Triclosan

Managing germs without this hazardous antibacterial pesticide

Do you know that every time you wash or sanitize your hands, you may be exposing yourself to a toxic pesticide? Many are not aware that the antibacterial products they buy are creating a toxic pesticide exposure with residues that accumulate in their bodies, contributing to a number of health risks. Triclosan is a controversial antibacterial pesticide prevalent in many consumer products labeled with the term "antibacterial." The chemical is the focus of a growing campaign led by a coalition of health and environmental groups, including Beyond Pesticides and Food & Water Watch, that seeks its removal from the consumer market. Studies have increasingly linked triclosan and its chemical cousin triclocarban to a range of adverse health and environmental effects, from allergy susceptibility, bacterial resistance, endocrine disruption and impaired fetal development to water and food contamination.

"Existing data raise valid concerns about the effects of repetitive daily human exposure to these … ingredients" - FDA, 2010

Originally introduced to the market in 1972, for hospital and health care use, triclosan has exploded onto the marketplace in hundreds of consumer products ranging from antibacterial soaps, deodorants, toothpastes, cosmetics, fabrics, toys, and other household and personal care products. Triclosan's impact on the consumer market has been aided by a false public perception that antibacterial products are best to protect and safeguard against potential harmful bacteria. However, studies conclude that antibacterial soaps show no health benefits over plain soaps. In fact, FDA's Nonprescription Drugs Advisory Committee in 2005 concluded that antibacterial soaps and washes are no more effective than regular soap and water in fighting infections.

Triclosan Facts: Where is it found?

Triclosan, used in hundreds of consumer products such as soaps, hand sanitizers, cosmetics, toys, plastics (brushes, cutting boards) and textiles (socks), is an antibacterial pesticide linked to numerous human health risks and environmental contamination. Studies find triclosan in urine, breast milk and umbilical cord blood. It is also detected in large concentrations in surface waters and waste water treatment sludge, as well as in fish and earthworms. Triclosan is also an endocrine disruptor, interfering with thyroid hormones, estrogen and androgen receptors. It is also implicated in the rise of bacterial resistance, which can threaten the integrity of antibacterial and antibiotics in medical settings. *Learn more at www.beyondpesticides.org/antibacterial/triclosan.htm.*

Research into triclosan's health and environmental impacts shows triclosan does more harm than good, despite its widespread consumer use. Studies find that it persists in the environment, contributes to the increasing rates of bacterial resistance, has endocrine disrupting properties, and causes adverse health problems in humans and wildlife species.

Triclosan in Our Bodies

Centers for Disease Control and Prevention (CDC) reports document triclosan in the urine of 75% of the U.S. population, with the most recent 2010 update finding that the levels of triclosan in the U.S. population have increased by 42% between 2004 and 2006. Being fat soluble, triclosan accumulates, and is found in fatty tissue, breast milk and blood. Triclosan is an endocrine disruptor, meaning it interferes with vital hormone functions in our bodies. It interferes with the body's thyroid hormone metabolism, and estrogen and androgen receptors. A 2010 study from the University of Florida, Gainesville, finds that triclosan interferes with estrogen metabolism in women and can disrupt a vital enzyme during pregnancy. This is troubling because triclosan is detected in the bodies of pregnant women at levels higher than nonpregnant women.

Exposures occur mainly by absorption through the skin or through the lining of the mouth. These exposures can lead to skin irritation, and an increase in allergic reactions, espe-

What Can You Do?

Avoid products containing triclosan. Check your label. Is it labeled "antibacterial, antimicrobial, microban, biofresh?" If yes, then skip it. For a list of some products that contain triclosan, visit www.beyondpesticides.org/antibacterial/triclosan.htm.

Sign the pledge to go triclosan-free. With this pledge you also support efforts to ban triclosan from consumer products. You also pledge to tell your friends and family about the health and environmental dangers of triclosan and that regular soap and water works just as well. Sign the pledge online at www.beyondpesticides.org/antibacterial/triclosan-pledge.htm.

Tell EPA and FDA to remove triclosan from the products you buy. Email EPA Administrator Lisa Jackson or submit your comments to the triclosan docket at www.regulations.gov. For more information, see the alert at www.beyondpesticides.org/antibacterial/triclosan.htm.

Ask your local supermarket, cosmetic store, local businesses or co-op to stop selling triclosan products. Encourage your local schools, government agencies, municipality, religious institutions and businesses to use their buying power to go triclosan-free. Download the resolution at www.beyondpesticides.org/antibacterial/triclosan.htm.

cially in children. Triclosan has been tied to the rise of bacterial resistance and antibiotic resistance.

Triclosan Downstream

Over 90 percent of triclosan products are washed down the drain. Once down the drain, they wreak havoc with the environment –converting to highly toxic forms of dioxin, accumulating in sewage sludge (biosolids), contaminating waterways, and destroying fragile ecosystems. USDA scientists found that triclosan is only slowly degraded in biosolids and persists at low levels in the environment for long periods of time. Biosolids are typically recycled onto agricultural lands. This persistent chemical can then be taken up and translocated in plants like the soybean, a cornerstone of the American diet.

According to the U.S. Geological Survey, triclosan is one of the most frequently detected compounds and at some of the highest concentrations in U.S. waterways. Triclosan has been detected in wastewater, biosolids, surface water, and sediments. Once in water, triclosan metabolites bioaccumulate in the bodies of fish, shellfish and crustaceans. In amphibians, triclosan disrupts the thyroid hormone, resulting in reproductive and developmental effects. The prevalence of triclosan in the nation's waterways is a cause for concern since triclosan is converted into several toxic compounds including various forms of dioxin and dioxin-like compounds when exposed to sunlight in an aqueous environment.

Eliminating Triclosan

Since the 2004 publication of "The Ubiquitous Triclosan," Beyond Pesticides has been exposing the dangers of this toxic chemical. Now, along with Food and Water Watch and over 80 environmental and public health groups, Beyond Pesticides is leading a national grassroots movement calling for the ban of triclosan from consumer products. In 2004, Beyond Pesticides petitioned FDA to remove triclosan from consumer products and in 2009 and 2010 submitted ban petitions with Food and Water Watch to FDA and EPA, citing numerous statutory violations and health and environmental risks. Calls for a ban have been echoed by several members of Congress, including Rep. Edward Markey and Rep. Louise M. Slaughter. Several manufacturers, including Colgate-Palmolive and GlaxoSmithKline, have taken notice of these recent developments and have quietly reformulated their products –further illustrating that triclosan in consumer products is, in fact unnecessary. Retail giant Staples has identified triclosan as a "bad actor" and is talking with manufacturers about removing it from products.

Visit www.beyondpesticides.org/antibacterial/triclosan.htm or contact Beyond Pesticides, 202-543-5450 for more information on this hazardous antibacterial pesticide.