



There are now over 80,000 chemicals used in consumer products and manufacturing in the US—and very few have been tested for safety. It's time to take a stand so we can truly protect human health and the environment.

Childhood asthma rates have more than doubled since 1980, an unprecedented rise that many physicians attribute, in part, to increased air pollution and use of toxic cleaning products.

Heal Your Home: The Case for Precaution

Some time ago, Co-op America published an article called “The Ugly Side of Cosmetics,” in which we detailed why many experts are concerned about the vast number of potential toxins in body care products.

That article, printed in our *Real Money* newsletter, cited studies showing that many of the body care products we use on a daily basis—from make-up and hair care products to soaps and baby wipes—contain known or probable carcinogens, hormone disrupters, and other potentially harmful substances. We recommended consumers exercise extra caution and purchase their body care items from companies that pledged to phase out the most harmful chemicals and use organic and truly natural ingredients (see p. 14).

Not too long after we printed that piece, a group of individuals started discussing the article on an Internet message board. At first, they were concerned—until a young woman popped in and reassured everyone that “I’m a chemistry major, and all of these products are safe. The government wouldn’t let them be on store shelves if they weren’t.”

Like that student, many people have considerable faith in the government to protect them, assuming that if a product of any type is sold in the US, it must be safe for human health and the environment.

That faith is misplaced. As evidenced by the recent news reports about lead in children’s toys made in China, toxic products can and do make it onto US store shelves. For

example, mainstream newspapers backed up our cosmetics story this year, when in October 2007, the Campaign for Safe Cosmetics discovered lead in several trusted brands of lipsticks still sold today in US stores, from drugstore stalwart L’Oreal to the more exclusive Dior brand.

“How is lead getting into children’s toys and my make-up?” asks a shocked Suzanne Anich, mother to an 18-month-old daughter in Eagan, MN. “I thought lead was completely banned from use in the US.”

So did a lot of people. But lead—a potent, known neurotoxicant—is only banned in paint at levels over 600 parts per million, and it can *legally* be mixed into other products, like the vinyl shower curtain in Anich’s bathroom, the vinyl bib her toddler sometimes uses, the computer in her home office, the cell phone in her purse, and the mainstream-brand makeup she used to use before discovering green products. And yes, even in her daughter’s toys.

“Some of the toxic toys we’re hearing about now did have illegal lead levels, but some of them were probably perfectly legal, especially the children’s jewelry, where the lead can be mixed into the product,” notes Dr. Steven Gilbert, a toxicologist with the University of Washington and author of *A Small Dose of Toxicology* (Informa Press, 2004).

And we have more than just lead to worry about. There are now some 80,000 chemicals registered for use in the US, and more than 2,000 new chemicals are introduced

each year, according to the Commonweal Biomonitoring Resource Center and the Body Burden Work Group.

“While the government does require health studies and pre-market testing on prescription drugs, it does not do so for most other chemicals,” says Gilbert.

In other words, when you take a close look at the cleaners we use in our homes; the pesticides that we spray on our food; the hormones ingested by our meat or dairy animals; the paints and stains and finishes we use on our cars, furniture, mattresses, or walls; the body and hair care products we use on ourselves, you’ll find that very few of them are independently tested to ensure they won’t harm human health or the environment before they hit store shelves. (For an in-depth look at what US federal regulations do and don’t do when it comes to chemicals, see the box below.)

And while corporations may save money by not conducting health and safety tests on the ingredients they use, it’s consumers who pay the price. Time and again, it falls to consumers, university scientists, or nonprofit watchdog groups to prove that a given chemical or product is unsafe—which generally happens only after several people have been harmed or killed, after our air and water and soil becomes poisoned, after entire populations are burdened with more than their share of birth defects, systemic illnesses, cancer.

“So much of public health and environmental policy relies on what I call the ‘dead body’ principle,” says Carolyn Raffensperger, executive director of the Science and Health Environmental Network (SEHN). “When you wait for proof before you take action, the proof is usually in the dead bodies and the sick bodies. When you let the chemical out and haven’t tested it, you’re using our bodies as lab rats.”

But we don’t have to rely on the dead body principle, say Raffensperger and others, who are calling for a better way to protect ourselves and future generations. It’s called the Precautionary Principle, and it’s something we embrace here at Co-op America, whenever we recommend a green product or service over a conventional one or screen a company for membership in our Green Business Network™. It’s why when industry assures us that something is “safe,” we don’t take that for granted. It’s why we champion the cleanest, greenest way of doing business over business as usual.

THE PRECAUTIONARY PRINCIPLE

When Carolyn Raffensperger was a young girl, her father, a pediatric surgeon, came home from work and made an announcement that would reverberate throughout her life.

“He said he believed the birth defects and childhood tumors that he was a world expert on were caused by pollution,” says Raffensperger. “And when he told me he couldn’t do anything about it because he couldn’t prove it, I was stunned. He was seeing suffering in babies, and they hadn’t done anything to deserve it. Why, I wondered, did he need proof before he could take action?”

It was a question that ultimately led her to SEHN, where she and her colleagues worked to determine how the world could go beyond what’s called “risk assessment.” The way we currently calculate the risk of a chemical is to determine the level at which lab animals get sick from it. Then, we plug it into a formula that basically says, “If we use this much less than what makes animals sick, we should be okay.”

But sometimes, Raffensperger knew, even those low doses of a chemical could cause harm, alone or in

Is Our Government Protecting Us?

Chemicals used in manufacturing—including those in the products we buy, like toys, furniture, and cleaners—are regulated under the Toxic Substances Control Act of 1976 (TSCA). This law gave the US Environmental Protection Agency (EPA) the right to track the nearly 80,000 industrial chemicals used in the US. But many say it’s too weak to truly keep us safe.

TSCA technically requires that new chemicals be subject to toxicity reviews before coming to market, but in practice, the government has done little to prevent dangerous chemicals from being used. Since 1976, the EPA has only required the testing of 200 chemicals, and has banned a scant five from use. Under TSCA, companies must disclose the ingredients of their products to the EPA, but they don’t have to submit toxicity data for any new chemicals they want to use, as pointed out in a 2005 Government Accountability Office report.

More disturbingly, about 80 percent of the chemicals that fall under the TSCA have not been tested at all. Instead, some 62,000 were “grandfathered” in when TSCA was signed into law in 1976 and were simply presumed safe.

Labeling laws don’t require companies to provide complete lists of ingredients to anyone but the EPA, so other organizations aren’t able to review them for safety. Products only need to carry warning labels if a chemical ingredient has been proven to pose unreasonable risk to health. And before the EPA can require companies to test chemicals for safety, the agency must prove

that the chemical poses “unreasonable risks” to human health.

“The EPA, through TSCA, seldom requires industry to produce data,” says Dr. Steven Gilbert, a toxicologist with the University of Washington and author of *A Small Dose of Toxicology*. “With about 3,000 chemicals produced at over 1 million pounds each year going into our environment, it’s a huge issue that our government doesn’t take a more precautionary approach.”

With all its flaws, TSCA doesn’t even apply to cosmetics—a broad category of products including make-up, lotion, shampoo, deodorant, and other personal care products—which fall under the regulation of the Food and Drug Administration (FDA).

The FDA does not review or approve cosmetics, or their ingredients, before they are sold to the public. It merely urges companies to conduct voluntary safety tests. And so, according to the nonprofit Environmental Working Group (EWG), 89 percent of ingredients used in cosmetics have not been assessed for safety by the FDA or the industry.

The bottom line is that both the FDA or the EPA could do much better. “TSCA has only managed to eliminate five toxic chemicals of the nearly 80,000 in commerce,” says Kathy Curtis, policy director of Clean New York. “None have been eliminated in over 17 years, despite mounting evidence of their harm to humans and the environment, and increasing availability of safer alternatives.” —Sarah Tarver-Wahlquist

combination with other substances in the environment. So she and her colleagues wondered how they could get governments around the world to take action to protect human health and the Earth before having definitive proof.

The answer came in 1998, when a graduate student named Joel Tickner wrote and asked her to participate in his dissertation work on an idea he called the Precautionary Principle.

“I knew this was an answer to the question we’d been asking. Within minutes of seeing the student’s request, I decided to convene the Wingspread Conference,” she says.

And so, ten years ago, Raffensperger, Tickner, and a group of scientists, philosophers, lawyers, and activists gathered at the Wingspread Conference Center in Racine, WI, to take a stand against the harm we are doing to ourselves, the environment, and future generations. The group reached an historic consensus that “corporations, government entities, organizations, communities, scientists and other individuals must adopt a precautionary approach to all human endeavors.”

The group released the Wingspread Statement elaborating on their consensus, which defines the heart of the Precautionary Principle as follows: *When an activity raises threats of harm to human health or the environment, precautionary measures should be taken even if some cause and effect relationships are not fully established scientifically. In this context, the proponent of an activity, rather than the public, should bear the burden of proof.*

“Risk assessment embodies the idea that we can measure and manage or control risk and harm—and we can decide that some risk is acceptable,” says Raffensperger. “The Precautionary Principle is a very different idea that says that as an ethical matter, we are going to prevent all the harm we can.”

To illustrate how things would change if we adopted the Precautionary Principle as the backbone of US chemical policy, Raffensperger cites the example of mercury used as a preservative in vaccines. “Risk assessment science says it doesn’t look like mercury in vaccines causes damage, but there’s still a raging debate going on about whether it causes autism in children. And whether it does or not, mercury just isn’t good for children. We don’t have to wait for definitive proof that we’re harming kids before we take action, especially if we have alternatives. The Precautionary Principle says that if you’ve got safer alternatives, why not use them?”

A DECADE OF HOPE

As we celebrate ten years of the Precautionary Principle, it’s important to also celebrate the considerable impact it’s had. While there hasn’t yet been much in the way of federal action in the US, some states and several countries are moving toward a more precautionary approach:

- The state of California recently banned phthalates, plastic softeners linked to endocrine disruption, in cosmetics and in toys. Last December, Minnesota banned toxic mercury in cosmetics sold in the state. In Washington state, some communities have decided that hospitals and schools must be cleaned with non-chemical-based products. And in Massachusetts, proposed legislation would require using only nontoxic cleaners in day cares, schools, and other public buildings.

- The European Union (EU) recently passed the groundbreaking Registration, Evaluation and Authorisation of Chemicals law, or REACH. Under REACH, more than 60,000 chemicals will have to be registered with the EU and, for the first time, evaluated for toxicity to human health and the environment. Substances of high concern will be removed from the market unless the manufacturers can prove their

Two young girls protest the use of PBDEs as flame retardants in furniture, electronics, and mattresses. These persistent, bioaccumulative chemicals are linked to memory, behavior, and learning impairment in lab animals.

The Washington Toxics Coalition/www.watoxics.org



safety. (See p. 29 for more on REACH and its potential impact here in the US.)

- Businesses like green household products company Seventh Generation[™] and organic body care company Aubrey Organics[™] are going the extra mile to protect human health and the environment, workers and communities. They’re using the safest ingredients they can find, and they’re fully disclosing those ingredients on product labels or Web sites, even though they’re not legally obligated to do so. And consumers are taking a stand by purchasing these cleaner, greener products.

“The Precautionary Principle says that if you’ve got safer alternatives, why not use them?”


“The green marketplace is booming in every sector—from nontoxic body care to organic food to green cleaners,” says Denise Hamler, director of Co-op America’s Green Business Network[™]. “People are letting manufacturers know that they don’t want hidden toxins in their products.”

- These green businesses and consumers are influencing mainstream industry, as well-known brands launch green product lines to keep up with consumer demand. Target has pledged to phase out PVC (vinyl) products, which contain phthalates. In cooperation with none other than the Sierra Club, Clorox is introducing “Green Works,” a line of less-toxic household cleaners. Home Depot is now selling several brands of environmentally friendly home improvement products, flagging them in stores with an “Eco-Options” sign.

Then there are the efforts of people like Co-op America members, who are working to keep toxins out of their homes, workplaces, and communities. Use our “Creating a Healthy Home” section (pp. 10-20) to take the most important steps to clear the air in your household. And check out our “Answers from the Experts” section (pp. 22-32) for expert advice on making green living joyful at home while we push the marketplace and our politicians for reform.

We are creating change when it comes to toxic chemical products and processes, and we can keep creating change together, until no one has to worry about being exposed to something that will make them or their children sick.

“Do we want to leave a toxic legacy? Or do we want to leave the blessings of a healthy world?” asks Raffensperger.

We can do either one. 

—Tracy Fernandez Rysavy