

**Written comments in support of House Bill 5130:  
An Act Concerning Child Safe Products**

Before the Connecticut Legislature's Environment Committee, March 1, 2010.

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Senator Meyer, Representative Roy, and members of the Environment Committee,

Thank you for the opportunity to write to you today in support of House Bill 5130. My name is Ted Schettler. I am a physician and also have a degree in public health. In addition to traditional medical sciences, I have training in epidemiology and toxicology.

This bill addresses a fundamental problem:

Manufacturers provide us with a highly diverse array of consumer products on which we depend in many aspects of our lives. These products are made of chemicals and materials that impart form and function. But, some chemicals used in consumer products are hazardous to people...to manufacturing workers, to consumers of all ages, or to waste handlers or recyclers. And somewhere throughout the life cycle of those products, people may be exposed to those hazardous chemicals and become sick.

Biomonitoring studies in people of all ages document widespread exposures to hazardous chemicals used in consumer products.

For example, the CDC's latest report on 212 chemicals in the blood or urine of a representative sample of the US population age 6 and older identified persistent, bioaccumulative toxicants, carcinogens, reproductive/developmental toxicants, and more.

Other studies measure chemicals in the umbilical cord blood of newborn infants, amniotic fluid, the blood or urine of workers, and so on. A 2004 study of umbilical cord blood of 10 randomly selected newborn infants analyzed the samples for a total of 413 chemicals. They detected 200 on average. They were chemicals that cause cancer, that are toxic to the brain and nervous system, and that cause birth defects or abnormal development. These infants were contaminated with those chemicals before they were born.

Workers are commonly exposed to hazardous chemicals at levels far higher than other people. This is true for workers who manufacture chemicals and products, as well as workers who dispose of or recycle products at the end of life. Children living in villages overseas where many US electronic products end up for recycling are routinely exposed to extraordinary levels of highly toxic chemicals released from those products.

Finding a chemical in blood or urine of course does not by itself mean that there is necessarily a health effect. But it does mean that exposure to the chemical has occurred, and when the chemical has particularly hazardous properties, we should be paying close attention and taking steps to minimize or eliminate the exposure.

Removing a chemical from commerce is an approach in keeping with the well-accepted notion of a hierarchy of controls, which prioritizes substitution with safer chemicals over other approaches to minimize exposures. It is a way of avoiding a problem altogether rather than trying to manage it or accept the consequences.

This bill provides for identifying priorities within a list of chemicals of high concern with the intent of replacing them in children's products with safer alternatives. It thereby accomplishes several important objectives:

- It drives markets toward safer products
- It incentivizes the creation of safer products when they don't already exist
- It reduces the toxic footprint of material production, use, disposal, recycling
- It helps to protect children's health, public health, worker health, and environmental health in Connecticut and elsewhere

This bill requires the use of authoritative science and reflects the recommended new approach to risk assessment from the National Academy of Sciences. In their 2009 report, "Science and Decisions", they propose a framework that begins with a "signal" of potential harm....for example, a suspicious disease cluster....or the presence of a hazard. Under the traditional paradigm, the question has been, "What is the probability and consequence of an adverse health effect posed by that signal?" In contrast, the newly recommended framework asks from the outset, "What options are there to reduce the hazards or exposures?"

That is what this bill would do. By identifying a list of chemicals of concern, it sends a signal to the market place. It provides a scientifically justifiable means for prioritizing among chemicals of high concern, identifying those priority chemicals in children's products, and replacing them with safer alternatives. Consumers want this information and manufacturers should be given both incentives and requirements to replace priority chemicals of concern with safer alternatives.

By supporting this bill, you are choosing to avoid a problem, up and down the product supply chain, rather than attempting to manage it or accept the consequences. In public health, this is primary prevention. This bill is consistent with efforts around the country...in legislatures and businesses...intended to improve the safety of consumer products...and will especially help protect Connecticut's infants and children.

