



March 25, 2019

Oregon Senate Committee on Environment and Natural Resources
900 Court St. NE
Salem Oregon 97301

RE: Oregon SB 853—A bill to prohibit the use of chlorpyrifos and restrict the use of neonicotinoids

Dear Honorable Members of the Senate Committee on Environment and Natural Resources,

Migrant Clinicians Network and Farmworker Justice urge you to support SB 853 to prohibit the use of chlorpyrifos and restrict the use of neonicotinoids in Oregon. Both Migrant Clinicians Network and Farmworker Justice are national non-profit organizations. MCN is dedicated to health justice for the mobile poor and provides extensive training and technical assistance to clinicians across the country. Our work includes several national programs funded by the US Environmental Protection Agency (EPA) to prepare health clinics and providers to respond appropriately to pesticide poisonings, to further help them understand the long-term effects of pesticides and to help them prevent pesticide illness. Farmworker Justice seeks to empower farmworkers to improve their living and working conditions, including their occupational health.

We urge you to support SB 853 to ban chlorpyrifos use in Oregon. Please consider the impact of this chemical on the health of citizens in Oregon, particularly those who are most vulnerable and most exposed. EPA banned the use of chlorpyrifos in residential settings in 2000 due to emerging evidence that it posed unacceptable neurodevelopmental risks to young children. However, the agency allowed continued use of the pesticide in agriculture, resulting in exposure to the children of farmworkers and other rural residents. Farmworkers are historically one of the most economically disadvantaged labor groups in the country because they work long days, perform hazardous work and receive low wages all while being routinely exposed to high levels of pesticides in the fields where they work and in the communities where they live. Exposure to pesticides causes farmworkers to suffer more chemical-related injuries and illnesses than any other workforce in the nation. Most of these workers are particularly vulnerable to environmental and occupational health hazards because they have no health insurance, and

limited access to health care. Since EPA banned chlorpyrifos for home use in 2000, farmworkers and their children have been exposed to chlorpyrifos through airborne drift, water contamination, and even the residues on their parents' work clothes.

The extensive epidemiologic research that confirms serious, permanent neurodevelopmental effects of very low doses of chlorpyrifos exposure in utero or during childhood is described elsewhere in more detail. Farmworkers and their families in Oregon cannot be adequately protected from these outcomes unless there is a ban on the use of chlorpyrifos.

In Oregon, chlorpyrifos is used in crops including strawberries, apples, hazelnuts, corn and other vegetables, as well as Christmas trees and nursery plants. Farmworkers in Oregon are exposed to chlorpyrifos when they mix or apply the chemical, when they work near an area where chlorpyrifos spraying takes place and are contaminated by drift, or when they enter a field that has previously been sprayed and has residual chemical exposure. Farmworkers exposed at work transport pesticides on their work clothing, shoes, hair and skin into family vehicles and their homes. In addition, farmworker families live in camps near the fields where they work or in substandard dwellings. In these environments, they experience exposure to chlorpyrifos frequently. In all of these settings, farmworkers are absorbing chlorpyrifos through the skin, through the lungs, and through the gut.

In its most recent Human Health Risk Assessment for chlorpyrifos, EPA found that there are no safe levels of the pesticide in food or water, that unsafe exposures to farmworkers continues to occur on average *18 days after applications* (despite worker re-entry times no longer than 5 days) and that workers who mix and apply chlorpyrifos are exposed to unsafe levels even when using protective gear and engineering controls.¹

The most immediate concern of exposure to chlorpyrifos is for the pregnant farmworkers. It is not possible to reduce the level of exposure below the threshold for damaging the fetus. Personal protective equipment is not 100% effective and contributes to the workers' heat burden, which itself can be dangerous. Similarly, field sanitation provisions for handwashing are simply not adequate to reduce the levels of exposure below those known to cause harm. The water provided to workers to prevent heat illness is yet another source of contamination at these low levels.

Farmworkers experience chronic and acute exposure to chlorpyrifos. In the past two years, MCN has helped physicians and other healthcare providers respond to two acute worker poisoning outbreaks from chlorpyrifos. Poisoned workers suffered from dizziness, nausea, vomiting and they are being monitored for the long-term effects from these incidents. The majority of the workers in both outbreaks were not even working directly with chlorpyrifos.

¹ US Environmental Protection Agency. Chlorpyrifos: Revised Human Health Risk Assessment for Registration Review at 36-7. Health Effects Division, Office of Pesticide Programs at 36-7 (November 3, 2016). <https://www.epa.gov/ingredients-used-pesticide-products/revised-human-health-risk-assessment-chlorpyrifos>

Unbeknownst to the workers in both outbreaks, chlorpyrifos had been sprayed on a nearby field and drifted onto the workers, causing acute poisonings. In 2014, Raynor and others published a report of 371 migrant farmworkers in North Carolina who were found to have levels of urinary chlorpyrifos metabolites (among other pesticides) that were an order of magnitude greater than those found in the US population as a whole.²

Chlorpyrifos does not discriminate between farmworker families and farmer families when it comes to exposure routes, and family impact may not be limited to children. A 2017 paper published from the Agricultural Health Study has identified a borderline but statistically significant increased risk for pre-menopausal breast cancer among women who reported using chlorpyrifos, consistent with its known effects as an endocrine disrupting chemical.³

MCN and Farmworker Justice urge the committee to issue a favorable report on SB 853 that is critically needed to protect Oregon farmer and farmworker families.

Sincerely,

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Amy K. Liebman, MPA, MA, Director of Environmental and Occupational Health, Migrant Clinicians Network

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² Raymer JH, Studabaker WB, Gardner M, Talton J, Quandt SA, Chen H, Michael LC, McCombs M, Arcury TA. Pesticide exposures to migrant farmworkers in Eastern NC: detection of metabolites in farmworker urine associated with housing violations and camp characteristics. *Am J Ind Med.* 2014 Mar;57(3):323-37. doi: 10.1002/ajim.22284. Epub 2013 Nov 25.

³ Engel LS, Werder E, Satagopan J, Blair A, Hoppin JA, Koutros S, Lerro CC, Sandler DP, Alavanja MC, Beane Freeman LE. Insecticide Use and Breast Cancer Risk among Farmers' Wives in the Agricultural Health Study. *Environ Health Perspect.* 2017 Sep 6;125(9):097002. doi: 10.1289/EHP1295.