

New study indicates higher than predicted human exposure to the toxic chemical bisphenol A or BPA

September 20 2010

Researchers have discovered that women, female monkeys and female mice have major similarities when it comes to how bisphenol A (BPA) is metabolized, and they have renewed their call for governmental regulation when it comes to the estrogen-like chemical found in many everyday products.

A study published online in the Sept. 20 NIH journal [Environmental Health Perspectives](#) ties rodent data on the health effects of BPA to predictions of human health effects from BPA with the use of everyday household products. The study was authored by researchers at the University of Missouri Division of Biological Sciences and Veterinary Medical Diagnostic Lab (VMDL) and Biomedical Sciences, in collaboration with scientists at the University of California-Davis and Washington State University.

"This study provides convincing evidence that BPA is dangerous to our health at current levels of human exposure," said Fredrick vom Saal, Curators' professor of biological sciences at the University of Missouri.

"The new results clearly demonstrate that rodent data on the health effects of BPA are relevant to predictions regarding the health effects of human exposure to BPA. Further evidence of human harm should not be required for regulatory action to reduce human exposure to BPA."

BPA is one of the world's highest production-volume chemicals, with

more than 8 billion pounds made per year. It can be found in a wide variety of consumer products, including hard plastic items such as [baby bottles](#) and food-storage containers, the plastic lining of food and beverage cans, thermal paper used for receipts, and dental sealants. The findings in the current study suggest that [human exposure](#) to BPA is much higher than some prior estimates and is likely to be from many still-unknown sources, indicating the need for governmental agencies to require the chemical industry to identify all products that contain BPA.

Several states, including Connecticut, Massachusetts, Washington, New York and Oregon, have passed bills to reduce exposure to BPA, and similar legislation is pending in the U.S. Congress.

"For years, BPA manufacturers have argued that BPA is safe and have denied the validity of more than 200 studies that showed adverse [health effects](#) in animals due to exposure to very low doses of BPA. We know that BPA leaches out of products that contain it, and that it acts like estrogen in the body," said Julia Taylor, lead author and associate research professor at the University of Missouri.

"We've assumed we're getting [BPA](#) from the ingestion of contaminated food and beverages," said co-author Pat Hunt, a professor in the Washington State University School of Molecular Biosciences. "This indicates there must be a lot of other ways in which we're exposed to this chemical and we're probably exposed to much higher levels than we have assumed."

Provided by University of Missouri-Columbia

Citation: New study indicates higher than predicted human exposure to the toxic chemical bisphenol A or BPA (2010, September 20) retrieved 28 April 2024 from <https://medicalxpress.com/news/2010-09-higher-human-exposure-toxic-chemical.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.