Protecting Children's Health from Toxic BPA

Bisphenol A (BPA) has been known as an endocrine disruptor since the 1930s, and in the past 10 years, BPA exposure has been linked to a long list of diseases ranging from infertility, obesity, early puberty, breast cancer, to diabetes, and thyroid malfunction. These linkages have been observed at extremely low doses, to which most Oregonians are exposed.

More and more evidence shows that the chemical bisphenol A (BPA) is harmful to children's health. Yet manufacturers still use BPA in products such as baby bottles, sippy cups, infant formula cans, and other food containers. It is possible and cost effective to make bottles and other food containers without BPA. We need to protect our children from BPA by eliminating it from baby bottles and other food containers.

What is Bisphenol A (BPA)?

BPA was developed as a synthetic sex hormone in the 1930s but is now used in common household materials, including some clear, rigid plastic water bottles, baby bottles, reusable food containers, and in the lining of food cans. It is one of the highest-volume chemicals produced in the world.

BPA Harms Children's Health

Exposure to BPA is ubiquitous in the U.S. Testing in 2007 by the Centers for Disease Control (CDC) found 93 percent of Americans age 6 and up were exposed to BPA. Children in the study had the highest levels of BPA, followed by teens and adults.

BPA is a hormone-disrupting chemical that can have health effects at extremely low exposure levels. Scientific studies have linked BPA to cancer, miscarriage, obesity, reproductive problems, heart disease, diabetes, liver abnormalities, and even attention deficit disorders. These linkages have been observed at doses to which most Americans are exposed.

No Government Oversight of Toxic Chemicals in Consumer Products

Why is it that in 2009 children's products containing toxic chemicals still make it to store shelves and into our homes? The frightening answer is that there is little federal or state government oversight on toxic chemicals in children's products.

How much longer must we wait for the federal government to take action? Oregon has established itself as a national leader in protecting children from toxic chemicals. Oregon has the chance to lead the nation on modernized safety standards designed to protect our most vulnerable citizens, our children.

There is a Better Way

Fortunately, it is possible to make bottles and other food containers without BPA. Companies such as Nalgene, Playtex, and Eden foods have all started using BPA-free alternatives. Wal-Mart and Toys "R" Us have also pledged to stop selling baby bottles and sippy cups containing BPA.

In 2008, the Canadian government concluded that BPA is hazardous to human health and announced plans to ban BPA in baby bottles. In 2009, several state and local governments passed legislation that eliminated BPA from children's products including Connecticut, Minnesota, and the City of Chicago.

Toxic BPA Has No Business in Baby Bottles

Specifically, we need state legislation that will do the following:

- Phase out BPA in all reusable food and beverage containers intended for children under 3. This includes baby bottles and sippy cups.
- Phase out BPA from formula cans and baby food jars (single use food and beverage containers) intended for children under 3.

Latest Research On Health Impacts Of Bisphenol A:

Premature babies have BPA levels 10 times

higher than general population. *Exposure to Bisphenol A and other Phenols in Neonatal Intensive Care Unit Premature Infants*, A M Calafat, J Weuve, X Ye, L Jia, et al, *Environ. Health Perspectives, Dec. 2008*. Premature babies hospitalized in neonatal intensive care units had levels of BPA in their urine 10 times higher than the general population. The source of exposure most likely was plastic medical devices used in the hospital, although some could have come from infant formula.

BPA exposure linked to heart disease, diabetes and liver abnormalities in humans. *Association of urinary bisphenol A concentration with medical disorders and laboratory abnormalities in adults. IA Lang, TS Galloway, A Scarlett, WE Henley, et al. JAMA. 2008, 300(11): 1303-10*. This study examined associations between urinary BPA concentrations and adult health status for 1455 adults aged 18 through 74 years. Higher urinary BPA concentrations were associated with cardiovascular diagnoses, diabetes, and clinically abnormal concentrations of the certain liver enzymes. The authors conclude that higher BPA exposure may be associated with avoidable morbidity in adults.

Study demonstrates adverse effect of BPA on brains of nonhuman primates. *Bisphenol A prevents the synaptogenic response to estradiol in hippocampus and prefrontal cortex of ovariectomized nonhuman primates. Leranth C, Hajszan T, Szigeti-Buck K, Bober J, MacLusky NJ. Proc Natl Acad Sci U S A. 2008, 105(37): 14187-91.* This study examined the influence of BPA administration at a daily dose equal to the current EPA reference safe daily limit. The study found that even at low exposure levels, BPA completely abolishes the synaptogenic response to estradiol. This study is the first to demonstrate an adverse effect of BPA on the brain in a nonhuman primate model.

BPA in babies 11 times higher than adults. *Predicting plasma concentrations of Bisphenol A in young children (< two years) following typical feeding schedules using a physiologically-based toxicokinetic model. A Edginton, L Ritter. Environ. Health Perspectives in Press, Nov. 2008.* This study estimated that the amount of BPA circulating in the blood of babies is more than 11 times higher than the amount in adult blood. The disparity is likely due to natural differences in metabolism and body size between babies and adults.

We can take advantage of reliable scientific research compiled by authoritative government agencies to phase out bisphenol A—one of the most dangerous chemicals in consumer products that endangers our children. Eliminating toxic BPA from children's food and beverage containers will help protect the health of all Oregon children now and in the future.

Coalition Partners

OSPIRG

Stand for Children

Environment Oregon

Confederated Tribes of the Warm Springs

Oregon Nurses Association

Oregon Medical Association

Oregon Environmental Council

Planned Parenthood

Rachel's Friends

Oregon Center for Environmental Health

Oregon Toxics Alliance

Children First for Oregon

American Federation of State, County and Municipal Employees (AFSCME) Green

Family Forward

Project Children

Community Health Partnership

Northwest Coalition for Alternatives to Pesticides

www.oeconline.org/bpa-free

Renee Hackenmiller-Paradis
Program Director
503-222-1963 x110
reneep@oeconline.org

Andrea Salinas
Legislative Director
971-221-2653
andreas@oeconline.org