Use of personal care products during pregnancy linked to adverse effects in newborns

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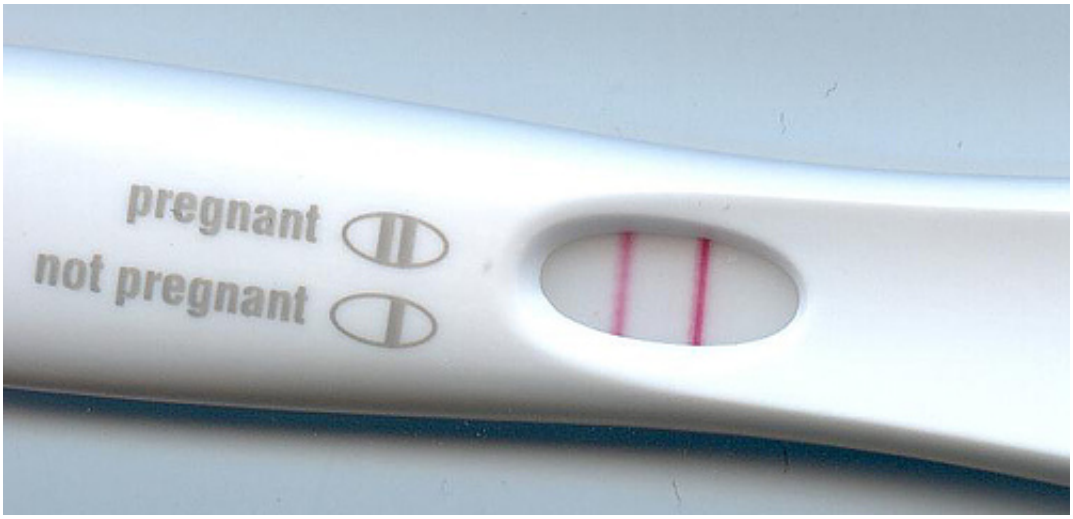

Pregnancy test. Credit: public domain

A study led by SUNY Downstate Medical Center's School of Public Health presents evidence linking personal care products used during pregnancy to adverse reproductive effects in newborns.

"The study found a link between women with higher levels of butyl paraben, which is commonly used as a preservative in cosmetics, and the following birth outcomes: shorter gestational age at birth, decreased birth weight, and increased odds of preterm birth," says Laura Geer, PhD, MHS, associate professor in the Department of Environmental and

Occupational Health Sciences in the School of Public Health at SUNY Downstate.

The antimicrobial compound, triclocarban, mainly added to soaps, was associated with shorter gestational age at birth. Another common chemical added to lotions and creams, propyl paraben, was associated with decreased body length at birth. The long-term consequences of this are not clear, and, Geer adds, "Findings must be reproduced in larger studies."

The study was a collaboration with SUNY Downstate's Department of Obstetrics and Gynecology, and the Center for Environmental Security at Arizona State University's Biodesign Institute, directed by professor Rolf Halden, PhD, a noted expert in the study of antimicrobial chemicals. The findings are available online and will be published in a Special Issue "Emerging Contaminants" in the *Journal of Hazardous Materials*.

Dr. Geer says, "Our latest study adds to the growing body of evidence showing that endocrine-disrupting compounds can lead to developmental and reproductive problems in animals and in humans. Effects observed in previous studies mainly came from animal models only."

This study presents evidence of potentially adverse impacts in humans. Larger follow-up studies to confirm these findings are warranted. Geer suggests, "Based on this new evidence, the safety of use of these chemicals in our consumer products should be reassessed."

Regulations requiring removal of triclosan from various consumer care products have been in place since 2015 in the European Union, but broader regulatory action by the U.S. Food and Drug Administration and the U.S. Environmental Protection Agency has not ensued. Various U.S. manufacturers have pledged to voluntarily remove triclosan from various

hygiene-related products, while the state of Minnesota has passed a ban on use of triclosan in sanitizing or hand and body cleaning products beginning in 2017.

Dr. Geer concludes, "Our study provides further evidence of the importance of assessing the risks of having these additional chemicals in our consumer products. While small-scale changes in birth size may not be of clinical relevance or cause for concern in individual cases, subtle shifts in birth size or timing at the population-level would have major impacts on the risk for adverse birth outcomes."

More information: Laura A. Geer et al, Association of birth outcomes with fetal exposure to parabens, triclosan and triclocarban in an immigrant population in Brooklyn, New York, *Journal of Hazardous Materials* (2016). DOI: 10.1016/j.jhazmat.2016.03.028

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