



Oregon Pediatric Society

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

DATE: February 16, 2023

TO: Senator Michael Dembrow, Chair
Senator Suzanne Weber, Vice-Chair
Members of the Senate Committee on Education

FROM: Shaili Rajput, MD, MPH
Oregon Pediatric Society Member

SUBJECT: Support for SB 426, Toxic Free Schools

The Oregon Pediatric Society (OPS) is the state chapter of the American Academy of Pediatrics (AAP). Our membership is committed to improving and protecting the health and well-being of all children in Oregon, as well as those who care for them. OPS strongly endorses SB 426, which would protect children from the toxic health effects of pesticide exposure in schools.

My name is Shaili Rajput. I am a pediatrician advocate practicing in Portland, Oregon; a member of OPS and the AAP Council on Environmental Health and Climate Change, and a parent. In both my professional and personal life, my priority is to protect children's health and safety and to prevent illness and injury.

I treat children with chronic asthma and acute asthma exacerbations weekly, if not daily. I see the way in which this disease affects children's quality of life and takes a toll on families: Missed days of school and work, hospitalizations, costly medications, and academic and social frustration. I see the unfair way in which these illnesses affect some children more than others, simply because of where they live and go to school. I speak to parents who worry about their children's developmental progress or academic achievement, wondering if the environments that are meant to support their children's learning and thriving are, in fact, doing the opposite.

Their concerns are not unfounded. Risks for disease development in children often are multifactorial. While some of these factors, such as genetics, are not preventable, many are. One of these risk factors is pesticide exposure.

The downstream health effects of both acute and chronic exposure to pesticides are well established. Pesticides affect many body systems—reproductive, endocrine, respiratory, neurologic, and immune.¹ Children are particularly vulnerable to insult due to the immaturity of their organs; less effective systems for toxin removal; normal, exploratory behavior that increases their risk of toxin exposure; and need for more food, drink, and respirations relative to their weight compared to adults, which also increases their risk of dietary and inhalant pesticide exposure. A policy statement on pesticide exposure from the AAP Council on Environmental Health and Climate Change cites



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epidemiologic studies that associate in-utero pesticide exposure with adverse birth outcomes including preterm birth, low birth weight, and congenital anomalies.^{2,3} Additional studies suggest an association between chronic, low-level exposures and negative effects on growth and neurobehavioral development. Specifically, research has linked organophosphate exposure with ADHD.⁴ A 2015 study in the peer-reviewed journal *Pediatrics* linked chronic low-level exposure to insecticides in residential areas to an increased risk of leukemia or lymphoma in young children.⁵ Exacerbation of lung disease, such as asthma can occur.

The American Academy of Pediatrics supports approaches such as Integrated Pest Management (IPM) in minimizing and replacing the use of pesticides while still controlling pest populations.² Support for the expansion of such existing efforts through thoughtful regulatory action in Oregon, such as SB 426, is necessary.

Oregon school districts currently lack the resources and support needed to successfully implement safer pesticide use practices in learning environments. Building upon prior legislation, SB 426 will involve the expertise of the Oregon Department of Education and child health experts when implementing and updating Integrated Pest Management (IPM) plans in classrooms, cafeterias, playgrounds, and athletic fields. It will provide the appropriate funding to do so, which has hitherto been inadequate. It will require the availability of technical support, accountability tools, and regular stakeholder involvement to ensure successful implementation of modernized IPMs, thereby keeping the areas where children play and learn safe.

We have a duty to use our knowledge and voices to protect children. In keeping with that responsibility, the Oregon Pediatric Society and I urge you to vote yes on SB 426.

References:

1. Pascale A, Laborde A. Impact of pesticide exposure in children. *Rev Environ Health*. 2020;35(3):221-227.
2. Council on Environmental Health. Policy statement: Pesticide exposure in children. *Pediatrics*. 2012;130(6):e1757–e1763
3. American Academy of Pediatrics, LeDer to the Environmental Protection Agency, June 27, 2017.
4. Liu J, Schelar E. Pesticide exposure and child neurodevelopment. *Workplace Health Saf*. 2012;60(5):235-243.
5. Chen M, Chang C, Tao L, Lu C. Residential exposure to pesticide during childhood and childhood cancers: a meta-analysis. *Pediatrics*. 2015;136(4):719-729.