



Solutions for a
Toxic-Free Tomorrow

Testimony of Sarah Woodbury, Vice President of Programs and Policy, Defend Our Health
In Opposition to LD 2116 "An Act to Require Flame-Retardant Seats on New School Buses"
Before the Transportation Committee
February 1, 2024

Hello Senator Chipman, Representative Crafts and members of the Transportation Committee. My name is Sarah Woodbury. I am the Vice President for Programs and Policy at Defend Our Health. Defend Our Health's mission is to make sure that everyone has equal access to safe food and drinking water, healthy homes, and products that are toxic-free and climate friendly. I am here to testify in opposition to LD 2116 "An Act to Require Flame-Retardant Seats on New School Buses".

In 2017, Defend worked with a variety of stakeholders and legislators to pass the first in the nation ban on toxic flame retardants in furniture in part because of the health impacts on children and our firefighters. The law passed with overwhelming bipartisan majority, overriding a veto from then Governor LePage. We have made progress in moving away from these dangerous chemicals. We should not go back.

Flame retardants contain several chemicals which are toxic to human health. Commonly used chemical flame retardants are linked to cancer, lower IQ and poorer attention in children, hormone disruption, thyroid effects, and obesity. Chemicals used in flame retardants such as chlorinated Tris compounds including Tris(1,3-dichloroisopropyl) phosphate (TDCPP) and tris(2-carboxyethyl) phosphine (TCEP) as well as antimony trioxide have been designated as carcinogens. Other chemicals such as Polybrominated Diphenyl Ethers (PBDEs), Hexabromocyclododecane (HBCD), and Tetrabromobisphenol A (TBBPA) are persistent toxic chemicals that last a long time in the environment¹. According to the National Institute of Environmental Health Science Adverse health effects may include endocrine and thyroid disruption, immunotoxicity, reproductive toxicity, cancer, and adverse effects on fetal and child development and neurobehavioral function². Because of their developing brains and bodies, children are the most vulnerable to health impacts.

¹ Green Science Policy Institute. (n.d.). *Some Flame Retardants of Concern*. Some Flame Retardants of Concern - Green Science Policy Institute. <https://greensciencepolicy.org/harmful-chemicals/flame-retardants/fr-list/>

² U.S. Department of Health and Human Services. (2023, April 14). *Flame retardants*. National Institute of Environmental Health Sciences. https://www.niehs.nih.gov/health/topics/agents/flame_retardants

In terms of safety of the buses themselves, there are already federal safety standards in place under the Dept of Transportation National Highway Traffic Safety Administration (NHTSA). Under federal safety standards, standard No. 302, "Flammability of Interior Materials," specifies that the horizontal burn rate of certain specified materials (e.g., seat cushions and seat backs) may not exceed four inches per minute. In recent years, the NHTSA has looked at the safety and flammability of bus seats. After a high-profile incident in KY in 1988, the NHTSA initiated a rulemaking process to decide if additional flame retardants should be added to school bus seats. That process found that it wasn't necessary to add additional toxic flame retardants to school bus seats for a variety of reasons. When we look at incidents of harm to children due to bus safety incidents, most bus accidents are crash related, not fire related. Even when fire is present, it is generally near the engine and children have enough time to escape out the doors. Speaking of doors, additional safety requirements for doors that were implemented after rulemaking in 1991 increased the number of emergency exits in larger school buses, improved access to side emergency doors, and improved the visibility of the emergency exits which made it easier for children to escape faster during an emergency. And finally, they found that it would increase costs for already burdened school districts. According to the NHTSA's 2003 report the cost of requiring additional flame retardants could increase the total seating cost for a bus by between \$1000-\$2000 per bus³. We would have no problem advocating for the necessity of spending that money if it would protect children but adding additional flame retardants is not necessary and does nothing to increase the safety of the kids riding the buses.

Finally, when looking at adding additional flame retardants to bus seats we need to consider the health and safety of our brave firefighters. Firefighters have higher rates of cancer than the general public in part because of their exposure to toxic chemicals in flame retardants. A National Institute for Occupational Safety and Health (NIOSH) study found an association between firefighting and increased incidence of multiple myeloma (53%), prostate cancer (28%), non-Hodgkins lymphoma (51%) and double the risk for testicular cancer.⁴ A 2013 study found that levels of some flame-retardants in firefighters were two to three times those of the general population and levels of dioxins in blood were indicative of occupational exposure. Cancer caused 66 percent of the career firefighter line-of-duty deaths from 2002 to 2019, according to data from the International Association of Fire Fighters (IAFF).

We need to make sure that buses are safe for our kids. Adding additional toxic flame retardants to school bus seats will not make them safer and will, in fact, expose them to additional toxic chemicals that can impact their health. Therefore we urge the committee to vote "ought not to pass" on LD 2116.

³ NATIONAL HIGHWAY TRAFFIC SAFETY ADMINISTRATION. (2003, July 24). *Flammability of Interior Materials in School Buses*. Federal Register . <https://www.federalregister.gov/documents/2003/07/24/03-18595/flammability-of-interior-materials-in-school-buses>

⁴ *Cancer FAQ*. Firefighter Cancer Support Network. (2023, March 31). <https://firefightercancersupport.org/resources/faq/>