DATE: February 21, 2023

TO: Senator Michael Dembrow, Chair

Senator Suzanne Weber, Vice-Chair

Members of the Senate Committee on Education

FROM: Lauren Herbert, MD

Oregon Pediatric Society Member

SUBJECT: Support for SB 426, Toxic Free Schools

I am a pediatrician in Springfield, and a member of the Oregon Pediatric Society and Lane County Medical Society. I am writing to express our support for Senate Bill 426.

Currently, the state provides funding to regulate lead, radon, asbestos, and air quality in schools. SB 426 would provide the funding to include pesticides in these environmental regulations.

Children are more vulnerable to the effects of pesticides because of thinner skin, and increased inhalation of the chemicals in proportion to their body size. Behavior of children also increases their exposure: playing in grass and soil, and putting hands and objects in their mouths.

Senate Bill 637, passed by the Oregon Legislature 14 years ago, initiated a plan to protect children from the toxic effects of pesticides by establishing an integrated pest management (IPM) program. Pesticides include insecticides, fungicides, rodenticides, and herbicides. A major problem when the plan was adopted by the legislature was that there was not adequate funding to implement it, especially in school districts located in low-income communities. If passed, SB 426 would finally provide the funding necessary to support schools to carry out safer IPM practices and to update the previous plan.

The health risks for children and pregnant mothers have been recognized for years. Ten years ago, the American Academy of Pediatrics (AAP) published a comprehensive review of the literature to date on the medical effects of pesticides on children (Roberts, 2012). The article reviewed prospective cohort studies that showed an association between exposure to pesticides early in life with subsequent developmental and behavioral problems. The article also described multiple case-controls studies that showed a statistically significant relationship between maternal pesticide exposure and the development of acute lymphocytic leukemia (ALL)in children

The AAP also published a policy statement on pesticide exposure in children outlining the adverse health effects and calling on pediatricians to work with government to implement policies to protect infants and children. (Council on Environmental Health, 2012)

Because of the adverse health effects of organophosphate pesticides, regulations on their use has increased. Newer pesticides were introduced and were initially thought to be less toxic. However, studies have shown that these also carry health risk. In a 2022 article reviewing epidemiologic studies of pyrethroids, these insecticides also showed developmental neurotoxicity (Helle 2022).

These articles show that pesticides have neurotoxic effects on the developing brain, and that fetal exposure is associated with increased risk of ALL. As physicians, we agree with the AAP position of working with government to protect children and developing infants.

There is sufficient evidence of harm of pesticide exposure to children that enforcing and updating our existing laws is essential for Oregon children. I understand that there are many challenges facing our schools, but school children cannot wait another 14 years for the state to provide funding to implement and update an existing plan. We need to protect children now. The Oregon Pediatric Society and Lane County Medical Society urge you to vote yes on SB 426.

Sincerely,

Lauren J. Herbert, MD
Pediatrician
Springfield, Oregon
Member of Oregon Pediatric Society
Member of Lane County Medical Society

Articles Cited

Council on Environmental Health, American Academy of Pediatrics. Policy Statement: Pesticide Exposure in Children. *Pediatrics*. 130(6): e1757-e1763 (2012)

Roberts, J.R, Karr, C.J. Pesticide Exposure in Children. *Pediatrics*. 130(6): e1765-e1788 (2012)

Andersen, H.R., et.al. Pyrethroids and developmental neurotoxicity—A critical review of epidemiological studies and supporting mechanistic evidence. *Environmental Research*. 214, part 2. (2022)