## **ISSUE BRIEF**





## Phthalates and Children's Products

By Paul Brown April 2008

Phthalates are synthetic chemicals found in a variety of everyday products, including plastic toys, paints and some pesticide products. They are used to make plastic soft. Unfortunately, these chemicals don't stay in the products -- instead, they migrate into the air, into food, or into people, including babies in their mother's wombs. Phthalates have been found in indoor air and dust,  $1^{1}$  and in human urine, blood, and breast milk 2. Levels are highest in children ages 6 to 11 and in women, and African Americans have been shown to have higher levels of phthalates than whites. 3

Phthalates have been linked to birth defects in baby boys, including abnormal genitals, and to testicular cancer, and liver problems. In girls, phthalates are believed to increase the risk of early puberty, which is possibly why so many girls are now starting puberty at ages 8 and 9. These hormonal changes also increase their risk of getting breast cancer when these girls grow up.

The European Union and 14 other countries, including Japan, Argentina, and Mexico, have already banned these chemicals from children's toys. In October 2007, California became the first state in the nation to enact a statewide ban on the manufacture, sale or distribution in commerce of children's toys and child care articles that contain phthalates. In addition, approximately a dozen states have introduced - or are considering introducing legislation - to ban phthalates in toys and other consumer products.

For the first time, Congress is considering banning phthalates in toys and children's products as part of the 2008 reauthorization of the Consumer Product Safety Commission. If successful, this effort will reduce potentially dangerous exposures that could harm children's development and increase the risk of cancer as adults.

This Issue Brief is based on information from Jackie Lombardo, Sierra Club National Toxics Committee and Friends and Advocates for Children, Teachers and Schools, and The Breast Cancer Fund http://www.breastcancerfund.org/site/pp.asp?c=kwKXLdPaE &b=84570

For the chemical industry's point-of-view, see "Phthalate Information Center" at http://www.phthalates.org/whatare/qanda.asp

References:

<sup>[1]</sup> Rudel RA, Brody JG, Spengler JD, Vallarino J, Geno PW, Sun G, Yau A (2001). Methods to detect selected potential mammary carcinogens and endocrine disruptors in commercial and residential air and dust samples. Journal of Air and Waste Management Association 51(4):499-513.

<sup>[2]</sup> Kato K, SilvaMJ, Reidy JA, Hurtz D, Malek NA, Needham LL, Nakazawa H, Barr DB, Calafat AM(2003). Mono(2-ethyl-5-hydroxyhexyl) phthalate and mono-(2-ethyl-5-oxhexyl) phthalate as biomarkers for human exposure assessment to di-(2-ethylhexyl) phthalate. Environmental Health Perspectives 112: 327-330.

[3] CDC (2005). Third National Report on Human Exposure to Environmental Chemicals. Atlanta: Centers for Disease Control and Prevention.