

## TSCA Reform Needed Now

# Congress Must Protect Children from a Developmental Toxic: **Bisphenol A (BPA)**



BPA has been measured in breast milk, amniotic fluid, and follicular fluid, providing evidence that the developing fetus and infant are exposed. Federal agencies have determined that infants are the most highly exposed due to the use of BPA in baby bottles and infant formula. Visit [www.takeouttoxics.org](http://www.takeouttoxics.org).

When the Toxic Substances Control Act (TSCA) was enacted in 1976, it was intended to ensure that chemicals are safe throughout their lifecycle, from manufacture to use and disposal. But weaknesses in the law have left the Environmental Protection Agency (EPA) unable to act on known health dangers. Other laws, such as those setting air, water, and workplace safety standards, do not adequately regulate exposure to most chemicals, nor do they address the hazards a chemical may pose over its entire lifecycle. New legislation is needed to rapidly reduce exposure to toxic chemicals, such as Bisphenol A (BPA)\*. Produced at more than 2 billion pounds per year, BPA has found its way into many consumer products and into many people's bodies. NRDC urges Congress to update TSCA to protect people and the environment from toxic chemicals.

For more information, please contact:

**Sarah Janssen, M.D.,  
Ph.D., MPH**  
sjanssen@nrdc.org  
(415) 875-6100

### **BPA is a Hormone-Disrupting Chemical Linked to Reproductive and Developmental Harm**

BPA is a very common chemical found in plastics, food and beverage can linings, and other consumer products. BPA is known to mimic estrogen and, in animal studies, researchers have linked early life EXPOSURE to reproductive harm, increased cancer susceptibility, and abnormalities in brain development and fat metabolism. There are alternatives to BPA, but manufacturers are not required to use them. In fact, current law does not even require manufacturers to disclose whether or not their product contains BPA, leaving consumers completely in the dark. Several states and municipalities have already passed or are considering legislation to ban BPA from certain products, yet TSCA severely limits EPA's ability to protect the public.

### **Voluntary Efforts to Reduce the Use of BPA are Welcome, but are Not Enough to Protect the Public**

Due to the public outcry over the mounting scientific evidence of BPA toxicity, many retailers

and manufacturers have taken their own initiatives to eliminate BPA from their products.

- Wal-Mart, Toys R Us, Target, and Sears are just a few of the national chains that are phasing out baby bottles containing BPA.
- The nation's six largest baby bottle manufacturers announced in 2009 that they either have already eliminated or will phase out BPA.
- Sunoco, a chemical manufacturer, instituted a policy to no longer sell BPA for use in food and water containers intended for children under three.
- Several infant formula makers are already using BPA-free packaging.
- Some canned foods are packaged in BPA-free containers, including Eden Organics canned bean products. In addition, General Mills has announced that its Muir Glen organic tomato products will be packaged in BPA-free cans.

Although these initiatives are praiseworthy, consumer protection should not be left solely to voluntary efforts of individual retailers. The time has come for Congress to expand protection from BPA and other harmful chemicals by reforming TSCA.



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## Bisphenol A

### Products Where BPA Is Found

BPA is used to make polycarbonate plastics that are commonly used in consumer products such as baby bottles, sippy cups, and reusable water bottles. BPA is often found in epoxy resins used to coat metal food and beverage cans, including beer and soda cans. BPA is also used in the production of other plastics, including those used for medical devices, for industrial applications (such as adhesives and paints), and in the production of flame retardants and thermal paper (such as those used in cash register receipts). Some polymers used in dental sealants and tooth coatings also contain BPA.

### Exposure and Health Risks

Over 90 percent of people in the United States have been found to be carrying BPA residues in their bodies and BPA has been found in nearly every fluid measured including urine, breast milk, cord blood, amniotic fluid and follicular fluid. The human body breaks down and excretes BPA within a few days, so the fact that it is consistently measured in humans means that we are taking in BPA as fast as our bodies can get rid of it. Premature infants in neonatal intensive care units undergoing treatments with medical devices were found to have BPA levels more than 10 times higher than levels seen in the general public. For most people, contaminated food is presumed to be the biggest source of exposure as BPA has been detected in infant formula, canned foods and beverages. Inhalation or ingestion of dust and absorption across the skin may also be routes of exposure.

BPA is a hormone-disrupting chemical that mimics estrogen, the female sex hormone essential for development and function of reproductive organs. BPA may also interfere with thyroid hormone, which is important for development of the brain and nervous system. Laboratory animal experiments find that exposure levels similar to those seen on a daily basis by most people, early life exposure to BPA is linked to developmental and reproductive harm such as earlier onset of puberty, increased susceptibility to breast and prostate cancer, and changes in gender-specific behavior caused by altered brain development. BPA also has been associated with infertility, abnormal chromosomes, abnormalities in fat metabolism, and the development of insulin resistance. In humans, BPA exposure has been linked to miscarriage, erectile dysfunction, diabetes, heart disease and alterations in toddler behavior.

### How BPA is Designated and Regulated Now



In 2007, Norway banned the import of consumer products containing BPA. Denmark, Germany, and France have also taken measures to limit the use of BPA, especially in children's products.



The Canadian Ministry of Health has determined that BPA is a "chemical of concern" and has banned the use of BPA in baby bottles and is restricting use in formula cans.



The National Toxicology Program (NTP) has expressed "some concern" that BPA exposure in fetuses, infants, and children may increase the risk for neurodevelopmental harm and prostate cancer. NTP noted that "the possibility that Bisphenol A may alter human development cannot be dismissed."

BPA has been approved as a food additive by the FDA since the 1950s. The most recent FDA reevaluation concluded that current levels of exposure are "safe," but relied solely on two studies funded by the chemical industry and was sharply criticized by the FDA's own scientific board of advisors for being inconsistent with the available scientific evidence. After a lengthy delay, FDA announced in January 2010 that it agreed with NTP's scientific assessment of BPA, but stopped short of regulating the chemical in our food supply.

In 2010, EPA issued an "action plan" to address BPA under its existing limited authority under TSCA, which also does not call for any immediate regulation of the chemical and will primarily focus on environmental releases.

The city of Chicago, and the states of Connecticut, Minnesota, Maryland, New York, Vermont, Washington, and Wisconsin have banned BPA from baby bottles and sippy cups. In addition to banning BPA from these products, Connecticut and Vermont have banned BPA from infant formula and baby food jars, as well as reusable food and beverage containers. Several other states are considering similar bans. In all, more than 30 states and municipalities introduced legislation to ban or limit exposure to BPA.



The Massachusetts Department of Public Health has issued a public health advisory on BPA which advises pregnant women, nursing mothers and parents of children under the age of two to avoid the use of products that contain BPA.



Maine has listed BPA as a "chemical of high concern" for being an endocrine disruptor and developmental toxicant under its law on Toxic Chemicals in Children's Products.

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