

Useful chemical or dangerous toxin?

By **Lucia Dolan**/ Special To The Tab

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More than 80,000 new chemicals have been created and released into our environment since World War II. Many of these chemicals, such as pesticides and *flame-retardants*, are in our children before they are even born. Rising rates of asthma, autism and cancer beg the question: Who decides which chemicals are safe?

Under our laws chemicals are innocent until proven guilty. It took many years, many deaths and many lawyers to prove the case against tobacco. In 1951, the first study linking smoking to cancer was published. The study motivated its author, Dr. Richard Doll, to give up smoking, but few others. Smoking was so ubiquitous; no one could believe it was truly harmful. Twenty-five years later, Dr. Doll published another study, which showed 1 in 3 smokers died from their habit. In 1998, California passed the first laws restricting smoking.

The Environmental Protection Agency has the ability to ban the manufacture and import of chemicals that pose an unreasonable risk. The last chemical the EPA banned was asbestos in 1989. In 1991, the asbestos ban was overturned and compliance made voluntary. We know many of the chemicals we use pose a risk. The question remains: when does a chemical's risk outweigh its benefits?

In 1989, Massachusetts became the first state to tackle this question with the passage of the Toxics Use Reduction Act. Instead of innocent until proved guilty, we are attempting to follow the Precautionary Principle, an ounce of prevention is worth a pound of cure. The Precautionary Principle recognizes scientists often cannot fully predict the impact of toxins on our health. It calls for us to seek out the safest alternative within the limits of our knowledge. TURA seeks to reduce the use of toxins by either replacing them with safer alternatives or eliminating their need by redesigning a product's production process.

TURA was a compromise between environmental groups who wanted toxins banned and industry groups who used chemicals in their business. Our law is recognized as a success worldwide. TURA met its original goal to reduce toxic byproduct generation by 50 percent in 1998. Since 1990, toxic byproduct generation has been reduced another 58 percent and industrial toxic chemical use has dropped by 40 percent. TURA led to the creation of the Toxic Use Reduction Institute at Lowell. TURI researches and promotes safer alternatives to known toxic chemicals. One of the top toxic chemicals TURI is working to replace within our state is formaldehyde.

Formaldehyde, the embalming liquid, is a common source of indoor air pollution. It keeps more than frogs in jars looking fresh; it is used to make wrinkle-resistant clothing and draperies; it is in glues and in some paints (as a preservative). It is in prefabricated wood products all around us, flooring, tables, cabinets and chairs. These products release fumes into the air in quantities we can't smell but can detect in blood samples. Formaldehyde has been linked to both cancer and reproductive problems.

TURI is funded by industries who use toxic chemicals and by our state government. TURI's annual cost to the state is quite small, \$250,000 for 2006, but often under attack

in tight budget times when pennywise becomes toxic pound foolish. Fortunately, TURI receives strong support from our legislators, representatives Ruth Balser, Kay Khan, Peter Koutoujian and Sen. Cynthia Creem. Together with public support, they have helped keep TURI working towards a healthier tomorrow. For more information on safer alternatives to toxic chemicals, contact the Alliance for a Healthy Tomorrow at 617-338-8131 or www.healthytomorrow.org.

Lucia Dolan has a bachelor's degree in economics from Columbia and master's degree in library and info science from Berkeley. She is the mother of three young children and is district coordinator for the Alliance for a Healthy Tomorrow.