

HEALTH NEWS

Study Links Phthalates to Preterm Births and Infant Deaths

Exposure to a widely used plastic chemical may be contributing to preterm births globally, raising concerns about its role in maternal and infant health.



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A chemical commonly found in plastics and household products may be behind nearly 2 million preterm births worldwide in a single year, according

to recent research.

Preterm birth is a leading cause of death in children under 5 and can lead to lasting learning and development problems, according to the World Health Organization.

The recent study, [published](#) in the journal *EClinicalMedicine* and led by researchers at NYU Langone Health, estimates that exposure to a chemical used to make plastics more flexible is linked to nearly 2 million preterm births worldwide in 2018. This accounts for more than 8 percent of all premature births that year.

The findings also suggest that this chemical, a type of plasticizer called phthalate, may be linked to about 74,000 newborn deaths.

The team focused on di-2-ethylhexylphthalate (DEHP), part of a family of chemicals called phthalates used widely in plastics, personal care products, and household goods.

Phthalates in Pregnancy

Using a computer model, researchers estimated DEHP exposure in 2018 across 200 countries and territories, using data from national surveys in the United States, Europe, and Canada. They combined that exposure data with existing studies on how DEHP might influence preterm birth, along with global birth and death figures.

The study estimates that DEHP exposure may have contributed to 1.2 million years of life lived with disabilities caused by premature birth.

The Middle East and South Asia bear a larger share, making up 54 percent of estimated illnesses from preterm birth. These areas have growing plastics industries and high levels of plastic waste. Africa accounted for 26 percent, with a disproportionately high death rate, reflecting broader challenges in premature infant care.

The study also looked at another similar chemical, diisononyl phthalate (DiNP), which is often used as a replacement for DEHP. Researchers found it may pose a comparable risk, potentially contributing to about 1.88 million preterm births globally.

However, the researchers themselves urge caution. The study does not establish that DEHP or DiNP directly cause preterm birth, nor does it account for other types of phthalates. Due to some uncertainty in the data, they also caution that the true effect could be up to four times smaller—or slightly higher—than the main estimate.

Where the Exposure Comes From

Phthalates are pervasive in modern life. DEHP is part of a group called phthalates, used in products such as cosmetics, cleaning agents, and insect repellents.

This is the first global estimate of how many preterm births are linked to DEHP exposure and which parts of the world are most affected, the researchers said.

“Phthalates are all around us, making plastics more flexible but also [serving] as solvents and fixatives in things like personal care products,” Jennifer Brandon, an environmental scientist and sustainability consultant at Wild Beacon Consulting, who was not involved in the study, told *The Epoch Times*.

She noted that people are exposed to them through daily life via cosmetics, perfumes, hairsprays, nail polish, air fresheners, plastic (PVC) shower curtains, children’s toys, vinyl tablecloths, and many types of food packaging.

“They can also flake off into the dust and air we breathe, because they are in so many common household products,” Brandon said.

Chris DeArmitt, a polymer and environmental scientist and founder of Phantom Plastics and the Plastics Research Council, who was not involved in the study, told *The Epoch Times* that the most common plastics—including polyethylene, polypropylene, and PET—contain no phthalates at all.

Evidence Still Limited

Not everyone finds the study credible. DeArmitt argued that the research misrepresents the state of evidence.

“The consensus based on huge amounts of data is that there is no evidence of a threat,” he said.

“Exposure comes from phthalates in medicine, nail polish, and perfumes that are sprayed directly on the skin,” but these exposures were not the focus of the study.

DeArmitt said that this study was funded by Beyond Petrochemicals and Beyond Plastics, two groups that advocate for phasing out plastics. He also pointed to the study’s methodology, which used computer modeling to draw conclusions on phthalate risks—“[there’s] no actual evidence,” he said.

The study authors also emphasized that scientific evidence strongly suggests the risks to humans are low. They added that current phthalate regulations are unlikely to lead to significant improvements in public health.

Regardless of where the scientific debate lands, Brandon emphasized that it’s possible to reduce our exposure.

One of the biggest ways is to change the cosmetics you use. “There are common phthalate-free nail polishes and shampoos, and more and more cosmetics are advertising that they are phthalate-free,” she said. “If the product doesn’t say it’s phthalate-free, it probably isn’t.”

She also recommends replacing PVC or vinyl shower curtains with fabric ones labeled phthalate-free. “Buy children’s toys that are wood or natural rubber, and ditch those air freshener sprays; they are basically a mixture of harmful chemicals.”



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George Citroner reports on health and medicine, covering topics that include cancer, infectious diseases, and neurodegenerative conditions. He was awarded the Media

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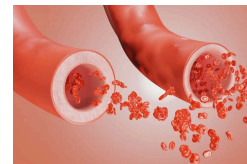
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