

## **APUA and Triclosan**

On February 17<sup>th</sup>, APUA attended a congressional briefing in Washington D.C. on triclosan, the antimicrobial biocide used since 1972 in a wide range of products from hand soap to cutting boards. The briefing, entitled “Triclosan: Our Health, Our Environment” was co-sponsored by Food and Water Watch and Beyond Pesticides, two consumer groups who coordinated a petition submitted in January calling on the Environmental Protection Agency to ban triclosan from consumer products. Presenters included Rolf U. Halden, PhD, PE from the Center for Environmental Biotechnology at Arizona State University, Allison Aiello, PhD, MS from the University of Michigan School of Public Health, and Peter Vikesland, PhD, from the Department of Civil and Environmental Engineering at Virginia Tech. These presentations addressed the human health impacts of triclosan and its efficacy versus regular soap, as well as the presence of triclosan in the environment and the subsequent environmental health hazards.

To inform the policy debate, APUA has reviewed the state of scientific knowledge regarding triclosan as of January 2011, and produced a white paper that considers the following aspects: (i) the mode of action of triclosan; (ii) current usage of triclosan; (iii) the potential impact of triclosan on human and animal health; (iv) the possible association between triclosan usage and antibiotic resistance; (v) the potential impact of triclosan on the environment; (vi) current regulatory scrutiny of triclosan; and (vii) potential alternatives and next steps.

APUA has been concerned about potentials risks of triclosan in soap and other consumer products for over a year. On January 5, 2010 APUA sent a letter to Representative Edward Markey commending him on his letters to the FDA and EPA regarding regulation of triclosan in antibacterial soap.

Over 1000 household products contain triclosan. While good hygiene is an important foundation for infection control, triclosan cleaning agents may be paradoxically implicated in promoting new super germs that are resistant to antibiotics, linger on surfaces, and can be transferred to humans. To avoid possible public health problems associated with the increasing use of triclosan containing products, the government needs closer scrutiny and independent research regarding the chemical’s potential risks including:

- Disruption of normal bacterial flora which allows proliferation of less desirable species
- Link to emergence of MRSA in the community
- Negative effects on thyroid function
- Skin irritation
- Immune system disruption.

While the use of triclosan and other strong biocides may be appropriate under special regulated circumstances they are not for routine use in the healthy household. Children in day care centers and the elderly in nursing homes are particularly vulnerable to resistance. Washing with plain soap and water produces 99 percent of the hygiene control a normal household requires. Bleach and pinesol agents are more appropriate as they do not leave behind the resistance-promoting residue which triclosan has exhibited in the laboratory.

There are growing concerns about the emergence and spread of triclosan residues in the environment, and its potential negative impact on human and animal health. However, the scientific debate continues regarding the safety and efficacy of its application in personal care and household products. Triclosan has several important medical uses, and the future aim must be to retain these applications while eliminating the more frivolous and unnecessary ones. It would be wise to restrict the use of triclosan to areas where it has been shown to be effective and most needed.

Below are what APUA suggests as next steps:

---

1. Follow the upcoming decisions by the FDA and the EPA in 2011, after their review of safety and efficacy data is concluded.
2. Support scientific and public health research on the cumulative effects and chronic use of triclosan.
3. Continue to follow scientific literature for additional information regarding health impacts and environmental fate of triclosan and its by-products.
4. Adopt a precautionary principle attitude towards the use of triclosan. Coordinate with appropriate agencies and groups to develop a public factsheet as well as concise messages that resonate with the public and specific audiences. Possible messages include:
  - Antibacterial product residues are found in the environment
  - The use of antibacterial products may provide a false sense of security and lead to inadequate hand-washing practices
  - Effective alternatives include washing hands with soap and water and using alcohol or peroxide based hand gel sanitizing agents for extra assurance
  - Minimize use of antibacterial-containing cleaning products and personal care products; for surfaces, bleach-containing products are an alternative
  - Avoid antibacterial cutting boards
5. Review opportunities to include messages from water quality outreach efforts to specific audiences. Such audiences might include:
  - Primary purchasing agents in households and commercial institutions
  - Purchasing departments of public institutions
  - Health care and veterinary professionals
  - Parents and teachers
  - Manufacturers and distributors
6. Consider developing State and Federal legislation to limit the use of triclosan in consumer products.
7. Support advocacy initiatives that through the gathering of new knowledge and offering of solutions promote the prudent use of triclosan.
8. Support initiatives to gather relevant agencies and public health stake holders to engage in face-to-face conversations on the implementation of appropriate use of triclosan.

