

**BEFORE THE BOARD OF COUNTY COMMISSIONERS
ACTING AS THE MULTNOMAH COUNTY BOARD OF HEALTH**

ORDER NO. 2011-129

Adopting a Policy Restricting the Sale of all Reusable Beverage Containers and Reusable Infant and Child Beverage Containers Containing Bisphenol A in Multnomah County and Directing the County Health Department to Promulgate Rules and Regulations to Implement the Policy.

The Multnomah County Board of Health Finds:

- a. The Multnomah County Board of County Commissioners constitutes and is the policy-making body of the Multnomah County Board of Health under ORS 431.410 and 431.415.
- b. One of the core responsibilities of the local public health authority is to assure activities necessary for the preservation of health or prevention of disease, including environmental health services.
- c. Bisphenol A is an industrial chemical that is produced in large amounts and widely used to make resins and polycarbonate plastics, including baby bottles and linings of metal food and baby formula cans. Bisphenol A is known to leach into food and liquids from containers, and thereby result in human exposure.
- d. An analysis of the potential health impacts of Bisphenol A undertaken by the County Health Department found emerging scientific evidence that shows reasons for concern:
 - (1) Bisphenol A is a hormone-disrupting chemical with wide exposure that causes health effects.
 - Scientific studies have linked low-level exposures of the chemical to cancer, obesity, reproductive problems, heart disease, diabetes, and liver abnormalities.ⁱ
 - The Centers for Disease Control's National Health and Nutrition Examination Survey (NHANES) found Bisphenol A exposure among 93% of Americans age 6 and up during a test in 2007ⁱⁱ.
 - (2) Babies and infants are more vulnerable to the health effects of Bisphenol A:
 - Peer-reviewed studies show that possible health effects of Bisphenol A can include can impact thyroid function, brain growth, changes in behavioral development such as hyperactivity, and breast and prostate cancer.ⁱⁱⁱ
 - Bisphenol A circulating in the bloodstream of babies is more than 11 times higher than in adult blood due to differences in metabolism and body size between babies and adults.^{iv}
 - (3) Exposure to Bisphenol A is a health equity issue.
 - Research has found that Bisphenol A levels are highest in non-Hispanic Black Americans and in women^v and that people with the highest exposure to the chemical were from the lower income groups.^{vi}

- Statistics show African American and low income mothers breastfeed in lower rates. Mothers who do not breastfeed rely on formula which is fed using bottle that may contain Bisphenol A.^{vii}
- e. Research by the Food & Drug Administration (FDA), Centers for Disease Control & Prevention (CDC), the Environmental Protection Agency (EPA), and the National Institute of Environmental Health Sciences (NIEHS) are only beginning to document the negative health impacts of Bisphenol A as a toxic chemical in humans. Peer-reviewed scientific articles have and continue to demonstrate the additional negative effects of the chemical on human development and behavior.
 - f. It is the intent of the Multnomah County Board of Health to protect the health of Multnomah County residents by taking reasonable steps to phase out Bisphenol A in consumer products. Many jurisdictions in the United States and North America have concluded that the chemical is hazardous to human health and have passed legislation to eliminate Bisphenol A from children's products. Examples include Canada; the Counties of Albany, Rockland, Schenectady and Suffolk in New York; the States of New York, California, Connecticut, Minnesota, Washington, Wisconsin, Vermont; and the City of Chicago.
 - g. The Multnomah County Board of Health strongly encourages and applauds voluntary industry actions to stop making products that contain Bisphenol A, and to facilitate the development of alternatives to this chemical in the use of plastic products. The Board also applauds pledges by Toys-R-Us, Wal-Mart, and Nalgene to eliminate the use of Bisphenol A in their products.

The Multnomah County Board of Health Orders:

1. It is the policy of Multnomah County that the sale of reusable beverage containers made from plastics containing Bisphenol A be restricted within Multnomah County. The Board intends this Policy Order to apply to reusable beverage containers used by infants, children, and adults. In light of this policy, the Board directs the Health Department to adopt definitions of beverage containers subject to this Order, including, but not limited to, baby bottles, children's spill proof cups, sippy cups, sports bottles, insulated water bottles, and other reusable containers for storage of beverages. The Board further directs that definitions should not include beverage containers intended for disposal after initial use, commercial water jugs or cans containing commercially processed liquids.
2. The Board directs the County Health Department to promulgate rules and regulations to carry out and enforce this restriction. The Health Department may adopt a schedule of fines to recover expenses of the Department as a part of the enforcement process in carrying out this Order.

3. The Board directs the County Health Department to continue to monitor emerging scientific research that examines the health effects of other products containing Bisphenol A, and make recommendations to the Board about additional reasonable steps that could be taken to reduce exposure to chemical toxins in infants, children, and adults.


ADOPTED this 27th day of October, 2011.

BOARD OF COUNTY COMMISSIONERS
FOR MULTNOMAH COUNTY, OREGON



Jeff Cogen 
Jeff Cogen, Chair

REVIEWED:
JENNY M. MORF, ACTING COUNTY ATTORNEY
FOR MULTNOMAH COUNTY, OREGON

By 
Bernadette Nunley, Assistant County Attorney

ⁱ 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.

ⁱⁱ Fourth National Report on Human Exposure to Environmental Chemicals (Fourth Report), Centers for Disease Control & Prevention, as referenced in Calafat, AM, X Ye, L-Y Wong, JA Reidy and LL Needham. 2008. Exposure of the US population to bisphenol A and 4-tertiary-octylphenol: 2003-2004. *Environmental Health Perspectives* 116:39-44.

ⁱⁱⁱ Edginton, A and L Ritter. 2008. "Predicting plasma concentrations of Bisphenol A in young children (< two years) following typical feeding schedules using a physiologically-based toxicokinetic model" *Environmental Health Perspectives* doi:10.1289/ehp.0800073.

^{iv} 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.

^v Calafat, Antonia M., Ye, Xiaoyun, Wong, Lee-Yang, Reidy, John A., and Needham, Larry L. "Exposure of the U.S. Population to Bisphenol A and 4-tertiary-Octylphenol: 2003-2004. *Environmental Health Perspectives*. Jan. 2008 116 (1): 39-44.

^{vi} LaKind, Judy S., Naiman, Daniel Q. "Daily Intake of Bisphenol A and Potential Sources of Exposure: 2005-2006 National Health and Nutrition Examination Survey. *Journal of Exposure Science and Environmental Epidemiology*, DOI 10.1038/jes.2010.9; and Calafat, Antonia M., Ye, Xiaoyun, Wong, Lee-Yang, Reidy, John A., and Needham, Larry L. "Exposure of the U.S. Population to Bisphenol A and 4-tertiary-Octylphenol: 2003-2004. *Environmental Health Perspectives*. Jan. 2008 116 (1): 39-44

^{vii} J. Cacilia Kim. "Breastfeeding: Natural Protector Against Swine Flu". *We News*, August 7, 2009. Accessed from: <http://www.womensenews.org/story/reproductive-health/090807/breastfeeding-natural-protector-against-swine-flu>