



**Written Testimony
Before the Committee on Agriculture, Conservation and Forestry
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Re: LD 316 – An Act To Prohibit the Use of Chlorpyrifos

Senator Dill, Representative O’Neil, and Members of the Committee,

Conservation Law Foundation (CLF) is pleased to offer this written testimony to the Committee on Agriculture, Conservation and Forestry. CLF strongly supports LD 316, legislation that would prohibit the distribution of the pesticide chlorpyrifos in Maine.

CLF is a nonprofit, member-supported environmental organization working to protect Maine and New England’s environment for the benefit of all people. We use the law, science, and the markets to create solutions that preserve our natural resources, build healthy communities, and sustain a vibrant economy. CLF supports common-sense and scientifically based regulation of pesticides to protect communities and the environment.

Chlorpyrifos is an outdated and dangerous pesticide. It is a neurotoxin and a member of a class of chemicals developed by the Nazis for chemical warfare.¹ The weight of the evidence demonstrating chlorpyrifos’ harm to humans, and particularly to infants and children, is beyond debate. Chlorpyrifos is associated with lung cancer,² endocrine disruption, and cardiovascular disease.³ It has been shown to impair placental function and nutrient transport from mother to

¹ See Adriane J. Busby & Gabriel Eckstein, “Organophosphates, Friend and Foe: The Promise of Medical Monitoring for Farm Workers and Their Families,” 27 UCLA J. Envtl. L. & Pol’y 39, 43 (2009), <https://scholarship.law.tamu.edu/cgi/viewcontent.cgi?article=1304&context=facscholar>.

² Won Jin Lee et al., “Cancer Incidence Among Pesticide Applicators Exposed to Chlorpyrifos in the Agricultural Health Study,” *Journal of the National Cancer Institute*, December 2004, <https://academic.oup.com/jnci/article/96/23/1781/2521083>.

³ Hafiz Ubaid ur Rahman et al., “A Comprehensive Review on Chlorpyrifos Toxicity with Special Reference to Endocrine Disruption: Evidence of Mechanisms, Exposures and Mitigation Strategies,” *Science of the Total Environment*, February 2021, <https://www.sciencedirect.com/science/article/abs/pii/S0048969720361787>.

fetus.⁴ In exposed children, chlorpyrifos is associated with brain anomalies,⁵ decreased IQ and memory function,⁶ and autism.⁷

Chlorpyrifos is particularly dangerous to pesticide applicators, farm workers, and people living near areas where the pesticide is applied, but all Mainers are at risk while chlorpyrifos remains in use. Dangerous levels of chlorpyrifos are found in common foods like apples, grapes, and berries, and it is used on Christmas trees as well.⁸ Chlorpyrifos must be removed from use in order to protect Mainers from residues of this dangerous neurotoxin.

Just as Chlorpyrifos is a threat to human health, it is a major risk to animals. Scientists at the U.S. Fish & Wildlife Service recently concluded that chlorpyrifos and the related pesticide malathion are so toxic that they “jeopardize the continued existence” of more than 1,200 endangered species.⁹ For many endangered species, the Fish & Wildlife Service determined that a single exposure could be catastrophic.¹⁰ Chlorpyrifos is toxic to bees, earthworms, birds including robins and mallard ducks, and fish, and it can accumulate in the tissues of predators that eat smaller animals exposed to chlorpyrifos.¹¹

Prohibiting the distribution of chlorpyrifos in Maine is the best step the Committee can take to protect Mainers and the environment from this dangerous pesticide. CLF respectfully urges the Committee to act favorably on LD 316. Thank you for the opportunity to provide testimony on this issue. I am available to answer any questions the Committee may have about these comments.

⁴ M E Ridano et al., “Impact of Chlorpyrifos on Human Villous Trophoblasts and Chorionic Villi,” *Toxicology and Applied Pharmacology*, August 2017, <https://pubmed.ncbi.nlm.nih.gov/28549829/>.

⁵ Virginia A Rauh et al., “Brain Anomalies in Children Exposed Prenatally to a Common Organophosphate Pesticide,” *Proceedings of the National Academy of Sciences*, May 2012, <https://pubmed.ncbi.nlm.nih.gov/22547821/>.

⁶ Virginia Rauh et al., “Seven-Year Neurodevelopmental Scores and Prenatal Exposure to Chlorpyrifos, a Common Agricultural Pesticide,” *Environmental Health Perspectives*, August 2011, <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3237355/>.

⁷ Alice Park, “A Mother's Exposure to Pesticides During Pregnancy May Raise Children's Autism Risk,” *Time*, March 20, 2019, <https://time.com/5555300/pesticide-exposure-autism/>.

⁸ Miriam Rotkin-Ellman & Veena Singla, “EPA: Toxic Pesticide on Fruits, Veggies Puts Kids at Risk,” January 6, 2017, Natural Resources Defense Council, <https://www.nrdc.org/experts/miriam-rotkin-ellman/epa-toxic-pesticide-fruitsveggies-puts-kids-risk>.

⁹ Eric Lipton, “Interior Nominee Intervened to Block Report on Endangered Species,” *New York Times*, March 26, 2019, <https://www.nytimes.com/2019/03/26/us/politics/endangered-species-david-bernhardt.html>.

¹⁰ Id.

¹¹ National Pesticide Information Center, “Chlorpyrifos: General Fact Sheet,” <http://npic.orst.edu/factsheets/chlorpgen.html>.