



Testimony of Maine Public Health Association in Opposition to:

LD 1249: An Act Regarding the Testing and Safety of Marijuana and Marijuana Products

LD 1434: An Act Regarding Controlled Entry Areas within Retail Marijuana Stores

LD 1452: An Act To Amend the Law Regarding the Advertising and Marketing of Adult Use Marijuana

Joint Standing Committee on Veterans and Legal Affairs
State House, Room 437
Friday, April 23, 2021

Good morning Senator Luchini, Representative Caiazzo, and distinguished members of the Joint Standing Committee on Veterans and Legal Affairs. My name is Rebecca Boulos. I am a resident of South Portland and executive director of Maine Public Health Association. MPHA opposes the following bills:

- LD 1249: An Act Regarding the Testing and Safety of Marijuana and Marijuana Products
- LD 1434: An Act Regarding Controlled Entry Areas within Retail Marijuana Stores
- LD 1452: An Act To Amend the Law Regarding the Advertising and Marketing of Adult Use Marijuana

MPHA is the state's oldest, largest, and most diverse association for public health professionals. We represent more than 500 individual members and 30 organizations across the state. The mission of MPHA is to improve and sustain the health and well-being of all people in Maine through health promotion, disease prevention, and the advancement of health equity. As a statewide nonprofit association, we advocate, act, and advise on critical public health challenges, aiming to improve the policies, systems, and environments that underlie health inequities – but which also have potential to improve health outcomes for all people in Maine. We are not tied to a national agenda, which means we are responsive to the needs of Maine's communities and we take that responsibility seriously.

LD 1249: An Act Regarding the Testing and Safety of Marijuana and Marijuana Products

MPHA opposes any effort to reduce the scope of testing of marijuana and marijuana products. Given this new and growing enterprise, and our equally new and growing regulatory framework, now is not the time to scale back any testing requirements. We are still learning how to test these products and what to test for, and research is still identifying poisons, toxins, and other contaminants that would be harmful to human health. The state needs to continue ensuring that products sold meet established public health and safety requirements.

As an example, the state continues to uncover the scope of perfluoroalkyl and polyfluoroalkyl substances (PFAS) contamination of farming land and drinking water supplies. What is particularly challenging about these chemicals is both their widespread use and the public's unawareness of their additive exposure and accumulation. Without testing of marijuana products, we will be unaware of potential PFAS contamination, even of organically grown products, putting consumers health at risk. According to the U.S. Environmental Protection Agency,¹ PFAS are found in air, soil, surface water, and groundwater (including drinking water); food and food packaging; commercial household products; and some living organisms (where PFAS have accumulated over time). PFAS do not break down and can accumulate over time. There is evidence from human and animal studies that PFAS exposure may reduce antibody responses to vaccines^{2,3} and infectious disease

resistance,⁴ alter metabolism⁵ and fertility,⁶ reduce fetal growth and increase the risk of being overweight or obese.⁷ A recent review of the research literature explored the relationship between PFAS exposure and children's health. Six associations with health were identified: early puberty onset, immunity/infection/asthma, thyroid and renal function, cardio-metabolic measures, and neurodevelopmental/attention.⁸

Lastly, should the committee support requiring the Department of Administrative and Financial Services to adopt rules that edible marijuana products meet the food safety contamination standards in place for similar food products through the Department of Agriculture, Conservation and Forestry, we have several considerations for the Committee and Department:

1. Studies have shown that the nutrient contents of food in both packaged and ready-to-eat foods may be incorrectly labeled.⁹ Specific to marijuana, studies from Washington State showed clear and systematic differences within results provided by cannabis testing, even when controlling for confounding factors.¹⁰ Will there be additional assessments to ensure content and labeling accuracy across products, and testing facilities? Will there be a standard serving size for CBD, and/or recommended amount of CBD within servings (or ratio of THC:CBD/serving)? Cannabis has become much more potent; samples studied from 1995 to 2014 show that while the level of THC increased by 300%, the amount of CBD decreased by 50%.¹¹ MPHA recommends the Department consider the evidence to support the amount of marijuana and THC/CBD that is present within one serving.
2. Who determines the recommended use/expiration dates? What are the criteria?
3. Will warning labels or advisories be printed on packaging about interactions between THC (and other cannabinoids) and nutrients and/or drugs in the edible product? Will identifying interactions be part of the testing requirement *before* a product goes to market? Will the warning label be placed on the front of the product?
4. The bill does not include health claims as allowable (or not) on products. At the federal level, the FDA monitors nutrient content claims, health claims, and structure/function claims through three ways: the 1990 Nutrition Labeling Education Act (NLEA), the 1997 Food and Drug Administration Modernization Act (FDAMA), and as described in the FDA's guidance titled *Interim Procedures for Qualified Health Claims in the Labeling of Conventional Human Food and Dietary Supplements*.¹² Given that marijuana is not legal at the federal level, which omits FDA oversight of health claims, and means that marijuana products being used in research studies are likely not the same as products being sold and consumed, MPHA recommends prohibiting health-related statements on marijuana products until the FDA is responsible for regulating the product and associated health claims (in which case the FDA would establish the criteria for health claims related to marijuana use).

LD 1434: An Act Regarding Controlled Entry Areas within Retail Marijuana Stores

MPHA opposes this legislation. While establishing this area would presumably limit the entry of persons under 21 years of age onto the sales floor, the bill does not prohibit windows with viewing of the sales floor, or collateral or advertising in the controlled entry area, which could introduce marketing to persons under the age of twenty-one.

If the committee is supportive of having such an entry way, then we respectfully request an amendment to prohibit windows with a view of the sales floor, and collateral or advertising in the controlled entry area.

LD 1452: An Act To Amend the Law Regarding the Advertising and Marketing of Adult Use Marijuana

We oppose this bill because it bypasses standard administrative processes for oversight of this new industry. In changing the process, any time a business disagrees with the decision of the Office of Marijuana Policy, the issue goes directly to Maine's Superior Court, unnecessarily burdening the judicial system. Furthermore, by defining specific items that might appeal to persons under the age of 21, this bill introduces more gray areas into

an already underdeveloped regulatory framework. For example, the bill lists “comic animal,” but not “animal”; however, it is reasonable that any image of an animal could appeal to persons under 21 years of age. Overall, this bill weakens the position of the Office of Marijuana Policy to protect public health by limiting youth-friendly advertising, labeling, and packaging.

There is reason to be concerned about the likely increase in attraction to youth if this bill (and LD 1434) were to pass. While e-cigarettes are the most widely used tobacco product among U.S. youth,¹³ a study from the U.S. Centers for Disease Control and Prevention found that nearly 9 in 100 students reported vaping marijuana. Based on this survey, researchers estimate that nearly 1 in 3 U.S. high school students who use e-cigarettes have already used marijuana.¹⁴ This is particularly problematic because the *THC in vaporized oils and waxes can be 4-30 times higher than dried marijuana.*⁴

People who used cannabis heavily in their teens and continued through adulthood showed a significant drop in IQ between the ages of 13 and 38 – an average loss of 8 points for those who met criteria for cannabis dependence.² Marijuana adversely impacts adolescent brain development, is a risk factor for cardio-respiratory disease and testicular cancer and is associated with both psychiatric illness and negative social outcomes.^{15,16}

The 2019 Maine Integrated Youth Health Survey (MIYHS) asked, “How much do you think people risk harming themselves (physically or in other ways) if they smoke marijuana once or twice a week?” 38% of middle schoolers and 67% of high schoolers answered, “Slight risk” or “No risk,” an increase for both groups in no perceived risk compared to 2015 and 2017.¹⁷ The 2019 MIYHS also reported that 8.5% of middle schoolers, and 36.4% of high schoolers have used marijuana (18.1% of middle schoolers report their first time was before age 11; 16.6% of high schoolers report their first time was before age 13).¹⁷

Maine Public Health Association opposes these bills as we believe they pose risks to public health. We respectfully request you vote LD 1249, LD 1434, and LD 1452 “Ought Not to Pass.” Thank you for your consideration.

¹U.S. Environmental Protection Agency. 2018. Basic information on PFAS. <https://www.epa.gov/pfas/basic-information-pfas>.

²Grandjean P, Heilmann C, Weihe P, et al. 2017. Estimated exposures to perfluorinated compounds in infancy predict attenuated vaccine antibody concentrations at age 5-years. *J Immunotoxicol*,14(1):188-195.

³Looker C, Luster MI, Calafat AM, et al. 2014. Influenza vaccine response in adults exposed to perfluorooctanoate and perfluorooctanesulfonate. *Toxicol Sci.*,138(1):76-88.

⁴National Toxicology Program. 2016. Monograph on immunotoxicity associated with exposure to perfluorooctanoic acid (PFOA) and perfluorooctane sulfonate (PFOS). Research Triangle Park, NC: National Toxicology Program. https://ntp.niehs.nih.gov/ntp/ohat/pfoa_pfos/pfoa_pfosmonograph_508.pdf.

⁵Liu G, Dhana K, Furtado JD, Rood J, Zong G, Liang L, Qi L, Bray GA, DeJonge L, Coull B, Grandjean P, Sun Q. 2018. Perfluoroalkyl substances and changes in body weight and resting metabolic rate in response to weight-loss diets: A prospective study. *PLoS Med*,15(2):e1002502.

⁶Bach CC, Vested A, Jorgensen K, Bonde JP, Henriksen TB, Toft G. 2016. Perfluoroalkyl and polyfluoroalkyl substances and measures of human fertility: A systematic review. *Crit Rev Toxicol*,46(9):735-55.

⁷Braun J. 2017. Early-life exposure to EDCs: Role in childhood obesity and neurodevelopment. *Nat Rev Endocrinol*,13(3):161–173.

⁸Rappazzo KM, Coffman E & Hines EP. 2017. Exposure to perfluorinated alkyl substances and health outcomes in children: A systematic review of the epidemiologic literature. *International Journal of Environmental Research and Public Health*, 14(7):691.

⁹Urban, L. E., Dallal, G. E., Robinson, L. M., Ausman, L. M., Saltzman, E., & Roberts, S. B. (2010). The accuracy of stated energy contents of reduced-energy, commercially prepared foods. *Journal of the American Dietetic Association*, 110(1), 116–123.

¹⁰Jikomes, N., Zoorob, M. The cannabinoid content of legal cannabis in Washington State varies systematically across testing facilities and popular consumer products. *Scientific Report*. 8: 4519 (2018).

¹¹ElSohly M.A., et al. Changes in cannabis potency over the last two decades (1995-2014) – Analysis of current data in the United States. *Biological Psychiatry*. 2016; 79(7):613-619.

¹²U.S. Food and Drug. Label claims for conventional foods and dietary supplements. Updated June 2018.

¹³US Department of Health and Human Services. *E-Cigarette use among youth and young adults: A report of the surgeon general*. Atlanta, GA: Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health;2016.

¹⁴Cunningham A. Teen vaping of marijuana raises concerns about addiction. *Science News*. October 2018.

<https://www.sciencenewsforstudents.org/article/teen-vaping-marijuana-raises-concerns-about-addiction>

¹⁵American College of Pediatricians. Marijuana use: Detrimental to youth. April 2017. <https://www.acpeds.org/position-statements/marijuana-use-detrimental-to-youth>

¹⁶Wilkinson ST, D'Souza DC. Problems with the medicalization of marijuana. *JAMA*. 2014;311(23):2377–2378.

¹⁷Maine Youth Health Data Atlas. Data from 2019 Maine Integrated Youth Health Survey.

<https://data.mainepublichealth.gov/miyhs/files/atlas/atlas.html>