Phthalates and Children’s Products

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Phthalates are synthetic chemicals found in everyday products—including plastic toys and shampoos. They are used to make plastic flexible and to add fragrances to soap and other personal products. Unfortunately, these chemicals don’t stay only in the products, and phthalates have been found in indoor air and dust,¹ and in human urine, blood, and breast milk.² Levels are highest in women and children ages 6 to 11. African Americans have been shown to have higher levels of phthalates than whites.³

Research indicates that boys exposed to phthalates may be more likely to develop smaller genitals and incomplete descent of the testicles. Boys who are born with undescended testicles are 2-11 times more likely to develop testicular cancer as teenagers or young men. Phthalates are believed to also affect girls' hormones, but the health impact is not yet known. Recent studies also show associations between children’s exposure to phthalates and the risk of asthma, allergies and bronchial obstruction.⁴,⁵

Animals exposed to phthalates are more likely to develop liver cancer, kidney cancer, and male reproductive organ damage.⁶ Studies by Harvard researchers have shown phthalates

Phthalate Exposure Continues

Children and adults in the U.S. are still exposed to phthalates in many other products, including shampoo, soap, lotions, food packaging, pharmaceuticals, and medical devices and tubing.¹⁰ The U.S. Food and Drug Administration (FDA) regulates many of these products, including baby shampoo and baby lotion. If the FDA does not ban phthalates from these products, legislation would be required to do so.

In 2009, U.S. Environmental Protection Agency (EPA) Administrator Lisa Jackson announced that EPA is developing an “action plan” for several chemicals including phthalates. The action plan will outline the risks that phthalates may present and the specific steps EPA will take to address those concerns such as regulatory action to label, restrict or ban the chemicals. When completed, the action plan will be posted at www.epa.gov

While other government agencies are concerned about phthalates in specific products, the EPA focuses on the chemicals for use in any kind of product and establishes safety standards for each phthalate. A challenge for the EPA is to set safety standards that make sense given that people
may alter human sperm DNA and semen quality.\textsuperscript{7}

As of February, 2009, children’s toys and child care products sold in the U.S (such as teething rings and plastic books) can not contain phthalates. However, testing to ensure these products are actually phthalate-free does not begin until February 2010 in order to give small businesses time to comply with the new law.

The ban on phthalates is the result of a law passed in 2008, the Consumer Product Safety Improvement Act. The law permanently bans BBP, DBP and DEHP from toys and child care products, and temporarily bans DIDP, DINP and DnOP until a scientific board (the Chronic Hazard Advisory Panel) determines for the Consumer Product Safety Commission (CPSC) whether or not they are safe.

A few months before the bill passed, major retailers such as Wal-Mart, Target, and Babies "R" Us promised to remove or severely restrict children's products containing phthalates by the end of 2008.\textsuperscript{8}

The ban in the U.S. followed similar bans in other countries. In 2006, the European Union banned the use of 6 phthalates in toys that may be placed in the mouth by children younger than 3.\textsuperscript{9} The banned phthalates are DINP, DEHP, DBP, DIDP, DNOP, and BBzP. Fourteen other countries, including Japan, Argentina, and Mexico, had also banned phthalates from children's toys prior to the U.S.

References:


4 Jaakkola JJ, Knight TL (2008 July). The Role of exposure to phthalates from polyvinyl chloride products in the development of asthma and allergies: a systematic review and meta-analysis. \textit{Environ}


