



**Testimony of the Maine Public Health Association In Support of LD 125,  
An Act To Prohibit the Aerial Spraying of Glyphosate and Other  
Synthetic Herbicides for the Purpose of Silviculture**

Joint Standing Committee on Agriculture, Conservation and Forestry  
Room 214, Cross State Office Building  
Tuesday, March 2, 2021

Good morning Senator Dill, Representative O’Neil, and distinguished members of the Joint Standing Committee on Agriculture, Conservation and Forestry. My name is Rebecca Boulos. I am a resident of South Portland and executive director of the Maine Public Health Association. I am here to provide testimony in support of LD 125, An Act To Prohibit the Aerial Spraying of Glyphosate and Other Synthetic Herbicides for the Purpose of Silviculture.

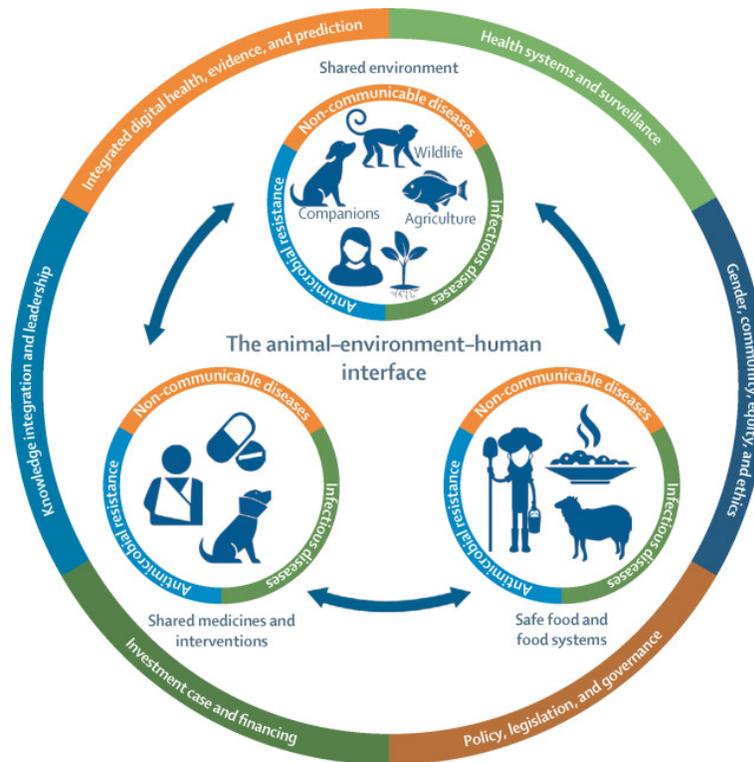
MPHA is the state’s oldest, largest, and most diverse association for public health professionals. We represent more than 500 individual members and 30 organizations across the state. The mission of MPHA is to improve and sustain the health and well-being of all people in Maine through health promotion, 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 125 prohibits the aerial application of glyphosate or other synthetic herbicides for the purpose of silviculture, including reforestation, regeneration, or vegetation control after a timber harvest.

Over the past 40 years, there has been widespread use of the herbicide glyphosate, with the understanding there were minimal side effects. However, research suggests there are indeed negative effects for human, animal, and environmental health. In fact, in 2015, the World Health Organization reclassified glyphosate as probably carcinogenic to humans.<sup>1</sup> A 2018 article conducted a comprehensive review of the human and environmental health effects of glyphosate. Researchers found “Although the acute toxic effects of glyphosate and AMPA [its breakdown product, aminomethyl phosphonic acid] on mammals are low, there are animal data raising the possibility of health effects associated with chronic, ultra-low doses related to accumulation of these compounds in the environment. Intensive glyphosate use has led to the selection of glyphosate-resistant weeds and microorganisms. Shifts in microbial compositions due to selective pressure by glyphosate may have contributed to the proliferation of plant and animal pathogens.”<sup>2</sup> The paper also cited soil contamination as a concern. Glyphosate adsorbs to clay and organic matter, which slows its degradation by soil microorganisms and leads to accumulation in soils over time. Furthermore, despite its attachment to clay and organic matter, parts of the glyphosate and AMPA have been found in ground water after heavy rain.<sup>2</sup>

Another study, conducted in 2017, assessed the human health effects of aerial spraying of glyphosate in Colombia. Researchers found increased prevalence of miscarriages, skin rashes and respiratory illness among populations exposed to the herbicide.<sup>3</sup>

These articles demonstrate the acute and long-term human, animal, and environmental health impacts of the use of this herbicide. The concept of “One Health” recognizes the relationships between animal, environment, and human health (see graphic below).<sup>4</sup> In the context of this bill, the One Health approach would focus on the interactions between human administration of aerial herbicides and impacts to environmental, animal, and human health, including development of antimicrobial resistance and impacts to food and water systems. Policy solutions, such as prohibiting their usage, will reduce these dangers to our ecosystem.



MPHA believes passage of this bill is also a matter of health equity. Often, residents in rural Maine face many barriers to good health, including limited access to health care, broadband, and nutritious foods; poor air quality is another driving factor of health disparity, including the development of asthma and other respiratory illnesses. Since this herbicide is administered aerially, residents do not have control over their exposure, or the associated contamination of their soil and water.

Given the risks of acute and longer-term impacts to human, environmental, and animal health, and the association with health equity, Maine Public Health Association supports this legislation. Thank you for your consideration.

<sup>1</sup>International Agency for Research on Cancer. 2015. Evaluation of five organophosphate insecticides and herbicides. IARC Monographs. vol. 112. World Health Organization, International Agency for Research on Cancer, Lyon, France.

<http://www.iarc.fr/en/media-centre/iarcnews/pdf/MonographVolume112.pdf>.

<sup>2</sup>Van Bruggen AHC, He MM, Shin K, Mai V, Jeong KC, Finckh MR, Morris JG. 2018. Environmental and health effects of the herbicide glyphosate. *Science of the Total Environment*:616-617;255-268.

<sup>3</sup>Camacho A & Mejia D. 2017. The health consequences of aerial spraying illicit crops: The case of Colombia. *Journal of Health Economics*:54,147-160.

<sup>4</sup>Amuasi JH, Lucas T, Horton R, Winkler AS. 2020. Reconnecting for our future: The Lancet One Health Commission.

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