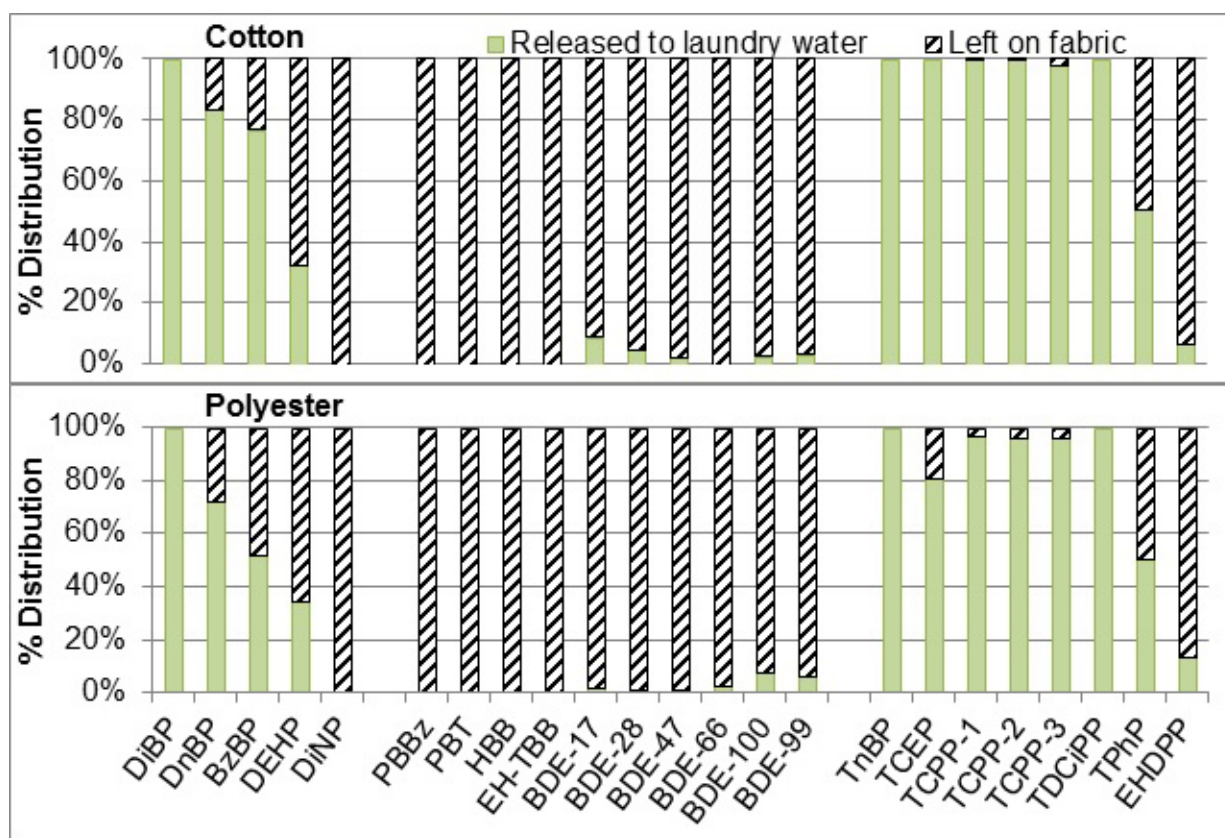


A surprising way laundry adds flame retardants to surface waters

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A variety of flame retardants and phthalates wash into laundry water (green) while others remain on cotton or polyester fabrics (black). Credit: American Chemical Society

In recent years, evidence has been building suggesting that flame

retardants, which are used in furniture and electronics, are potentially linked to health problems. And studies have shown that the substances leach out of products, and end up in indoor dust, air and in us. Now, scientists report in ACS' journal *Environmental Science & Technology* how flame retardants in our homes could also be contaminating surface water through our laundry.

Previous studies have measured elevated levels of flame retardants in wastewater going into and coming out of treatment plants. Researchers have guessed that some of the compounds are getting transferred from indoors to the outdoor environment when retardant-containing clothes are laundered, and the wastewater makes its way to rivers and lakes. Miriam L. Diamond and colleagues wanted to test that theory.

In a pilot study, the researchers found that cotton and polyester fabrics accumulate [flame retardants](#) and plasticizers called phthalates from the air in an indoor office environment. When the fabrics were laundered, a range of these substances flowed into the wash water, which ultimately gets treated and released into the environment. The results could have implications for both aquatic life and people, the researchers say.

More information: Amandeep Saini et al. From Clothing to Laundry Water: Investigating the Fate of Phthalates, Brominated Flame Retardants, and Organophosphate Esters, *Environmental Science & Technology* (2016). [DOI: 10.1021/acs.est.6b02038](https://doi.org/10.1021/acs.est.6b02038)

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