

Speaking of Science

# Phthalates, found in hundreds of household products, may disrupt sex development of male fetus

By **Amy Ellis Nutt** March 6 at 12:33 PM

New research regarding phthalates (pronounced THAL-ates), a known hormone disruptor found in hundreds of plasticized consumer products, adds to the growing scientific consensus of the public health danger they pose.

Analyzing data collected from 362 women, scientists at the University of Pittsburgh Graduate School of Public Health, found that higher levels of Human chorionic gonadotropin (hCG) in a pregnant mother's blood is strongly associated with a known biological marker for low sperm count in males. (Phthalates are known to target hCG.)

The biological marker used by researchers is called anogenital distance, a measurement of the distance between the anus and the scrotum, and it is significantly [shorter in infertile men](#) than in men with normal reproductive potential.

"Our study is the first to show that hCG is a target of phthalate exposure in early pregnancy and to confirm previous findings that it is a critical hormone in male development," Jennifer Adibi told the Endocrine Society, at whose annual meeting on Sunday she will be presenting the results of her team's study.

*[\[Toxic levels of a chemical in plastic medical devices could endanger preemies\]](#)*

Phthalates made big news in 2008 when the American Academy of Pediatrics reported that infants exposed to infant-care products, specifically baby shampoos, baby lotions, and baby powder, showed higher than normal levels of phthalates in their urine. Because they are known to disrupt hormones, several of them were [severely restricted](#) by Congress in children's toys and certain child-care articles.

Nonetheless, various kinds of phthalates, which make plastic durable but flexible, are found in everything from raincoats to nail polish to vinyl flooring.

Last year at least three major studies raised concerns about the ubiquity of phthalates. In [July](#), in the journal *Environmental Health*, scientists reported that infants with normal diets, especially diets high in whole milk, cream and poultry, consume double the amount of phthalates the Environmental Protection Agency considers safe.

In [November](#) of 2014, scientists at Johns Hopkins Bloomberg School of Health reported that because of phthalates in intravenous tubing, blood and fluid bags, premature babies can be exposed to 4,000 to 160,000 times the amount of phthalates considered safe.

*[\[Bacterial DNA from mom may be inherited\]](#)*

And in December, researchers at Columbia University's Mailman School of Public Health linked prenatal exposure to phthalates to a more than six-point drop in IQ score compared with kids with less exposure.

Under the law, the Federal Drug Administration has no jurisdiction over cosmetic products and ingredients, including phthalates (with the exception of color additives), before they are sold to the public.

On its Web site the FDA says that it "does not have evidence that phthalates as used in cosmetics pose a safety risk."

And according to the [Centers for Disease Control and Prevention](#), "Human health effects from exposure to low levels of phthalates are unknown. Some types of phthalates have affected the reproductive system of laboratory animals. More research is needed to assess the human health effects . . . "

**Read more:**

[Study: BPA alternative is tied to hyperactivity](#)

[Can't focus? Maybe you're a creative genius.](#)

[How to avoid products with toxic bisphenol-s](#)

---

Pulitzer Prize-winning reporter Amy Ellis Nutt covers health and science for The Washington Post.

---