The Cannabis Patient Advocacy Association P.O. Box 5658 Takoma Park, Maryland 20913 www.patientscann.com

February 19, 2020

RE: HB1369: Pesticides in Cannabis

The Cannabis Patient Advocacy Association requests that either the proposed Maryland Code, Agriculture § 5-105(i) as contained within HB1369, be stricken in its entirety or, in the alternative, that it be amended to include the words "natural or organic" immediately preceding the term "pesticide." While Maryland Code, Agriculture § 5-105(h) requires compliance with federal laws in this area, even the United States Environmental Protection Agency (EPA) standards for pesticide use in food products may not be adequate to properly ensure our most medically vulnerable patients are safe from pesticide harm. Pursuant to Maryland Code, Agriculture § 5-101(t), " 'Pesticide' means (1) any substance or mixture of substances intended for preventing, destroying, repelling, or mitigating any insects, rodents, fungi, weeds, or other forms of plant or animal life or viruses, except viruses on or in living humans or other animals, which the Secretary declares to be a pest; and (2) any substance or mixture of substances intended for use as a plant regulator, defoliant, or desiccant." The EPA's process for setting tolerance is pesticide and food product specific with no direct reference available to compare cannabis as a plant. "In setting the tolerance, EPA must make a safety finding that the pesticide can be used with 'reasonable certainty of no harm.' To make this finding, EPA considers the toxicity of the pesticide and its breakdown products, how much of the pesticide is applied and how often, and how much of the pesticide (i.e., the residue) remains in or on food by the time it is marketed. EPA ensures that the tolerance selected will be safe."1 There is no accurate way to do so for cannabis at this time. Additionally, the EPA only reevaluates the data and safety of a pesticide every 15 years post-registration²—a lengthy amount of time in modern science. Between 2009 and 2013 alone, the EPA took at least ten actions to cancel the use of specific pesticides previously deemed safe for human consumption at acceptable levels.³

While adults humans may not suffer from harmful effects from low level, short-term exposure to unnatural and non-organic pesticides,⁴ children are naturally at a greater risk of harm from pesticides due to the developing nature of their organs as well as their immune, metabolic and enzymatic systems.⁵ Sick children are especially vulnerable as are the geriatric, immune-compromised and chronically ill

⁴ Occupational and environmental exposure to pesticides and cytokine pathways in chronic diseases (Review), Gangemi, S., et al., <u>Int J Mol Med</u>. 38(4): 1012–1020 (2016).

¹ United States Environmental Protection Agency: Food and Pesticides as accessed at (<u>https://www.epa.gov/safepestcontrol/food-and-pesticides</u>).

² United States Environmental Protection Agency: Food and Pesticides as accessed at (<u>https://www.epa.gov/safepestcontrol/food-and-pesticides</u>).

³ United States Environmental Protection Agency: Food and Pesticides as accessed at (<u>https://www.epa.gov/safepestcontrol/food-and-pesticides</u>).

⁵ United States Environmental Protection Agency: Children Are at Greater Risks from Pesticide Exposure (2002) as accessed at <u>https://archive.epa.gov/pesticides/regulating/laws/fqpa/web/html/kidpesticide.html</u>.

because pesticides can structurally and functionally alter the immune system.⁶ A review of the literature show that even at low doses, chronic exposure to pesticides is associated with increased risk of a variety of cancers as data shows an immunotoxic effect on the immune system's ability to recognize and control tumor growth.⁷ For many medical cannabis patients, daily consumption, typically by ingestion, of their medication keeps them healthy and well. Even at low, acceptable levels, levels, chronic exposure could cause Maryland medical cannabis a reasonable certainty of harm.

The United States uses the term 'tolerance' when talking about pesticide levels. How much of that pesticide can the human body handle specific to that pesticide as it interacts with the food product? When it comes to cannabis, the answer is we don't know. There are other times when the answer in cannabis is "we don't know for certain but we know enough to know we're not doing harm." This is not one of those times. We know that unnatural and non-organic pesticides are harmful. It is believed that there are acceptable levels that may be consumed in food products. We know the EPA found that previously acceptable pesticides must be removed due to new scientific data. At best, it is unclear if the application of unnatural and non-organic pesticides to our cannabis can be used with "reasonable certainty of no harm." At best, allowing unnatural and non-organic pesticides are not necessary to grow the high-quality, affordable medical cannabis that Maryland patients need. Natural and organic pesticides exist and produce high-quality, affordable cannabis.

Unnatural and non-organic pesticides, even at EPA acceptable levels, can be harmful to children, the immune-compromised, geriatrics and the chronically ill. The Cannabis Patient Advocacy Association requests either the proposed Maryland Code, Agriculture § 5-105(i) as contained within HB1369, be stricken in its entirety or, in the alternative, that it be amended to include the words "natural or organic" immediately preceding the term "pesticide."

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⁶ Occupational and environmental exposure to pesticides and cytokine pathways in chronic diseases (Review), Gangemi, S., et al., <u>Int J Mol Med</u>. 38(4): 1012–1020 (2016).

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