie Allen, Kelsea Longo, Colby Champagne, Joanna Borg, Chelsi Gibson, Samantha Verna, Huon, Nguyen, Scott Zobeck, Bolanle Akinsulire, Steve Stephanou, Lindsay Kalter, Heather Gasper, Tim Harrington, PJ McCann, Mimi Brown, Chuck Gagnon, and Kathy Hussey.

Proceedings:

Chairman's Comments

Francis J. Doyle, Esq.

- Mr. Doyle called the meeting of the Boston Public Health Commission's Board of Health to order at approximately 4:08pm. He introduced the Board Members present and our Executive Director to the audience. He welcomed everyone and thanked them for coming.
- Mr. Doyle stated we have a number of very important issues that we're trying to stay on top that are facing the City. Today, we're here with the most cutting edge issue for us: the recent legalization of recreational use of marijuana. The professionals and leaders here at the Commission have been working on this issue for some time, looking into what the experience has been in other parts of the country that have adopted recreational use.

Acceptance and Approval of September 20, 2016 and October 14, 2016 Minutes

- Mr. Doyle then called for a motion to accept and approve the September and October board meeting minutes. Board Members present unanimously approved the minutes from the September 16, 2016 and October 14, 2016 board meetings.

Report from the Executive Office

Monica Valdes Lupi, JD, MPH

Executive Director, Boston Public Health Commission

- Ms. Valdes Lupi had some quick updates for the board before engaging with our colleagues from Denver who were already on the line. Ms. Valdes Lupi introduced our new Intergovernmental Relations Director, Heather Gasper and welcomed her to the Commission. . She'll be jumping right in and joining PJ McCann, our Deputy General Counsel in presenting us with updates on Question 4. Heather comes to us with a lot of experience working government relations. Prior to joining the Commission, she was part of the team at Partners Healthcare. Before that she served in Congressman Capuano's office.
- In your folders, you'll find a Proclamation that Mayor signed designating November as Prematurity Awareness Month.
- A quick update from our Director of Administration and Finance, Grace Connolly. We are moving into full swing around the FY18 budget planning. This month we'll be working with our colleagues at City Hall on the Capital Property Budget Requests that are due the end of the month. By the time the Board reconvenes next month, we'll have additional guidance on instructions from City Hall regarding operational budget exercises and planning moving forward.
- BPHC is in the news. In your packets, you'll see as a follow-up to last month's board meeting, an article from State House New regarding the Prevention & Wellness Trust Fund ("Mayors among Coalition Seeking to Extend Wellness Trust Fund") and really widespread advocacy on behalf of our public community and all of our partners to reauthorize the Prevention & Wellness Trust Fund. Ms. Valdes Lupi personally signed the letter to legislators and wanted to express her appreciation to the Mayor and the Board for signing on as well in support of PWTF.
- Last week we held a flu clinic at City Hall for our city employees. The Mayor actually got his flu shot from one of our nurses in the Infectious Disease Bureau.
- A quick update on an effort that we rolled out on social media here at the Commission, a wellness program called Planksgiving. It's a wellness initiative of one month of Planks and Thanks that's gotten a lot of attention.

Presentation: Recreational Marijuana and the Role of Local Public Health

PJ McCann, Deputy General Counsel, BPHC

Heather Gasper, Director of Intergovernmental Relations, BPHC

- Mr. McCann stated the real focus here tonight will be on hearing from our colleagues from Colorado. Before we do that, we wanted to start with an overview of what Question 4 entails and some initial issues that we've flagged here at the Commission.
- Mr. McCann began with a review of the Medical Marijuana timeline. In November 2012, the Medical Marijuana Ballot initiative passes; City interagency working group formed to develop local policy approach; January 2013: Boston Zoning Commission approves code amendment, making registered marijuana dispensaries (RMDs) a conditional use in commercial districts and forbidden use in residential districts; November 2013: Board of Health approves regulations; November 2014: DPH announces provisional certification for the first Boston RMD site; August 2015: BPHC receives Patriot Care Corporation application; November 2015 – Spring 2016: Staff conducted a series of internal meetings to review and discuss the Patriot Care Application, seeking feedback from other agencies including the Boston Police Department; July 2016: BPHC issues permit; facility opens August 2016.
- Medical Marijuana in Massachusetts by the numbers as of October 31, 2016: 8 RMDs open for sales, another was recently approved for Newton, so now there are 9RMDs; 32,416 active patients; 2,670 active caregivers; 172 registered physicians; 38,302 active physician certifications; and 57 RMDs with provisional certificates. There was a chart showing the steady increase in certified and active patients from October, 2015 through October, 2016
- Here is a Question 4 Summary: It legalizes possession of up to 1 ounce of marijuana in public for adults 21+; Legalizes possession of up to 10 ounces in the home; Allows adults to grow 6 plants in the home, up to 12 plants per household; Taxes recreational marijuana up to 12%, which includes the 6.25% state sales tax, a 3.75% state excise tax, and a 2% local option tax; medical marijuana remains untaxed; Directs state excise tax revenue to a dedicated Marijuana Regulation Fund be used for regulation and enforcement; Calls for the creation of a three-member Cannabis Control Commission (CCC) under the State Treasurer's Office to

promulgate regulations and license marijuana establishments and; Gives preference to existing medical marijuana facilities.

- In addition, Question 4 allows for limited local regulation of marijuana establishments – allows municipalities to ban or restrict the number of retail locations in their jurisdiction, but only after a City Council vote and voter referendum; Notes that the CCC will not approve an establishment if it receives notice that the establishment is not in compliance with any local ordinance or bylaw; Prohibits establishments within 500 feet of a school unless the city sets different buffer zone; Prohibits use in public and prohibits consuming marijuana anywhere smoking tobacco prohibited (presumably including local regulations and ordinances that are stronger than state law); Allows landlords to ban smoking but not other use of marijuana products; Prohibits use in retail establishments unless there is a petition signed by 10% of registered voters and local referendum to allow; Allows a retail location to operate as both a medical and recreational business.
- Here is the implementation timeline: December 15, 2016 – law takes effect; possession and growing legal; March 1, 2017 – State Treasurer appoints Cannabis Control Commission(CCC); September 15, 2017 – CCC promulgates regulations; October 1, 2017 – CCC begins accepting application from testing facilities and from medical marijuana treatment centers to sell recreational marijuana; January 1, 2018 – CCC accepts all applications if there are fewer than 75 MMJ provisional registrations by 10/01/17; January 1, 2018 – If CCC has not issued regulations, medical marijuana dispensaries can sell recreational marijuana; October 1, 2018 – CCC accepts applications from all applicants for retailer permits; November 2018 – Possible local referendum on smoking in businesses, local option tax, local limit on number of businesses.
- Ms. Gasper spoke about potential state legislative issues, reiterating Mr. McCann that the timeline is very important. She explained the implantation timeline: local authority must address limitations, procedural barriers to establishing local ordinances and regulations; clarify local authority to craft host community agreements; Revenue: revisit the adopted tax rate of 12%, which includes the 6.25% state sales tax, the 3.75% state excise tax, and the 2% local option tax.
- The City’s next steps are: Convene working group of City agencies; Determine agenda for state legislative and regulatory advocacy; Determine whether to pursue the 2% local option tax, and identify uses for funds; Determine response to any potential referendum to allow consumption on premises; Consider a local policy to prohibit marijuana use in all City buildings; Determine whether there is a need for any additional zoning code amendment, noting that zoning provisions for recreational establishments cannot be more restrictive than medical marijuana establishments; Determine process for host community agreements; Explore collaboration between City agencies to address diversion and youth access; Address nuisance issues related to home and commercial growing; Advocate for additional restrictions on edibles.

***Kathryn DeYoung, Epidemiologist, Denver Public Health
Marijuana Health Impact Monitoring: Colorado***

- The Colorado Department of Public Health and Environment (CDPHE) released a report on marijuana use and health effects. The report contained: Analysis of marijuana use, using state and national surveys; Analysis of potential health impact, using hospital and poison center data and; Evaluation and summary of scientific evidence about health effects of marijuana. Search “monitoring marijuana Colorado” to see the full report, or use this address: colorado.gov/pacific/cdphe/monitoring-marijuana-related-health-effects.
- The timeline of marijuana legalization in Colorado began in 2001 when medical marijuana was legalized. In 2010, medical marijuana became commercially available. In 2014, retail (recreational) marijuana became commercially available.
- Perceptions and Behaviors in Students. This chart represents student perceptions about the risk of harm associated with marijuana use. The percent of Colorado high school students who believe that: People who use marijuana regularly have moderate/great risk of harming themselves in 2013 was 54.0% compared to 47.7% in 2015. People who have one or two drinks [of alcohol] nearly every day have moderate/great risk of harming themselves was 69.9% in 2013 and 70.7% in 2015. People who smoke one or more packs of cigarettes per day have a moderate/great risk of harming themselves was 84.4% in 2013 compared to 84.3% in 2015.
- The next graph depicts the prevalence of current marijuana use for high school students compared to current alcohol and tobacco use in Colorado for the time period 2009 through 2015. Alcohol use in 2009 was at 40.8% and by 2015 it was down to 30.2%. Marijuana use in 2009 was at 24.8% and by 2015 it was 21.2%. Tobacco use in 2009 was at 17.7% and by 2015 it was 8.6%.

- The next chart showed a comparison between the percent of high school students who ever used and recently used marijuana in Colorado and the U.S. during the time period of 2005 through 2015. In 2005, the percent for U.S. ever used was 42.4%; Colorado's was at 38.4%. By 2015 the ever used for U.S. was 38.0%, Colorado was at 38.6%. For U.S. current use in 2005, the percent was 20.2% and Colorado was 22.7%. Those figures for 2015 were identical at 21.7% current use in the U.S. and Colorado.
- In the following chart, the prevalence of current marijuana use for high school and middle school students, 6th grade through 12th, and year, 2013 through 2015, in Colorado was shown. The percentage of marijuana use increased during that time period especially with 7th, 11th, and 12th graders: 7th grade rose from 4.5% in 2013 to 8.8% in 2015; 11th grade rose from 22.1 % to 26.3% and; 12th grade rose from 24.3% to 27.8%.
- The usual methods of marijuana use among high school students that reported current marijuana use in Colorado from 2011 through 2015. The most popular type of use was smoking: 88.9% in 2011, 85.0% in 2013, and 86.8% in 2015. Vaping was next with 5.5% in 2011, 6.2% in 2013, and 5.1% in 2015. Edibles followed with 3.8% in 2011, 5.2% in 2013, and 2.1% in 2015. "Other" methods were 1.9% in 2011, 3.6% in 2013, and 6.0% in 2015.
- Among Colorado high school students who drove in the past 30 day: 10.9% (10.-11.8%) had driven after using marijuana in 2013; 10.4% (9.0-11.8%) had driven after using marijuana in 2015. *Note: the length of time between marijuana use and driving was not specified.*
- Adult Perceptions and Behaviors. The percent of Colorado adults in 2014 who believe that **adults** who use marijuana daily / near daily have: a moderate / great risk of harming themselves 54.0% (52.4-55.6%); and adults who use marijuana daily / near daily have: a slight / no risk for harming themselves 46.0% (44.4-47.5%).
- In 2014, 48.9% of Colorado adults (18+ years of age) had ever used marijuana; 13.6% had used marijuana in the past 30 days ("current use"); and 33.2% of current users reported using marijuana daily. Over time, estimates of current use among Colorado adults have increased slightly: National Survey of Drug Use and Health: 2010 = 11/3%; 2011 = 11.0%; 2012 = 10.4%; 2013 = 12/9%; Behavioral Risk Factor Surveillance System: 2014 = 13/6%.
- Among Colorado adults who had used marijuana and the methods used in the past 30 days in 2014: Smoked 83.1% (80.0-86.3%); Eaten 34.4% (30.0-38.7%); Vaporized 32.4% (28.0-36.7%); Dabbed 17.9% (13.9-21.9%); Other 7.4%(4.9-9.9%); and Drank 5.8%(3.3-8.1%).
- The health effects of marijuana use based on calls to Rocky Mountain Poison Center and Drug Center (RMPDC), Emergency Department visits, and hospitalizations from January 1, 2000 to December 31, 2015. *NOTE: Human marijuana exposure calls to RMPDC were determined by the presence of the generic code marijuana 0083000 from the National Poison Data System or marijuana exposure mentioned in RMPDC case notes.* Counts of call remain fairly constant from 2000 to 2009. In 2010, calls related to marijuana significantly increased by more than double from 44 to 93 and in 2014 calls related to marijuana significantly increased by 74.8% from 127 to 222. In 2015, they increased from 152 to 229.
- The marijuana related calls to Rocky Mountain Poison Center and Drug Center (RMPDC) by age groups from January 1, 2000 to December 31, 2015 in Colorado (1,487). *NOTE: Human marijuana exposure calls to RMPDC were determined by the presence of the generic code marijuana 0083000 from the National Poison Data System or marijuana exposure mentioned in RMPDC case notes. Unknown age includes calls with ages recorded as teens, 20s, unknown adult (>=20yrs), unknown child (=19yrs), and unknown age.* Ages 0-17 years and 25 years and older showed increased numbers of marijuana exposure calls in the *Medical Marijuana Commercialized* era compared to the *Medical Marijuana Legalized* era, while ages 18-24 remain fairly constant since the *Prior to Legalization of Medical Marijuana* era. In 2014 with the beginning of the *Retail Marijuana Legalized* era, all ages showed increased numbers of marijuana exposures calls compared to the *Medical Marijuana Commercialized* era.
- This next chart represents the rates of Hospitalizations (HD) and Emergency Department (ED) visits with possible marijuana exposures, diagnoses, or billing codes in First Three Codes per 100,000 HD and ED visits by Legalization Eras in Colorado. In 2000 *Prior to Legalized Medial Marijuana era*, of the total number of 1,211 HD or ED visits, 274 were possible marijuana exposures. From 2001 to 2009 *Medical Marijuana Legalized era*, of the total 12,312 HD or ED visits, 288 were possible marijuana exposures.
- There was a significant increase during 2010 to 2013 *Medical Marijuana Commercialized era* of the total 16,426 ED visits, 376 were possible marijuana exposures and of the total 7,075 HD visits, 373 were possible marijuana exposures. There was also a significant increase during 2014 to Jun 2015 *Retail Marijuana*

Legalized era of the total 13,4736 ED visits, 530 were possible marijuana exposures and of the total 3,873 HD visits, 373 were possible marijuana exposures.

- At least one of the 30 ICD-8-CM diagnosis codes were used to determine ED visits with possible marijuana exposures, diagnoses, billing codes or poisonings and are based on rates per 100,000 ED visits. These types of visits stayed fairly constant from 2011 through June 2015. There was a slight increase in 2014 that leveled back down in 2015.
- ED visits involving other substances were identified using at least one of the ICD-9-CM codes in at least one of the 30 listed diagnosis codes. *Alcohol*: these types of visits were slightly over 4,250 in 2011 and continued to decline to approximately the 3,900 range by June 2015. *Opioids (Prescription Opioids, Heroin, Cocaine) Dependence and Poisoning*: these types of visits ranged from 500 in 2011 to approximately the 450 range by June 2015. *Stimulant Dependence and Poisoning*: these types of visits were also fairly constant ranging at approximately 550 in 2011 to 650 by 2015.
- The last chart represents rates of Hospitalizations (HD) and Emergency Department (ED) visits with possible marijuana exposures, diagnoses, or billing codes per 100,000 HD and ED visits by Legalization Eras in Colorado by age group. HD rates significantly increased in the following age groups from previous time periods. Age group 9 to 17 years in 2010-2013 was 6,411 and 7,281 in 2014-June 2015. Age group 18 to 25 years in 2010-2013 was 5,129 and 7,965 in 2014-June 2015. Ages 26 to 34 in 2010-2013 was 2,546 and 4,469 in 2014-June 2015. Ages 35 to 64 years 2010-2013 was 1,788 and 3,875 in 2014 - June 2015.

Danica Lee, Public Health Inspections Division Director, Denver Environmental Health Consumer Protection & Legal Marijuana in Denver

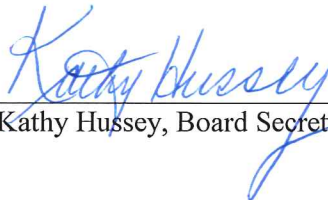
- The Denver Department of Environmental Health is comprised of 5 Divisions with 200 employees: Office of the Medical Examiner; Denver Animal Protection; Environmental Quality; Community Health; and Public Health Inspections, which has 2 sections of its own: Food Safety & Marijuana and Healthy Families/Health Homes.
- Food safety inspections of marijuana includes; local food safety regulations that have been applied to Denver marijuana food businesses since 2010; includes concentrates if ingested; all marijuana manufacturers and retailers receive an Environmental Health plan review and minimum 2 inspections annually; all complaints are investigated; ***marijuana businesses outside of Denver receive no food safety inspections; marijuana products not regulated as “food” by State Health Department.***
- There are shelf-stability concerns with Hash Oils for ingestion: Plant-derived oils may have *C. botulinum* spores; Concerns about micro-environment supporting *C. botulinum* growth and toxin formation; DEH requires one of the following for hash oils: labeled for smoking/vaping only, stored at 41F or less, and product evaluation/approval by Denver EH for shelf-stable storage; and Handout for industry:
<https://www.denvergov.org/content/dam/denvergov/Portals/771/documents/PHI/Food/Special%20Concerns%20with%20MJ%20extractions.pdf>. A copy of this handout is on the next screen.
- In January 2014, Denver Legalized Recreational Marijuana. We continued food safety inspections. We started to receive more referrals from other agencies and consumer complaints. We started to see big increase in types of products and distribution. We started to develop increased understanding of products, processes, and associated risks.
- Authorities in Chapters 23 and 24, DRMC deal with enforcement. DEH staff are badged and can issue criminal summons. Administrative citations are assessed for repeat violations. Food disposals, facility closures where imminent health hazards exist. First ever recalls of marijuana food product conducted in 2014.
- The first marijuana recall was in July, 2014. An issue was identified at the routing inspection of a marijuana baking mix business; marijuana ingredient was extracted in an old domestic laundry machine. We face many inspection challenges: constant industry innovations; unapproved equipment; industry lacks consumer safety expertise, GMPs; establishment of standardized policies; safety; complex supply and distribution; staffing; and communications.
- There are occupational safety hazards as well: explosions from concentrate production; hydrocarbon toxicity from improper ventilation during concentrate production; reduced oxygen, increased CO2 in grows; criminal activity; cross contamination between grows – Tyvek; Denver safety video.
- Some consumer safety issues include: cultivation practices influenced by plant value; solvent grade – impure solvents are much cheaper; heavy metal absorption; nutrients; off-label pesticide residue; hash oil shelf-stability – *C. botulinum* concern with ingestion; and unsafe equipment for food/smoking production.

- Pesticide contamination and Denver enforcement. In August 2015, the Denver Post commissions tests and finds high level contamination in concentrates. One lab director indicated that between April and September 2015, approximately 10% of samples were free of off-label residues.
- This prompted Denver involvement addressing contaminated Marijuana-derived products; 24 pesticide contamination recalls since September 2015 affecting approximately 300,000 units; 1 recall due to unclean equipment, 2 due to shelf-stability; 2 appeals of enforcement action to Denver's Board of Environmental Health. The stats show 59% or 247 medical marijuana products recalled versus 41% or 174 recreational marijuana products. There were 5 off-label pesticide residues found on recalled product samples. The media number of pesticide residues found on recalled product samples is 3.
- Why do we care? There are NO studies on health impact of mixing pesticides, concentrating, burning, or inhaling; a potential to be pervasive confounding factor when studying health and therapeutic impacts; and used as medicine for children and severely immunocompromised. The Cannabis Safety Institute White Paper in 2015 on the levels of pesticides detected in samples.
- Detectable residues can persist in products for many months. Residues persist in mature plants clipped from "mothers" that were sprayed. Low residues are still a concern, especially for concentrates. Cleaning of ventilation systems, grow rooms, and plant containers needed. Still seeing spiked residues indicating recent use in some investigations.
- In October 2016, there were two (2) unrelated investigations where "hot" plant material was tested by manufacturer and then returned to medicinal cultivator. Cultivators proceeded to resell hot plant material. One of the facility's plant material had 4 off label residues. A recall press release was sent out on October 24, 2016.

Adjournment

- Mr. Doyle stated that pretty much wraps up our business for today. We've got 5 minutes left. Are there any last questions from the audience? There were none. Mr. Doyle adjourned this meeting of the Board of Health promptly at 6:00p.m.

Respectfully submitted by:



Kathy Hussey, Board Secretary