Greenlist BULLETIN



Toxics Use Reduction Institute

January 18, 2019

This is the weekly bulletin of the TURI Library at the University of Massachusetts Lowell. Greenlist Bulletin provides previews of recent publications and websites relevant to reducing the use of toxic chemicals by industries, businesses, communities, individuals and government. You are welcome to send a message to info@turi.org if you would like more information on any of the articles listed here, or if this email is not displaying properly.

Serum concentrations of PFASs and exposure-related behaviors in African American and non-Hispanic white women

<u>Source: Journal of Exposure Science & Environmental Epidemiology</u>

Authors: Katherine E. Boronow, Julia Green Brody, Laurel A. Schaider, Graham F. Peaslee, Laurie Havas, Barbara A. Cohn

Per- and polyfluoroalkyl substances (PFASs) are used in a wide range of consumer products for their waterand grease-resistant properties, but few studies have explored this exposure route. We used multiple regression to investigate associations between six self-reported behaviors hypothesized to influence PFAS exposure and serum concentrations of six PFAS chemicals in 178 middle-aged women enrolled in the Child Health and Development Studies, about half of whom are African American. Blood samples were collected in 2010-2013, and participants were interviewed about behavior in 2015-2016. Results showed that African American women had lower levels of perfluorooctanoic acid (PFOA) and perfluorohexanesulfonic acid (PFHxS) compared with non-Hispanic white women. In African Americans, but not others, frequent consumption of prepared food in coated cardboard containers was associated with higher levels of four PFASs. Flossing with Oral-B Glide, having stain-resistant carpet or furniture, and living in a city served by a PFAS-contaminated water supply were also associated with higher levels of some PFASs. Product testing using particle-induced y-ray emission (PIGE) spectroscopy confirmed that Oral-B Glide and competitor flosses contained detectable fluorine. Despite the delay between blood collection and interview, these results strengthen the evidence for exposure to PFASs from food packaging and implicate exposure from polytetrafluoroethylene (PTFE)-based dental floss for the first time.

Read more...

See EPA GenX and PFBS Draft Toxicity Assessments

(comments due Tuesday, January 22, 2019)

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Also see the documentary "<u>The Devil We Know</u>" currently available on subscription services, including Netflix, iTunes, Amazon, and Google Play.

"Environmentally friendly" flame retardants break down into potentially toxic chemicals

Source: Environnmental Health News

Author: Brian Bienkowski

A purported "eco-friendly" flame retardant breaks down into smaller, possibly harmful chemicals when exposed to heat and ultraviolet light, according to a study from German researchers.

The study, published today in Environmental Science and Technology, is the first to show that a popular insulation flame retardant degrades into dozens of smaller chemicals and casts doubt that the "green" flame retardant is as harmless as touted.

Read more...

Read the full report: Degradation of the Polymeric Brominated Flame Retardant "Polymeric FR" by Heat and UV Exposure. Koch, et al, 2019

Settlement Bans Some Bee-Toxic Pesticides, Requires Public Comment Period on Testing All Pesticide Product Ingredients and Regulating Pesticide-Treated Seeds

Source: Beyond Pesticides

First, the good news: plaintiffs in a 2013 lawsuit against the Environmental Protection Agency (EPA) can allow themselves a small victory dance. In that suit, plaintiffs made a number of claims related to EPA's failure to protect pollinators from dangerous pesticides, its poor oversight of the bee-killing pesticides clothianidin and thiamethoxam, and its practice of "conditional registration," as well as labeling deficiencies.

Read more...

See Michigan NPR report: <u>Half of Michigan bumblebee species dropped by 50 percent or more</u>

See also from the *Smithsonian*: "Shrinking of Utah National Monument May Threaten Bee Biodiversity"

Toward a circular economy: Tackling the plastics recycling problem

Source: The Hour

Author: Margaret Sobkowicz

...My group has been working for the past eight years on sustainability of plastic materials for a range of applications. We study plant-based and biodegradable polymers, improved technologies for recycling plastics and reducing plastics toxicity. Polymers (long-chain organic molecules) are fascinating materials, and they have provided so many benefits to society; however, as population and consumption rates grow, humans must always be mindful of our relationship with the Earth. It is my goal as a researcher, educator and citizen to harness the tools of engineering for environmentally sound plastics production and use.

Read more...

See the original article in The Conversation.

See also in ChemicalWatch: "Remove hazardous substances in plastics by 2025, EU body says"

See also in the Official Journal of the European Union: <u>Opinion of the European Committee</u> of the Regions - Communication on a European Strategy for Plastics in a circular economy

TURI's Note: See also the report co-authored by Margaret Sobkowicz, the research for which was funded by an academic research grant from TURI, <u>Preparation of Semiconducting Polymer Colloids in Aqueous Dispersion for Electrically Active Coatings</u>

Key West takes first step in banning some sunscreens that experts say damage coral reefs

Source: Miami Herald Author: Gwen Filosa

The Key West City Commission on Tuesday unanimously voted to ban the sale of sunscreens that contain two ingredients — oxybenzone and octinoxate — that a growing body of scientific evidence says harm coral reefs.

"This ordinance is just one other thing we can do to help improve and protect our water quality," said Mill McCleary, of the nonprofit environmental protection group Reef Relief.

Read more...

See also this report from CNN: Is your sunscreen killing coral reefs?

To find safer sunscreens: EWG's Sunscreen Guide

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