

Debate

Should the FDA Protect Consumers from Potential Harm Associated with Antibacterial Soap?

Issue: Are consumers being harmed by antibacterial soap?

The Food and Drug Administration (FDA) has proposed that antibacterial soap and body wash manufacturers provide additional evidence that their products are more effective than other soap products and are safe for long-term use. Two chemicals commonly found in antibacterial products have raised concerns. It is estimated that liquid antibacterial soaps contain triclosan, while bar antibacterial soaps contain triclocarban. Approximately 75 percent of antibacterial liquid soaps and body washes contain triclosan, making up 45 percent of the total soap market. Studies have revealed the presence of triclosan in urine samples of 75 percent of respondents, suggesting that this chemical is highly present among the general population.

If the proposal of the FDA goes through, it will have significant implications for soap manufacturers. Antibacterial soap is a strong business within the United States. The fifth best-selling liquid hand soap in the United States is the antibacterial soap Dial Complete. If antibacterial soap manufacturers cannot prove their claims of effectiveness, they might have to relabel their products, reformulate them, or even remove them completely if they are deemed unsafe based on evidence. The FDA expects to make a final decision in 2016.

There are three reasons why the FDA and consumer advocates are concerned about the presence of triclosan. First, there is the question of whether triclosan is actually effective in killing more bacteria than other soap products. If it is not more effective, then the benefits of antibacterial soap are not true. Secondly, consumer advocates are concerned that triclosan might interfere with hormones, making long-term use harmful for the body. Finally, there is the possibility that too much use of triclosan could lead to bacteria that are not only resistant to triclosan, but to other antibiotics as well.

Since 2005 some scientists and consumer advocates have been calling for the FDA to get involved. Tests on animals have suggested that prolonged triclosan use could act as endocrine disrupters, negatively impacting a person's hormone system and possibly hindering fetal development. So far these tests have been performed largely on animals—not humans—so there is still the question of how this would affect humans. Some research has suggested that triclosan has been found in breast milk and umbilical cord blood. It is also found to be a contaminant of sewage and wastewater. Canada has requested that companies within the country voluntarily phase out triclosan from products for these reasons.

Another allegation is that triclosan is not any more effective than regular soap and water. Critics claim that the more common germs, such as staph and E. coli, are not impacted by use of antibacterial soap. Finally, there is a major concern that heavy use of triclosan can create resistant bacteria that could also be resistant to other antibiotics. Due to these potential costs, the FDA has been convinced to intervene.

However, antibacterial soaps have many supporters as well. The American Cleaning Institute claims that triclosan has helped fight against bacteria for decades. More than 600 firms support this claim, citing studies that have revealed there are fewer microbes on the hands of those who use antibacterial soap than on those who do not.

This material was Jennifer Sawayda under the direction of O.C. Ferrell and Linda Ferrell. It is intended for classroom discussion rather than to illustrate effective or ineffective handling of administrative, ethical, or legal decisions by management. Users of this material are prohibited from claiming this material as their own, emailing it to others, or placing it on the Internet. (2014)

There is not much evidence suggesting that triclosan-resistant bacteria exist outside of labs. Many studies have found that relationships between antibiotic-resistant bacteria and triclosan are not statistically significant. This has prompted one supporter to wonder why—if triclosan causes antibiotic-resistant bacteria—hasn't more antibiotic-resistant bacteria shown up in hospitals since the use of triclosan is so common? Even the FDA admits there is no evidence suggesting that triclosan is at all harmful to humans.

The soap industry is enormous, amounting to about \$5 billion in sales of soaps, shower products, and body washes. Forcing the industry to reformulate or relabel their products would be highly costly. Additionally, it would not be limited to the soap industry. Many other industries, including cosmetics, often use triclosan in products as well. Increased concern is causing some firms to begin to voluntarily remove triclosan. Johnson and Johnson and Reckitt Benckiser have begun phasing out triclosan from many of their products. If companies are listening to consumer concerns and are phasing out triclosan from products, is it really necessary for the government to get involved if there is little evidence to suggest the chemical negatively impacts humans?

There are two sides to every issue:

1. There is enough evidence to support the FDA's concerns about the negative impact of antibacterial soap.
 2. There is not enough evidence to support the FDA's concerns about the effects of antibacterial soap.
-

Sources:

Thomas M. Burton and Serena Ng, "FDA Seeks Stricter Rules on Antibacterial Soaps," *The Wall Street Journal*, December 16, 2013, <http://www.nytimes.com/2011/08/20/business/triclosan-an-antibacterial-chemical-in-consumer-products-raises-safety-issues.html?pagewanted=all&r=0> (accessed December 18, 2013).

Brian Clark Howard, "Avoid Antibacterial Soaps, Say Consumer Advocates," *National Geographic*, http://news.nationalgeographic.com/news/2013/12/131217-antibacterial-soaps-triclosan-fda-hygiene-safety-health/?rptregcta=reg_free_np&rptregcampaign=20131016_rw_membership_r1p_us_se_w# (accessed December 18, 2013).

Allison E. Aiello, Bonnie Marshall, Stuart B. Levy, Phyllis Della-Latta, and Elaine Larson, "Relationship between Triclosan and Susceptibilities of Bacteria Isolated from Hands in Community," *Antimicrob Agents Chemother* 48(8), American Society for Microbiology, 2004, pp. 2973-2979.

Elizabeth Weise, "FDA: Antibacterial soaps could pose health risks," *USA Today*, December 16, 2013, <http://www.usatoday.com/story/news/nation/2013/12/16/fda-antibacterial-soap/4038907/> (accessed December 18, 2013).

Andrew Martin, "Antibacterial Chemical Raises Safety Issues," *The New York Times*, August 19, 2011, <http://www.nytimes.com/2011/08/20/business/triclosan-an-antibacterial-chemical-in-consumer-products-raises-safety-issues.html?pagewanted=all&r=0> (accessed December 18, 2013).