



Farmworkers and Latinx Families United

Feb 21th, 2020

Chair Dembrow, Vice Chair and Baertshiger, members of the Committee

For the record, my name is Martha Sonato, Political Director at PCUN, Oregon's Farmworker Union.

On behalf of the 6,543 members of PCUN, I wish to express our full support for HB 4109, which would phase out the use of **chlorpyrifos** in Oregon.

Chlorpyrifos is a chlorinated organophosphate insecticide that was originally developed during WWII.

Scientific and public health data over the decades shows that babies and children exposed to this chemical, including in utero, are at heightened risk of numerous developmental delays, including damage to motor skills development, lower IQ, attention deficit hyperactivity disorder (ADHD), and autism spectrum disorder.¹ Children of farmworkers are at greatest risk, but studies have shown that pregnancies nearly a mile away may be affected by chlorpyrifos drift.² Chlorpyrifos has also been shown to damage human DNA,³ and has been linked to hormone-related cancers in adults, including breast, thyroid, and ovarian cancer.⁴ ^{5,6} And because pesticides can be carried home on work clothes and shoes and skin, it is not just the workers who are exposed, but also their families and children.⁷

In 2015, a major EPA review of all the available science on chlorpyrifos concluded that *all* uses of chlorpyrifos result in unsafe levels of exposure to people who handle chlorpyrifos and people who work in the areas where it is applied, even when they employ maximum personal protective equipment.⁸ This includes *all* uses on Christmas trees, which continue to pose risks of concern to workers 30 days after treatment.^{9,10} They also found that virtually all Americans receive unsafe chlorpyrifos exposures from chemical residues on food. However, the EPA declined to act on the recommendations of agency scientists, and the issue

¹ Shelton et al., "Organophosphate Exposures during Pregnancy and Child Neurodevelopment."

² Shelton et al., "Neurodevelopmental Disorders and Prenatal Residential Proximity to Agricultural Pesticides."

³ Diqui Li et al., "The Organophosphate Insecticide Chlorpyrifos Confers Its Genotoxic Effects by Inducing DNA Damage and Cell Apoptosis," *Chemosphere* 135 (September 2015): 387–93.

⁴ Ventura et al., "Effects of the pesticide chlorpyrifos on breast cancer disease. Implication of epigenetic mechanisms."

⁵ Engel et al., "Insecticide Use and Breast Cancer Risk among Farmers' Wives in the Agricultural Health Study."

⁶ Lerro et al., "Organophosphate insecticide use and cancer incidence among spouses of pesticide applicators in the Agricultural Health Study."

⁷ Butler-Dawson et al., "Organophosphorus Pesticide Residue Levels in Homes Located near Orchards."

⁸ Lowe et al., "Chlorpyrifos: Revised Human Health Risk Assessment for Registration Review"; Starks et al., "Peripheral Nervous System Function and Organophosphate Pesticide Use among Licensed Pesticide Applicators in the Agricultural Health Study."

⁹ US EPA, Appendix E: Occupational Handler Exposure and Risk Estimates (2016), <https://www.regulations.gov/document?D=EPA-HQ-OPP-2015-0653-0452> (accessed April 29, 2019).

¹⁰ US EPA, Appendix F: Occupational Post-Application Dermal Exposure and Risk Estimates (2016), <https://www.regulations.gov/document?D=EPA-HQ-OPP-2015-0653-0453> (accessed April 29, 2019).

remains caught up in litigation. Meanwhile there is a need for state action to protect the thousands of Oregon children, farmworkers and all communities who are exposed to Chlorpyrifos directly and indirectly.

HB 4109 proposes an 18 month phase out on the use of chlorpyrifos and institutes immediate steps to protect farmworkers and our communities. These include a 300 ft buffer zone around school, an 8 day re-entry period for farmworkers on to fields that have been sprayed with Chlorpyrifos and no aerial spraying of products that contain chlorpyrifos. This phase out timeline is in line with what we have seen in other places that have allowed for 18 months so that farmers can transition to better and safer alternatives.

We recognize the hard work of our farmers and the important part they are in our economy and communities. We commend the work of Oregon employers who are taking additional precautions and reducing their use of chlorpyrifos in the workplace. However, we know this pesticide is toxic and cannot allow farm workers and their communities to continue to be exposed to this pesticide. The phase out is consistent with other approaches states have taken and as Chair Dembrow highlighted the EPA was on the path to do the same. We also know farmworkers, tree planters and their families are also the backbone of the \$8 billion agricultural and reforestation industries in Oregon. Farmworkers who toil to put food on American tables do backbreaking work while working with dangerous chemicals like chlorpyrifos. We must do everything as a state to safeguard their health and safety.

Such is the story of one of our farmworkers, Mizael, who works picking lettuce, strawberries, broccoli and many other fruits and vegetables sprayed with chlorpyrifos. In September of 2014, Mizael was diagnosed with a brain tumour. In 2008 it took two surgeries for the tumor to be removed. He now has limited vision.

We must also do everything we can to protect our environment where our children and communities play and work. Chlorpyrifos is also known to harm the environment and wildlife. People come in contact with the chemical through residues on food, drift from pesticide application and contaminated water sources. Chlorpyrifos makes it into Oregon's waterways through a number of routes, including aerial spray application. The state of Oregon has documented chlorpyrifos above water quality criteria at times in the Middle Rogue, South Umpqua, Middle Deschutes, Yamhill, Clackamas, Hood, Wasco and Walla Walla River Basins.¹¹

In December, the Oregon Department of Agriculture convened a group of 12 folks to review the uses of Chlorpyrifos. We did not know ODA was interested in proactively pursuing mitigation measures relating to Chlorpyrifos. PCUN is part of this group and while we commend the agency for being proactive, we also recognize that the agencies' scope is limited in regards to this issue. Mitigation measures are not enough to protect all of our communities amidst mounting scientific and public health data that outline the negative effects of chlorpyrifos.

¹¹ <https://www.oregon.gov/ODA/programs/Pesticides/RegulatoryIssues/Documents/Documents/ChlorpyrifosWorkgroup/ChlorpyrifosMonitoringResults.pdf>.

ODA has publicly recognized their lack of technical expertise and staff capacity to evaluate the human health impacts of chlorpyrifos, including in their official statements made at the first meeting of this working group. ODA has not considered medical or epidemiological evidence on the public health effects of chlorpyrifos in their consideration of technical strategies to reduce exposure - a focus that is reflected in evidence that has been provided to the working group.

Given that human health is the primary cause for concern over chlorpyrifos, it is paramount for the state of Oregon to take a strong stance in phasing out chlorpyrifos through HB 4109.

These are not uncharted waters. Hawaii, California, New York, and the European Union have already begun to phase out chlorpyrifos. Together, these jurisdictions account for a geographical area and an agricultural economy many times the size of Oregon's, and produce many of the same crops that we do - including fruit, berries, grass seed, hazelnuts, Christmas trees, and much else. Oregon can also learn from the innovations of funding for research California is currently providing to farmers; the CA research on alternatives will be published very soon by April 2020 and many Extension departments (OSU, UO Davis) have already published their research on alternatives and IPM solutions. Northwest Center of Alternative Pesticides has also put a list on the record.

I am confident that, with the benefit of their experiences, Oregon can learn from their innovations and institute strong and sound protections from Chlorpyrifos that will improve healthy beginnings for our children and protect all of our communities.

I urge your support for HB 4109. Thank you for your time.

Martha Sonato, Political Director, PCUN