# **Greenlist Bulletin**

From the Toxics Use Reduction Institute at the University of Massachusetts Lowell

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This is the bi-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 mary@turi.org if you would like more

information on any of the articles listed here, or if this email is not displaying properly.

Screening for Chemical Contributions to Breast Cancer Risk

Source: Massachusetts Breast Cancer Coalition, June 2, 2015

A study published June 2nd, 2015 in *Environmental Health Perspectives*, "Screening for Chemical Contributions to Breast Cancer Risk: A Case Study for Chemical Safety Evaluation", outlines a new method for assessing how synthetic chemicals and pollutants may contribute to breast cancer risk. In addition to developing the chemical testing approach, the authors, including Janet Ackerman and Ruthann Rudel of Silent Spring Institute, identify two critical needs: the need for new chemical safety testing methods, and the need to screen more chemicals.

Inherited genes only explain about a quarter of a woman's risk of developing breast cancer. Exposure to synthetic chemicals and pollutants in air, water, food, workplaces, and consumer products may account for a significant portion of breast cancer risk.

# Read more...

See article in *Environmental Health Perspectives*, "Screening for Chemical Contributions to Breast Cancer Risk: A Case Study for Chemical Safety Evaluation".

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# Cotton, Cashmere, Chemicals ... What Really Goes Into Making Our Clothes?

Source: Ensia, June 9, 2015 Author: Elizabeth Grossman

June 9, 2015 -- The U.S. Federal Trade Commission has something to say about what you wear.

While not a fashion arbiter and unable to advise on attire for family gatherings, the FTC oversees what appears on the labels inside your clothes. As the federal agency responsible for enforcing the Textile Products Identification Act and related laws, it makes sure clothing is accurately labeled with its fabric content. But it turns out, apart from these laws (and a few -- including some state laws -- that restrict certain hazardous substances from being used in children's clothing), there is no overarching U.S. law that regulates or requires listing of materials outside of fabrics that go into producing our clothing.

Why does this matter? Because manufacturers use hundreds of substances to produce clothing that don't show up on clothing labels. And many of these are hazardous to the environment and to human health.

#### Read more...

Also see from The Guardian, "Sweat it out: could your sportswear be toxic?"

# EPA Releases EJSCREEN, An Environmental Justice Screening and Mapping Tool

# Source: U.S. Environmental Protection Agency, June 10, 2015

WASHINGTON -- [Today], the U.S. Environmental Protection Agency (EPA) released EJSCREEN, an environmental justice screening and mapping tool that uses high resolution maps combined with demographic and environmental data to identify places with potentially elevated environmental burdens and vulnerable populations. EJSCREEN's simple to understand color-coded maps, bar charts, and reports enable users to better understand areas in need of increased environmental protection, health care access, housing, infrastructure improvement, community revitalization, and climate resilience. "EJSCREEN provides essential information to anyone seeking greater visibility and awareness about the impacts of pollution in American communities," said EPA Administrator Gina McCarthy. "EJSCREEN has been a valuable resource for EPA to advance our commitment to protect Americans most vulnerable to pollution. I'm excited to share this tool with the public to broaden its impact, build transparency, and foster collaboration with partners working to achieve environmental justice." ...

EJSCREEN can help governments, academic institutions, local communities, and other stakeholders to highlight communities with greater risk of exposure to pollution based on 8 pollution and environmental indicators, including traffic proximity, particulate matter, and proximity to superfund sites. These indicators are combined with demographic data from the U.S. Census Bureau American Community 5-year Summary Survey enabling users to identify areas with minority or low-income populations who also face potential pollution issues.

#### Read more...

Access tool here.

Cleaning and disinfecting environmental surfaces in health care: Toward an integrated framework for infection and occupational illness prevention

Source: American Journal of Infection Control, May 1, 2015

Authors: Margaret Quinn, et al.

**Background:** The Cleaning and Disinfecting in Healthcare Working Group of the National Institute for Occupational Safety and Health, National Occupational Research Agenda, is a collaboration of

infection prevention and occupational health researchers and practitioners with the objective of providing a more integrated approach to effective environmental surface cleaning and disinfection (C&D) while protecting the respiratory health of health care personnel.

**Methods:** The Working Group, comprised of >40 members from 4 countries, reviewed current knowledge and identified knowledge gaps and future needs for research and practice.

Results: An integrated framework was developed to guide more comprehensive efforts to minimize harmful C&D exposures without reducing the effectiveness of infection prevention. Gaps in basic knowledge and practice that are barriers to an integrated approach were grouped in 2 broad areas related to the need for improved understanding of the (1) effectiveness of environmental surface C&D to reduce the incidence of infectious diseases and colonization in health care workers and patients and (2) adverse health impacts of C&D on health care workers and patients. Specific needs identified within each area relate to basic knowledge, improved selection and use of products and practices, effective hazard communication and training, and safer alternatives.

**Conclusion:** A more integrated approach can support multidisciplinary teams with the capacity to maximize effective and safe C&D in health care.

#### Read more...

New Study -- Many carcinogens found in Yale analysis of crumb rubber infill and playground mulch surfacing

Source: Environment and Human Health, Inc., June 11, 2015

North Haven, Conn., June 11, 2015 -- Environment and Human Health, Inc. (EHHI), an organization of physicians and public health professionals, is releasing its study done at Yale University showing that the analysis found 96 chemicals in the rubber tire infill used in synthetic turf and rubber tire mulch used as surfacing in toddler playgrounds.

Of the 96 chemicals detected -- a little under a half have had NO toxicity assessments done on them for their health effects -- therefore nothing is known about them. The other half have had SOME toxicity testing done on them -- but even many of those chemicals had incomplete toxicity testing and therefore all health effects are not fully known.

Of the half that have had toxicity assessments, 20% are probable carcinogens.

As well, 40% of the chemicals in that group were found to be irritants. 24% are respiratory irritants -- some causing asthma symptoms; 37% are skin irritants; and 27% can cause eye irrita[tion].

#### Read more...

TURI's Note: See our recently updated Library Guide on Artificial Turf.

# Minnesota Lawmakers Strike Deal On Flame Retardant Ban

Source: Manufacturing.net, May 18, 2015

Author: Andy Szal

Minnesota is one step closer to enacting the nation's strictest ban on fire retardant chemicals.

Proponents, however, lamented that a deal struck by lawmakers severely curbed the original list of banned substances.

"I'm tremendously disappointed today that we don't have more of the chemicals on this list. I can't even believe it," said Susan Shaw, a public health professor at the State University of New York-Albany who testified before a legislative committee on Monday. ...

Ultimately, the House passed amended legislation that restricts four chemicals and requires state officials to study the dangers of the other six. The ban would impact manufacturers and wholesalers beginning in July of 2017, with retailers affected one year later.

#### Read more...

See web page for <u>SF 1215 - Flame-retardant chemicals in children's products and upholstered residential furniture prohibition</u>.

# Silent Epidemic of Workplace Chemical Exposures Rages On: New Worker Right-to-Know Database Maps All OSHA Health Inspection Readings

Source: Public Employees for Environmental Responsibility, May 28, 2015

Washington, DC -- Workplace chemical exposures are the nation's eighth leading cause of death but the U.S. lacks any strategy for preventing the more than 40,000 premature deaths each year, according to Public Employees for Environmental Responsibility (PEER). [Today] the group unveiled a Worker Right-to-Know website displaying 30 years of Occupational Safety & Health Administration (OSHA) chemical exposure readings from inspections back to 1984 so workers can see what substances they encountered and to help guide OSHA in improving safeguards for worker health.

Occupational exposures kill malignantly, from cancer, neurological breakdown, cardiopulmonary disease, and other chronic maladies. While this toll claims the lives of more than 10 times the workers killed in all on-the-job accidents combined, OSHA spends in excess of 90% of its budget on safety issues.

"More Americans die each year from workplace chemical exposure than from all highway accidents, yet we have no national effort to stem this silent occupational epidemic," stated PEER Executive Director Jeff Ruch, pointing out that allowed chemical exposure on-the-job is roughly 1000 times higher than in the general ambient environment. "In the U.S., environmental protection stops at the factory door."

# Read more...

Visit the new Worker Right-to-Know Chemical Exposure database.

World-Wide Indoor Exposure to Polyfluoroalkyl Phosphate Esters (PAPs) and other PFASs in Household Dust

Source: Environmental Science & Technology, May 22, 2015

Authors: Ulrika Eriksson and Anna Karrman

Human exposure to perfluorocotanoic acid (PFOA) and other per- and polyfluoroalkyl substances (PFASs) is ongoing and in some cases increasing, despite efforts made to reduce emissions. The role of precursor compounds such as polyfluorinated phosphate esters (PAPs) has received increasing attention, but there are knowledge gaps regarding their occurrence and impact on human exposure. In this study, mono-, di-, and triPAPs, perfluorinated alkyl acids (PFAAs), saturated, and unsaturated fluorotelomer carboxylic acids (FTCA/FTUCAs), perfluoroalkane sulfonamides, and sulfonamidethanols (FOSA/FOSEs), and one fluorotelomer sulfonic acid (FTSA)) were compared in household dust samples from Canada, the Faroe Islands, Sweden, Greece, Spain, Nepal, Japan, and Australia. Mono-, di-, and triPAPs, including several diPAP homologues, were frequently detected in dust from all countries, revealing an ubiquitous spread in private households from diverse geographic areas, with significant differences between countries. The median levels of monoPAPs and diPAPs ranged from 3.7 ng/g to 1023 ng/g and 3.6 ng/g to 692 ng/g, respectively, with the lowest levels found in Nepal and the highest in Japan. The levels of PAPs exceeded those of the other PFAS classes. These findings reveal the importance of PAPs as a source of PFAS exposure worldwide.

# Read more...

# OECD publishes 'unprecedented' volume of nanomaterials data

Source: Chemical Watch, June 11, 2015

[ECHA] is urging REACH registrants of nanoforms of substances to check whether their dossiers need updating following the OECD's publication of what the global organisation calls an "unprecedented" volume of new data.

As reported by *Chemical Watch* last summer (CW 26 June 2014), the OECD has decided to give free access to vast swathes of data collected for its nanomaterials testing programme.

The organisation says the wealth of new information "has dramatically shifted the world's understanding of the properties and application of nanomaterials".

The data is being published now because the OECD has just completed its seven-year

experimental testing programme for nanomaterials, covering 11 commercially viable nanomaterials and over 110 different chemical tests. More than 780 studies of the specific properties of such materials were conducted to plug gaps in scientific understanding.

#### Read more...

Also see from U.S. EPA, "EPA Announces Registration of Nanosilver Pesticide Product".

EPA Releases Draft Assessment on the Potential Impacts to Drinking Water Resources from Hydraulic Fracturing Activities

Source: U.S. Environmental Protection Agency, June 4, 2015

WASHINGTON -- The Environmental Protection Agency (EPA) is releasing a draft assessment today on the potential impacts of hydraulic fracturing activities on drinking water resources in the United States. The assessment, done at the request of Congress, shows that while hydraulic fracturing activities in the U.S. are carried out in a way that have not led to widespread, systemic impacts on drinking water resources, there are potential vulnerabilities in the water lifecycle that could impact drinking water. The assessment follows the water used for hydraulic fracturing from water acquisition, chemical mixing at the well pad site, well injection of fracking fluids, the collection of hydraulic fracturing wastewater (including flowback and produced water), and wastewater treatment and disposal. ...

"EPA's draft assessment will give state regulators, tribes and local communities and industry around the country a critical resource to identify how best to protect public health and their drinking water resources," said Dr. Thomas A. Burke, EPA's Science Advisor and Deputy Assistant Administrator of EPA's Office of Research and Development. "It is the most complete compilation of scientific data to date, including over 950 sources of information, published papers, numerous technical reports, information from stakeholders and peer-reviewed EPA scientific reports."

EPA's review of data sources available to the agency found specific instances where well integrity and waste water management related to hydraulic fracturing activities impacted drinking water resources, but they were small compared to the large number of hydraulically fractured wells across the country. The report provides valuable information about potential vulnerabilities, some of which are not unique to hydraulic fracturing, to drinking water resources, but was not designed to be a list of documented impacts.

#### Read more...

See report, "Assessment of the Potential Impacts of Hydraulic Fracturing for Oil and Gas on Drinking Water Resources (External Review Draft)".

Please send a message to <a href="mary@turi.org">mary@turi.org</a> if you would like more information on any of these resources. Also, please tell us what topics you are particularly interested in monitoring, and who else should see Greenlist. An online search of the TURI Library catalog can be done at <a href="http://library.turi.org">http://library.turi.org</a> for greater topic coverage.

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