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The Green Campaign against Triclosan Is Dangerous and Regressive

Efforts to Ban Widely Used Antibiotic Tackles Phantom Risks

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Environmental activists have sounded the alarm suggesting that consumers face serious health risks from the antibacterial chemical triclosan, which manufacturers have safely used in soap and other personal care products for decades. Unfortunately, green hype has led federal regulators to force companies to try to do the impossible—prove that their products pose no risk or remove them from the market. But nothing in life is risk free. Rather, the question is whether products provide more benefits than risks, which is clearly the case with the chemical triclosan.

On December 17, 2013, the U.S. food and Drug Administration (FDA) issued a proposed rule to gather more information on the safety of triclosan.[1] If at the end of the year companies cannot demonstrate safety, the FDA may regulate with bans and other restrictions on the product.

The rule notes: "[I]n light of more recent scientific developments and changes in the use patterns of these products we are now proposing that additional safety data are necessary to support the safety of antiseptic active ingredients for this use."[2] In reality, the agency pursued this action not because of "new" information, but because a lawsuit by the Natural Resources Defense Council (NRDC) forced it to complete its scientific review of triclosan, which has dragged on for decades.[3]

Bureaucratic Delays. A May 2013 CBS News story helped sound the alarm: "Some Americans are shocked that the FDA has taken so long."[4] Yet the fact that bureaucrats rarely move quickly is not at all shocking, and it does not mean triclosan poses any significant risks. In addition, trying to quantify negligible risks from trace chemical exposures to substances like triclosan is a virtually impossible task. And there is little incentive for government agencies to issue any "final" conclusions, as researchers and program administrators develop entire careers around these programs. Each year, FDA lobbyists head to Capitol Hill asking for money to ensure that program heads, their employees, research partners, and lobbyists can continue to collect paychecks, health benefits, and, for some, government pensions.

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Environmental advocacy groups contribute to never ending bureaucracy through scare campaigns designed to capture headlines and generate more government funding for existing and new regulatory reviews. In addition, activists and industry groups prolong decisions by regularly suing agencies to either push or prevent action.

For example, the EPA and the U.S. Centers for Disease Control and Prevention have been working for decades assessing the risk of dioxin.[5] With billions spent, dioxin's worst-demonstrated human-health impact is a skin rash from exposure to extremely high levels that are not relevant to the trace exposures experienced by consumers.[6] Other effects are speculative and based on rodent studies alone. The EPA has repeatedly failed to adequately demonstrate a cancer risk,[7] but the program lives on.[8] Similarly, the agency has been revising its definition of "solid waste" since the 1980s, through various lawsuits and regulatory revisions that require long comment periods and "stakeholder" involvement. The agency's most recent "final" revision came out in 2008, and it launched another review in 2011.[9] Only when government is involved does it take that long to define something as simple as "garbage."

Unscientific Claims. On its website, NRDC claims: "In laboratory studies, they [antibacterial chemicals] have been shown to disrupt hormones and can encourage the growth of drug-resistant bacteria or 'superbugs.'"[10] Despite these claims, triclosan has been used widely for more than 40 years, and there is no hard evidence of triclosan-caused cancers, health problems, or creation of triclosan-resistant "superbugs" affecting human health. The most "damning evidence" greens can offer are allegations based on studies that suggest links between the chemical and health effects in rodents dosed large amounts.

For example, NRDC's claim[11] that triclosan disrupts human thyroid functioning is based on a study where researchers dosed rats with high amounts of the chemical, which has little relevance to humans exposed to trace amounts in the environment.[12] Similar rodent studies also find that many naturally occurring chemicals found in food cause health problems when given to rats and mice in high doses, including such foods as broccoli, coffee, pickles, and more.[13] We do not need an FDA review of these foods to know they are safe to eat and that these rodent studies are not particularly relevant to human health risks from trace chemicals.[14]

The studies related to human health impacts cited by NRDC are also very weak and inconclusive. NRDC cites one study of nursing mothers that includes only 36 women in its sample, and the findings did not even address triclosan safety. The study simply concluded: "[I]nfant exposure to triclosan via breast milk is much less than the dose in the mother."[15]

NRDC also wrongly suggests that the FDA is now suddenly concerned about triclosan safety and is poised to ban the chemical as a result. In a recent op-ed, "The Swan Song for Triclosan," NRDC staffer Mae Wu claims:

> Fortunately, the U.S. Food and Drug Administration (FDA) is aware of the reasons why and is taking a step towards protecting all consumers from those products. On Monday, the agency proposed a rule that would essentially eliminate chemicals like triclosan from antibacterial soaps because they are neither safe nor effective. Specifically, the FDA announced that it does not have enough data about the health impacts of triclosan to say

> that it is safe to use. And it said that evidence shows that antibacterial soaps are no more effective than regular soap at washing germs off hands.[16]

However, the statement on the FDA website clearly indicates that the agency has not drawn such conclusions and is not banning the product. Here are some direct quotes from the FDA website:[17]

> Triclosan is not currently known to be hazardous to humans.
>
> However, data showing effects in animals don't always predict effects in humans.
>
> FDA does not have sufficient safety evidence to recommend changing consumer use of products that contain triclosan at this time.
>
> For some consumer products, there is clear evidence that triclosan provides a benefit.
>
> At this time, the agency does not have evidence that triclosan in antibacterial soaps and body washes provides any benefit over washing with regular soap and water.

NRDC's claims suggesting that triclosan significantly contributes to antibiotic resistance among medicines are also unfounded.[18] It is not clear how much effect triclosan has on resistance of any kind. And phasing it out will not solve real resistance problems, which are more clearly related to other products and public policies.[19] Where resistance is a problem, the answer lies in the continued creation of new medical antibiotics, constantly presenting new challenges to dangerous bacteria. Unfortunately, efforts to limit access to antibiotics reduce potential profits, and thereby incentives for new investment.[20]

Tricolsan Safety and Efficacy. The FDA is not the only entity with an interest in promoting safe use of chemical products like triclosan. Privately conducted research has already provided significant assurance that triclosan is unlikely to pose significant health risks.[21] This research is available without lawsuits, myriad "stakeholder" meetings, comment periods, and other political delays.

Private research also debunks faulty green allegations suggesting that triclosan is not even effective at controlling bacteria. Plenty studies show that anti-bacterial soaps containing triclosan perform better than other options, including plain old basic soap. For example, one the "largest and most comprehensive studies" on the topic published in 2005 found that "anti-microbial agents in soap were best at reducing bacteria,"[22] as noted by University of North Carolina medical researchers in a public statement. They explain the importance of these products:

> These findings are important because health-care associated infections rank in the top five causes of death, with an estimated 90,000 deaths each year in the United States," Rutala said. "Hand hygiene agents have been shown to reduce the incidence of health-care associated infections, and a variety of hand hygiene agents are now available with different active ingredients and application methods.

> Our study showed that the anti-microbial hand washing agents were significantly more effective in reducing bacteria than the alcohol-based handrubs and waterless handwipes," he said. "Our study also showed that, at a short exposure time of 10 seconds, all agents with the exception of handwipes demonstrated a 90 percent reduction of bacteria on the hands.[23]

Hand wipes containing alcohol were less effective than those containing triclosan. Still, even when used very quickly for about 30 seconds, these waterless hand wipes removed roughly 50 percent of bacteria, which certainly is better than nothing when you cannot find a sink for a full hand washing. These hand wipes may be our next best option if green groups succeed in banning triclosan—until they go after the hand wipes too!

Greens might suggest that industry research is tainted because it is motivated by profit, but those incentives actually improve the quality of private research. Private firms risk their very survival if their products do harm—which gives them far stronger incentives than that of unaccountable bureaucrats and government-funded researchers who never experience direct consequences for their decisions or research findings. Private research focuses on making decisions in a timely manner so that businesses can sell valuable products that consumers want and enjoy, rather than focusing on politics, funding, and defending regulatory turf.

Companies do not make money by poisoning their customers, nor do they relish the idea of subjecting their own families to unreasonable risks. Industry and various independent scientific organizations study products extensively and these private systems work far better than government. A recent CEI paper on green chemistry offers some examples.[24] And private systems are free to move quickly should revisions become necessary.

Conclusion. Green groups' campaign against triclosan is part of their broader efforts to force society to abandon useful technologies. While triclosan may not be useful in all applications, it certainly has value and low risks. There is no good reason for government action; consumers should be free to decide which products they want to purchase. Environmentalist hype, misinformation and eventual regulations discard those benefits and divert economic resources from productive enterprises to second-best alternatives. The attack on triclosan is just one example of the toll that comes from this regressive philosophy, which promises to unravel human progress and make us poorer and less safe in the end.

Notes

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[13] For example, see National Research Council, Committee on Comparative Toxicology of Naturally Occurring Carcinogens, *Carcinogens and Anticarcinogens in the Human Diet: A Comparison of Naturally Occurring and Synthetic Substances* (Washington DC: National Academies Press, 1996), http://www.nap.edu/openbook.php?isbn=0309053919.
[14] For more details see Angela Logomasini, "Cancer Risk Factors," Safe Chemical Policy.org, April 13, 2012, http://safechemicalpolicy.org/cancer-risk-factors.
[15] M. Adolfsson-Erici, et al., "Triclosan in Plasma and Milk from Swedish Nursing Mothers and their Exposure via Personal Care Products," *Science of the Total Environment.* Vol. 372 No. 1 (2006): pp. 87-93.
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[21] See the numerous studies posted on this industry website: http://www.fightgermsnow.com/science-antibacterial-hand-soaps-antimicrobial-triclocarban-antibiotic-resistance-hygience-hands-sanitizer.
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