

Watts Remy

From: Herbert, Lauren (MD) <LHerbert@peacehealth.org>
Sent: Monday, April 1, 2019 7:39 AM
To: SENR Exhibits
Subject: Pediatrician support for SB853

To: The Senate Environmental Natural Resource Committee

From: Lauren Herbert MD, Leslie Pelinka MD, Miranda Lanning MD, Deborah Fuerth MD, Pediatricians, PeaceHealth Medical Group, Springfield and Eugene

Subject: Support for SB 853

We are writing in support of SB 853. As pediatricians, we are concerned about the adverse effects of chlorpyrifos and other pesticides on the developing brains of the fetus and young child.

The causes of developmental delay and other neurologic abnormalities are multiple, and include genetic and environmental factors. As we evaluate individual children with developmental disorders, it is often not possible to determine the cause of the abnormalities. We must rely on expert opinion to assess genetic and environmental effects that are associated with these disorders. We have read the letter submitted by Dr. Randall Phelps, one of our local developmental pediatricians, and agree with his assessment of risks of chlorpyrifos and other insecticides on the developing brain of fetuses and young children.

In the United States, there are regional Pediatric Environmental Health Specialty Units (PEHSU). We contacted the Northwest PEHSU and asked if there was sufficient evidence of association of chlorpyrifos with adverse effects in the developing brain for pediatricians to support the bill. The reply was: "yes, there is sufficient evidence." Included in the reply was a link to a recent article (2018): [today in PLOS Medicine](#)

As general pediatricians, when we assess complex medical problems, we frequently consult UpToDate, a widely-used, evidence-based medical resource with each topic reviewed and updated by experts in the field every six months. The UpToDate article "Occupational and environmental risks to reproduction in females: Specific exposures and impact" (authors Rose H. Goldman MD MPH and Blair J. Wylie MD MPH) includes a discussion of risk of pesticide exposure, including chlorpyrifos and other organophosphates. The article cites a study of 314 mother and infant pairs showing that higher chlorpyrifos levels were associated with lower birth weights and lengths, a similar effect as that seen with maternal smoking.

Neurotoxicity associated with organophosphates (which includes chlorpyrifos) is also addressed:

"There is animal and epidemiologic evidence that non-DDT insecticides also adversely impact neurodevelopment. This is not surprising given that the chemicals were initially designed as nerve agents. Evidence for neurotoxicity is strongest for organophosphate pesticides with demonstrable deficits in cognition, memory, behavior, and motor reflexes; the greatest effects appear to occur following prenatal exposure (compared with postnatal) and is not limited to women exposed occupationally."

As pediatricians, we care for the growth, development and well-being of all children. We urge you to support SB 853.

Sincerely,

Lauren Herbert MD
Miranda Lanning MD
Leslie Pelinka MD

Deborah Fuerth MD

Reference: Rose H. Goldman MD, MPH, Blair J. Wylie MD, MPH, "Occupational and environmental risks to reproduction in females: Specific exposures and impact." UpToDate, topic updated Feb 10, 2019

This letter expresses our views as pediatricians and does not represent the views of PeaceHealth as an organization.

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