



Oregon Pediatric Society

A Chapter of the American Academy of Pediatrics. Incorporated in Oregon

February 10, 2020

TO: The Honorable Representative Andrea Salinas, Chair
Members of the Oregon House Committee on Health Care

FROM: Julie Scholz, Executive Director of the Oregon Pediatric Society

SUBJECT: House Bill 4109 to phase out chlorpyrifos in Oregon

The Oregon Pediatric Society (OPS), the state chapter of the American Academy of Pediatrics (AAP), supports HB 4109 which prohibits the aerial application, and the sales and total use in Oregon by 2022, of dangerous pesticides containing chlorpyrifos. We are extremely concerned about the invasiveness and toxic effects of this chemical, especially to those living near farming areas or with family members who are farm workers.

As a result of its use in agriculture over the past four decades, traces of chlorpyrifos are commonly found in sources of drinking water. A study published in 2006 in the journal of *Pediatrics* found that children of mothers exposed to chlorpyrifos are more likely to develop neurodevelopmental disorders such as attention deficit hyperactivity disorder and autism spectrum disorder. A 2012 study at the University of California at Berkeley found that 87 percent of umbilical-cord blood samples tested from newborn babies contained detectable levels of the pesticide.

In a 2017 letter to the U.S. Environmental Protection Agency (also submitted to the Committee, which includes references for the following findings), the AAP said, “We are deeply alarmed that the EPA’s decision to allow the continued use of chlorpyrifos contradicts the agency’s own science and puts developing fetuses, infants, children, and pregnant women at risk.” The letter details how children face unique exposure risks to pesticides with adverse birth outcomes, including preterm birth, low birth weight, congenital abnormalities, pediatric cancers, and permanent neurobehavioral and cognitive deficits.

The AAP letter states:

“There is a wealth of science demonstrating the detrimental effects of chlorpyrifos exposure to developing fetuses, infants, children, and pregnant women. Like other organophosphate pesticides, chlorpyrifos interferes with enzymes in the nervous



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system. Chronic chlorpyrifos exposure in utero is associated with changes in social behavior, brain development, and developmental delays. A long-term Columbia University study following children born before and after a ban on in-home use of chlorpyrifos took effect found that the children born before the ban had much higher exposure levels, tended to be smaller, have poorer reflexes, and weigh less. Toddlers with higher exposures were behind in both motor and mental development by age three. They were also greater than five times more likely to be on the autism spectrum, greater than six times more likely to have ADHD-type symptoms, and greater than 11 times more likely to have symptoms of other attention disorders.”

Other long-term studies found lower IQs for children with prenatal chlorpyrifos exposure.

In August 2018, the 9th U.S. Circuit Court of Appeals in San Francisco ordered the EPA to remove chlorpyrifos from sale in the United States within 60 days. It didn't happen. The federal appeals court ruled that the Trump administration endangered public health by keeping this widely used pesticide on the market despite extensive scientific evidence that even tiny levels of exposure can harm babies' brains. Then, almost a year later in July 2019, the EPA announced it would not ban chlorpyrifos for crops use.

One pediatrician member of OPS shared why she thinks this bill is necessary:

"As pediatricians, we hope to provide parent reassurance about their children's health and help them navigate through sickness. While working in populations with high concentrations of children whose parents are farmworkers, one thing we commonly see are children coming in for acute visits who are migrating and only live in the community for a short period of time, without a consistent medical home.

Migrant workers and their children are affected by toxic exposure to chlorpyrifos, when they already have significant hardships. They are frequently migrating based on the seasons to multiple agricultural communities in Oregon and out of state to make a steady livable income."

I have had parents ask me if their child's respiratory illness may be secondary to something toxic the parent may have been exposed to at work, because they were concerned it was affecting their child's health. Or during child well-visit exams,



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parents ask if their child's inability to talk or walk was related to something 'they did' or if it was something hereditary. As pediatricians, we are familiar that pesticides, particularly chlorpyrifos, affect how children's brains develop and can lead to respiratory symptoms. We can't confidently tell parents that their children are not affected by pesticides they are exposed to at work, because we know scientific evidence says otherwise."

Roopa Pandit, MD, who works at a Woodburn pediatric clinic

Pediatric endocrinologist and OPS member Cheryl Hanna, MD, reviewed some of the recent scientific literature on the effects of chlorpyrifos as an endocrine-disrupting compound and as an anti-androgen which can disrupt male reproductive function. She is convinced that chlorpyrifos exposure risks lowering fertility.

There are alternatives to using chlorpyrifos as an agricultural pesticide. It is important for Oregon legislators to take action this session to begin the long overdue phase out of this dangerous chemical in our state. We urge you to pass HB 4109. Please call on OPS pediatricians if we can be a resource or answer any questions regarding this matter.

Attachments:

- American Academy of Pediatrics, Policy Statement: Pesticide Exposure in Children, 130 Pediatrics e1757, e1757- 58 (2012)
- American Academy of Pediatrics, Letter to the Environmental Protection Agency, June 27, 2017