

**Written Testimony of Sarah Evans, PhD  
Before the Connecticut General Assembly Committee on Children,  
February 21, 2013.**

Testimony in Support of:

**House Bill 6332, AN ACT CONCERNING TOXIC FIRE RETARDANTS IN CHILDREN'S  
PRODUCTS**

Dear Senator Bartolomeo, Representative Urban and honorable members of the Committee on Children,

I am a postdoctoral researcher in Environmental Pediatrics at Mount Sinai School of Medicine in New York City, a designated World Health Organization Collaborating Centre in Children's Environmental Health. My research focuses on the effects of exposure to environmental toxins on child development. In addition, I am a lifelong Connecticut resident and mother to a four year old. I am offering testimony in support of **HB 6332 An Act Banning Toxic Flame Retardants in Children's Products**. **I urge the Committee to carefully consider the strong scientific evidence on the negative health impacts of flame retardants, and vote in favor of this bill.**

Flame retardants are ubiquitous in the environment due to their extensive use in everyday products including those targeted to children, such as diaper changing pads, car seats, mattresses, baby carriers and other items<sup>1</sup>. They can be found in soil, air, and food sources, dust in indoor environments and are therefore inhaled, absorbed through the skin, or consumed on a daily basis. They persist both in the environment and in our bodies for long periods of time.

Children are particularly vulnerable to negative health effects from environmental exposures. Developmentally appropriate hand to mouth behaviors and higher breathing rates place young toddlers at increased risk of exposure. **Because these chemicals persist in the body and accumulate over time, young children are the most vulnerable to their effects.** Ironically, children's items do not require treatment with flame retardants, and a 2012 report from the Consumer Product Safety Commission determined that **flame retardant chemicals don't improve the flammability of products**<sup>2</sup>. Thus the risks of their use far outweigh the benefits.

At the Children's Environmental Health Center at Mount Sinai we frequently field questions from concerned caregivers and educators about exposure to toxins in the environment. Thus I know firsthand that this is an issue of great concern to many parents. Sadly, it is difficult to provide guidance that will truly protect all children from the impacts of chemicals like chlorinated Tris because there is no requirement for labeling, making it impossible to know whether a product has been treated with flame retardant chemicals. In fact, a study out this week identified numerous undisclosed flame retardant chemicals in children's nap mats<sup>3</sup>. Furthermore, due to limited testing, we don't know all of the health risks associated with exposure. **Without legislation that regulates the use of flame retardant chemicals, it is impossible to protect our children from their harmful effects.**

<sup>1</sup>Witt, H.(2012) Testing for Toxics: Children's Products and Chlorinated Tris.  
<http://www.illinoispirg.org/sites/pirg/files/reports/Testing%20forToxics.pdf>

<sup>2</sup><https://www.cpsc.gov/PageFiles/129840/ufmemos.pdf>

<sup>3</sup>Center for Environmental Health (2013). Naptime Nightmares? Toxic Flame Retardants in Child Care Nap Mats.

<sup>4</sup>"Flame Retardants: Tris (Chlorophyl) Phosphate and Tris (2- Chloroethyl) Phosphate." (1998). World Health Organization. Web. <[http://www.who.int/ipcs/publications/ehc/who\\_ehc\\_209.pdf](http://www.who.int/ipcs/publications/ehc/who_ehc_209.pdf)>.

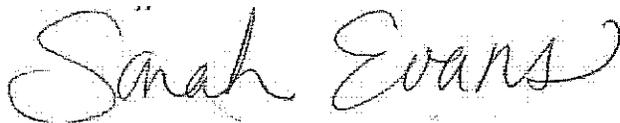
<sup>5</sup>[http://oehha.ca.gov/prop65/hazard\\_ident/pdf\\_zip/TDCPP070811.pdf](http://oehha.ca.gov/prop65/hazard_ident/pdf_zip/TDCPP070811.pdf)

What we do know about the adverse health effects of chlorinated tris flame retardants is enough to call for a complete ban on the use of this class of chemicals. The World Health Organization, National Cancer Institute, National Research Council and Consumer Product Safety Commission have all agreed that chlorinated Tris is a health hazard<sup>4</sup>. Both TCEP and TDCPP have recently been listed by the California EPA as mutagenic and possible human carcinogens<sup>5</sup>. Chlorinated Tris has been linked to mutagenicity and cancer, neurological damage, hormone disruption, and infertility. Long-term costs and burden of chronic diseases that require medical treatment and impair societal productivity further support the legislative action toward protecting children.

For the reasons outlined above, a federal ban on TDCPP in children's pajamas was implemented in the 1970s. New York State has recently enacted a bill to ban TCEP banned in children's products, and TCEP and TDCPP have been added to California Proposition 65. **To protect our children, the state of Connecticut must follow suit and ban the use of chlorinated tris in children's products.**

In summary, as a scientist and mother, I believe the mounting evidence for the potential for flame retardant chemicals to harm the developing child must no longer be ignored. **I strongly urge the Committee to keep the state of Connecticut at the forefront of protecting our children's health and the environment by voting to enact HB6332.** Thank you for the opportunity to submit testimony on this important issue.

Sincerely,

A handwritten signature in cursive script that reads "Sarah Evans". The ink is dark and the signature is written on a light-colored background.

Sarah Evans, PhD  
Norwalk, Connecticut

<sup>1</sup>Witt, H.(2012) Testing for Toxics: Children's Products and Chlorinated Tris.  
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<sup>5</sup>[http://oehha.ca.gov/prop65/hazard\\_ident/pdf\\_zip/TDCPP070811.pdf](http://oehha.ca.gov/prop65/hazard_ident/pdf_zip/TDCPP070811.pdf)