

Greenlist Bulletin

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

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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 mary@turi.org if you would like more information on any of the articles listed here, or if this email is not displaying properly.



Household Pesticide Contamination from Indoor Pest Control Applications in Urban Low-Income Public Housing Dwellings: A Community-Based Participatory Research

[Source: *Environmental Science and Technology*, January 30, 2013](#)

Authors: Chensheng Lu, Gary Adamkiewicz, Kathleen R. Attfield, Michaela Kapp, John D. Spengler, Lin Tao, and Shao Hua Xie

We designed this community-based participatory research (CBPR) project aiming to generate evidence-based research results to encourage residents living in urban low-income public housing dwellings to engage in a community-wide integrated pest management (IPM) program with the intention of improving their health and quality of life, as well as household conditions. We enrolled 20 families and their children in this study in which we utilized environmental exposure assessment (surface wipe and indoor air) tools to quantitatively assess residential pesticide exposure in young children before the implementation of an IPM program. We analyzed those samples for 19 organophosphate (OP) and pyrethroid pesticides.

[Read more...](#)

Removing Arsenic from Building Materials: A Success Story

[Source: *Healthy Building News*, March 12, 2013](#)

Author: Bill Walsh

March 17th marks the 10th anniversary of the EPA order that made it illegal to use the arsenic-based pesticide CCA (chromated copper arsenate) to treat wood intended for most residential uses, including wood destined for decks, picnic tables, landscaping timbers, gazebos, residential fencing, patios, walkways and play structures. This is also a happy milestone for the Healthy Building Network, marking the first major success of our then 3-year-old organization and our mission to transform the market for building materials to advance the best environmental, health and social practices.

[Read more...](#)

UT Health researchers find industrial chemicals in food samples

Source: [University of Texas Health Center at Houston, March 6, 2013](#)

Author: Stephanie Logue

HOUSTON -- Researchers at The University of Texas Health Science Center at Houston (UTHealth) have discovered phthalates, industrial chemicals, in common foods purchased in the United States. Phthalates can be found in a variety of products and food packaging material, child-care articles and medical devices.

"Although it's not completely understood how phthalates get into our food, packaging may be a contributor to the levels of the toxin in food," said lead investigator Arnold Schecter, M.D., M.P.H., professor of environmental health at The University of Texas School of Public Health Dallas Regional campus, part of UTHealth. . . .

Schecter believes this is the first study to compile an analysis of phthalates in foods found in the United States. National Institutes of Health researcher Linda Birnbaum, Ph.D., is the senior author on the study publication.

"It's unfortunate that we have these toxic chemicals in our bodies," said Schecter. "However, this is not a cause for alarm because the amount of phthalates found in the food falls below what the Environmental Protection Agency considers safe. But it is cause for concern because these toxins and others previously reported by this group do not belong in our food or our bodies."

[Read more...](#)

Read original article in *Environmental Health Perspectives*, "[Phthalate Concentrations and Dietary Exposure from Food Purchased in New York State.](#)"

Prenatal exposure to pesticide DDT linked to adult high blood pressure

Source: [University of California, Davis, March 12, 2013](#)

Infant girls exposed to high levels of the pesticide DDT while still inside the womb are three times more likely to develop hypertension when they become adults, according to a new study led by the University of California, Davis.

Previous studies have shown that adults exposed to DDT (dichlorodiphenyltrichloroethane) are at an increased risk of high blood pressure. But this study, published online March 12 in *Environmental Health Perspectives*, is the first to link prenatal DDT exposure to hypertension in adults.

Hypertension, or high blood pressure, is a high risk factor for heart disease, which remains the leading cause of death in the United States and worldwide.

[Read more...](#)

Read original article in *Environmental Health Perspectives*, "[Prenatal Exposure to the Pesticide DDT and Hypertension Diagnosed in Women Before Age 50: A Longitudinal Birth Cohort Study.](#)"

Hydrogen Ion (H⁺) in Waste Acid as a Driver for Environmentally Sustainable Processes: Opportunities and Challenges

Source: [Environmental Science and Technology, January 30, 2013](#)

Authors: Michael German, Arup K. SenGupta, and John Greenleaf

Acid–base neutralization reaction in the aqueous phase is thermodynamically favorable and kinetically fast. Waste acid neutralization is also the most common waste management practice globally. However, waste acid neutralization is yet to be used for any work/energy generation because of the low concentrations of the waste acid and the high heat capacity of aqueous solutions. In this paper, we address potential processes that can effectively take advantage of the high energy inherent in neutralization reactions, in accordance with the goal of sustainable development.

[Read more...](#)

[Source: Elsevier, March 12, 2013](#)

Human norovirus (hNoV), also known as the winter vomiting bug, is one of the most common stomach bugs in the world. The virus is highly contagious, causing vomiting and diarrhea, and the number of affected cases is growing. Currently there is no cure; sufferers have to let the virus run its course for a few days.

The consumption of fresh produce is frequently associated with outbreaks of hNoV but it remains difficult to identify where in the supply chain the virus first enters production.

A new study, published in the *International Journal of Food Microbiology*, investigated whether contaminated water used to dilute pesticides could be a source of hNoV. Farmers use various water sources in the production of fresh fruits and vegetables, including well water and different types of surface water such as river water or lake water -- sources which have been found to harbour hNoV.

[Read more...](#)

Read original article in the *International Journal of Food Microbiology*, "[Persistence of human norovirus in reconstituted pesticides -- Pesticide application as a possible source of viruses in fresh produce chains.](#)"

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