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Gender-Bender Chemicals Are Harming Unborn Boys

http://www.rednova.com/news/health/152503/genderbender_chemicals_are_harming_unborn_boys/#

FACTFILE

Phthalates have been used since the 1930s to make plastics softer and more flexible. In fragrances they help smells last longer and can mask chemical odours. Phthalates are not firmly bound into products and have found their way into the environment including remote marine locations. They can be absorbed through the skin, inhaled or ingested in food. Phthalates damaged the liver and reproductive system in tests on animals.

COMMON chemicals found in thousands of household products can harm the development of unborn baby boys, it was revealed yesterday.



Scientists warned that 'phthalates' used to make soaps, makeup, plastics and a host of other everyday items can disrupt the development of male babies' reproductive organs.

Experts said the finding raises questions about whether they may be linked to increasing rates of male reproductive disorders, including cancer.

It highlights growing scientific concern about the chemicals, known as hormone disruptors or EDCs endocrine-disrupting chemicals.

High levels of exposure have been linked to reproductive abnormalities so called gender bending and population declines in some species of birds, fish, reptiles and amphibians.

But there is even more alarm about the potential harm caused by chronic, low-level exposure to EDCs starting in the womb.

Phthalates are used in the manufacture of toys, medical equipment and paints, as well as hair sprays, deodorants and cosmetics. They have a variety of uses, including giving cosmetics colour and making plastics pliable.

In the latest study, researchers found women with higher levels of phthalate breakdown chemicals, or metabolites, in their urine were more likely to give birth to baby boys with undescended or small testicles, and small penises.

Significantly, they found the metabolite concentrations in the women needed were not exceptionally high. The researchers from centers across the U.S., led by Professor Shanna Swan from the University of Rochester in New York, looked at the reproductive organs of 134 boys, aged two to 30 months. They also measured the levels of nine widely used phthalates in the urine of their mothers.

The boys who were exposed to higher levels of metabolites had differences in the development of their genitals which were similar to the 'feminisation' seen in animals exposed to the chemicals.

Dr Swan said: 'We were able to show, even with our relatively small sample, that exposed boys were likely to display a cluster of genital changes.' He said the challenge was to isolate what kinds of products are most to blame, including the role played by plastics used to package food which might transfer the chemical agents.

He said: 'It's going to take a while to work out which of these sources is most relevant to human exposure.' Reproductive biology expert Professor Frederick vom Saal, from the University of Missouri-Columbia, said the chemical effects would lead to a 'global change' in the development of a male baby.

He said: 'Every aspect of male identity is altered when you see this in male animals.' He said levels of aggression, parenting behaviour and even learning speeds were affected.

The study, due to be presented at the Endocrine Disrupting Chemicals Forum in San Diego next week, adds to mounting evidence about increasing rates of male reproductive disorders.

Levels of testicular cancer have increased alarmingly across Europe, along with a fall in sperm counts, declining sperm quality and increasing fertility problems among couples trying to start a family.

Earlier this month a study found a higher than expected number of baby boys being born with undescended testicles in Lithuania could be due to environmental factors.

The conservation group WWF, said the 'startling' findings-from the new study showed the need for tougher control of gender bender chemicals.

Gwynne Lyons, toxics adviser to WWF UK, said: 'Regulation of the chemicals industry is woefully inadequate, and something needs to be done about this immediately.

'Right now, the Government is looking at how the regulation of hormone-disrupting chemicals could be made more effective under EU law.

'It remains to be seen whether the UK Government has got the guts to stand up to industry lobbying. If they don't, wildlife and baby boys will be the losers.'

THE HIDDEN DANGERS IN EVERY HOME: Phthalates are used in a variety of products including:

Air freshener	Mobile phones
Baby toys (plastic)	Moisturisers
Backpacks	Nail polish
Beach balls	Paint
Bubble bath	Perfume
Cleaning agents	Plastic raincoats
Coatings for tablets	Portable music players
Computers	PVC flooring
Deodorant	Shampoo
Disinfectant	Shaving foam
DVD players	Shower curtains
Electrical cables	Soap Sunscreens
Garden hoses	Toothbrushes
Hair gels and mousse	Trainers
Hairspray	Vinyl blinds
Ink	Wallpaper (PVC)
Insect repellent	Washing-up liquid
Lipstick	Wellington boots

Source: Daily Mail; London (UK)