# The Ban Poisonous Additives Act of 2014





The Ban Poisonous Additives (BPA) Act of 2014, which is being introduced by Sen. Edward Markey, D-Mass., and Reps. Lois Capps, D-Calif. and Grace Meng, D-N.Y., will remove BPA from food packaging, label food packaging that still contains BPA while alternatives are developed, encourage manufacturers to replace this hazardous chemical with alternatives that are safer for workers and consumers, and require the FDA to review the safety of all food contact substances.

## What and Where is BPA?

Bisphenol A (BPA) is the chemical building block for polycarbonate plastic and can be found in some plastic bottles and food storage containers marked with a No. 7. BPA is also used in epoxy resins that coat the lining of metal food and beverage cans. Globally, more than 10.3 billion pounds of BPA is used in products annually. <sup>1</sup>

BPA was studied as a possible estrogen therapy in the 1930s but was discarded in favor of other substances. <sup>2</sup> In the late 1940s, BPA was rediscovered by polymer scientists and quickly became a mainstay in the plastics industry. BPA is an unstable polymer, meaning the chemical bonds between molecules can be easily broken by heat and many other everyday conditions. Once these bonds break, BPA leaches out of the plastic or can lining into the food and then enters the bodies of people who eat or drink that food. BPA is also lipophilic (fat-seeking) and can leach into food products that contain fat, especially when heated. According to the U.S. Centers for Disease Control and Prevention, 92 percent of Americans have detectable levels of BPA in their bodies.<sup>3</sup> A 2013 California study found BPA in the umbilical cord of every one of the 85 pregnant women tested.<sup>4</sup>

# Why Act on BPA?

More than 300 animal and human studies have linked small amounts of BPA exposure to a staggering number of health problems, including prostate and breast cancer, asthma, obesity, behavioral changes and inattention, altered development of the brain and immune system, low birth weight and lowered sperm counts. Even minuscule amounts have been shown to cross the placenta and disrupt normal prenatal development.

Exposure to BPA during pregnancy, infancy and childhood is of particular concern to physicians and other scientists. Growing infants and children are not just small adults; their brains and other organ systems are developing rapidly, undergoing periods of particular sensitivity to chemical exposures. Any disruption to their hormonal system during development can set the stage for later-life diseases, such as breast cancer and prostate cancer.

#### The Problem Is Bigger Than the Few Actions Taken

Twelve states—California, Connecticut, Delaware, Illinois, Maine, Maryland, Massachusetts, Minnesota, New York, Vermont, Washington and Wisconsin—have banned the use of BPA in food containers for young children. Connecticut and Maine's laws also restrict BPA in all reusable food and beverage containers. A number of these states—most notably Connecticut, Delaware, Maryland and Minnesota—adopted BPA food packaging restrictions with strong bi-partisan support and the Connecticut and Minnesota BPA-ban bills were signed into law by Republican governors.

Following the lead of these states and a long list of retailers and manufacturers that banned BPA in food containers for young children, including CVS, Gerber, Kroger, Safeway and Toys R Us, the FDA ended its authorization of BPA in baby bottles and sippy cups in July, 2012. A year later, in response to a petition from then Rep. Markey, the FDA also banned the use of BPA in infant formula packaging. Banning BPA in the packaging of young children's food is critical; however to fully protect children from exposure to BPA and other chemicals of concern, we need to protect pregnant women and all of the foods that pregnant women and young children may ingest. Baby food and infant formula aren't the only sources of nourishment for young children, before or after they are born.

In addition to the actions taken by states and corporations, the French government has passed legislation phasing out BPA in food packaging by 2015. The Japanese government has encouraged voluntary action to eliminate BPA in food packaging that has resulted in a 50 percent decline in the BPA levels of their citizens. <sup>6</sup>

These are all important actions; however this patchwork of limited protections does not ensure that all food packaging is safe for workers and consumers. Not only do we need a national standard phasing out the use of BPA from all packaging, the U.S. needs a better system to ensure *all* food packaging is safe, as BPA is not the only chemical of concern being used. The FDA needs to do a better job of ensuring hazardous chemicals are not unintentionally ending up in our food supply and this legislation gives the agency the authority and mandate to review the safety of all currently approved food contact substances.

It is time for Congress to take the necessary steps to protect our citizens, including the children, women and men who consume packaged food, and the men and women who work in factories where food containers are made and packed. The BPA Act provides Americans with this needed health protection.

## What's in the BPA Act?

- Prohibits the sale of reusable food and beverage containers (such as sports water bottles, water cooler bottles and food storage containers) that contain BPA (180 days after enactment).
- Prohibits the introduction into commerce of all other food and beverage containers that contain BPA, including food and beverage cans (180 days after enactment).
- Allows the FDA to issue one-year renewable waivers if a manufacturer can show that no feasible technology exists to replace BPA in the container, provided that:
  - The container is labeled indicating the presence of BPA, and
  - The manufacturer submits a plan and timeline for removing BPA from the containers.
- Requires the FDA to provide industry guidance on safer alternatives to BPA and sets specific health criteria that must be met for any BPA alternative.
- Requires the FDA to review the safety of the list of substances currently used in food and beverage containers within one year after enactment and every three years thereafter.
- In addition to infants, children, and pregnant women, the definition of vulnerable population explicitly protects workers exposed to BPA and other food additives.
- Creates a strong safety standard of "reasonable certainty of no harm" from aggregate exposure including
  potential adverse effects from low dose exposure and the effects on vulnerable populations.
- Ensures that stronger state standards are not preempted.

For more information about the BPA Act, please contact Nancy Buermeyer (nbuermeyer@breastcancerfund.org) or Lee Anderson (LeeA@bluegreenalliance.org).

<sup>&</sup>lt;sup>1</sup> Chemical Weekly (2009). Bisphenol-A: A Techno-Commercial Profile. September 1, 2009: 205-211.

<sup>&</sup>lt;sup>2</sup> Vogel SA, 2012. Is it Safe? BPA and the Struggle to Define the Safety of Chemicals. Los Angeles and Berkeley, CA: University of California Press.

<sup>&</sup>lt;sup>3</sup> Calafat, A.M., Ye, X., Wong, L.-Y., Reidy, J.A., Needham, L.L., 2007. Exposure of the U.S. Population to Bisphenol A and 4-tertiary-Octylphenol: 2003–2004. Environ. Health Perspect.116, 39–44.

<sup>&</sup>lt;sup>4</sup> Gerona R.R., Woodruff T.J., Dickenson C.A., Pan J., Schwartz J.M., Sen S., Friesen M., Fujimoto V.Y., Hunt, P.A., 2013. BPA, BPA glucuronide, and BPA sulfate in mid-gestation umbilical cord serum in a northern California cohort. Environmental Science & Technology. /doi/abs/10.1021/es402764d

<sup>&</sup>lt;sup>5</sup> See Breast Cancer Fund (2013). Disrupted Development: The Dangers of Prenatal BPA Exposure. [WWW Document]. URL <a href="http://www.breastcancerfund.org/assets/pdfs/publications/disrupted-development-the-dangers-of-prenatal-bpa-exposure.pdf">http://www.breastcancerfund.org/assets/pdfs/publications/disrupted-development-the-dangers-of-prenatal-bpa-exposure.pdf</a>. Or request a copy the Breast Cancer Fund's compilation of Selected Abstracts of Bisphenol A (BPA) Studies, updated February 2014.

<sup>&</sup>lt;sup>6</sup> Matsumoto A, Kunugita N, Kitagawa K, Isse T, Oyama T, Foureman GL, Morita M, Kawamoto T: Bisphenol A levels in human urine. Environ Health Perspect 2003, 111:101.