

November 24, 2017

Standing Committee on Health
Sixth Floor, 131 Queen Street
House of Commons
Ottawa ON K1A 0A6
Canada
By e-mail: HESA@parl.gc.ca

Honourable Ginette Petitpas Taylor
Minister of Health
By e-mail: hcmminister.ministresc@canada.ca

***Re: Antimicrobial Resistance Prevention
with removal of antimicrobial chemicals from consumer goods***

We, the undersigned nongovernmental organizations, became aware this week of the HESA study of the important matter of Antimicrobial Resistance. As the Committee wraps up its considerations, we are writing to add one important topic and recommendation to this study.

We propose that the Committee recommend a comprehensive ban of chlorinated antimicrobial chemicals such as triclosan [phenol, 5-chloro-2-(2,4-dichlorophenoxy)] (CAS RN 3380-34-5) from consumer goods. Any exception to this ban should be considered only where there is strong, independent scientific evidence that the chemical:

- 1. does not confer antimicrobial resistance;*
- 2. does provide benefit, in reduction of serious disease; and*
- 3. does not exhibit effects in a broad range of tests of endocrine-related effects or cellular signalling, including at environmentally relevant concentrations and personal doses, as well as at higher levels.*

We further recommend that the Committee instruct Health Canada and Environment and Climate Change Canada to ensure that as chemicals are assessed such that the need and benefit to Canadians is fully demonstrated and supported by accurate scientific evidence, along with fulsome assessment of the potential for adverse impacts on health, as that cannot be overstated.

We bring your attention to a submission signed in January 2017 by six Canadian groups, including the undersigned, in response to the consultation regarding triclosan under the Chemicals Management Plan.¹

The most commonly used antimicrobial chemical in personal care and cleaning products is triclosan, although a similar chemical, triclocarban, is also used. We expect that management

1. Submission in Response to Canada Gazette publications on the final decision for phenol, 5-chloro-2-(2,4-

strategies focused on restricting the use of one chemical may spur increased use of others with similar chemical structures and health hazards (e.g., the use of bisphenol S to replace bisphenol A).

It is also concerning that companies market an ill-advised “need” to sanitize ourselves, our households and the built environment. Imagine, when a chemical kills 99% of the “germs,” the 1% that is left are the strongest. In this way, microbes can rapidly evolve resistance to multiple antimicrobials. Recent research indicates that resistance to triclosan confers resistance to important therapeutic antibiotics.

Not only do chlorinated antimicrobials in consumer goods exert selective pressure for resistance, they do not confer any societal or health benefit. As described in the aforementioned submission,¹ when the US Food and Drug Administration sought evidence from industry that antimicrobials in consumer products provided benefits such as preventing disease, no evidence was provided that the chemicals actually prevent infections in the community. Consequently, in September 2016 the US Food and Drug Administration took steps to ban these chemicals from certain goods.²

Health Canada and Environment and Climate Change Canada are developing management strategies for triclosan. The proposed tool for triclosan under consideration relies on a non-regulatory approach that does not require restriction or a ban of triclosan, but rather, the control of its releases to the aquatic environment.³ Your consideration to this matter is particularly timely.

For your further consideration, we also bring your attention to previous work by our organizations highlighting our concerns with triclosan and triclocarban and responding to assessments on triclosan conducted by Environment and Climate Change Canada and Health Canada under the *Canadian Environmental Protection Act, 1999*,^{4,5} as well as the Florence Statement on Triclosan, signed by over 200 scientists and health experts.⁶

2. Federal Register. Safety and Effectiveness of Consumer Antiseptics; Topical Antimicrobial Drug Products for Over-the-Counter Human Use. September 2016. <https://www.federalregister.gov/documents/2016/09/06/2016-21337/safety-and-effectiveness-of-consumer-antiseptics-topical-antimicrobial-drug-products-for>

3. Environment and Climate Change Canada, and Health Canada. Risk Management Approach for Phenol, 5-chloro-2-(2,4-dichlorophenoxy) – Triclosan. November 2016. <http://www.ec.gc.ca/ese-ees/default.asp?lang=En&n=371A2F3C-1>

4. Environment and Health Groups’ Statement on Triclosan: Call for Canadian Government to Prohibit Triclosan in all Consumer Products to Protect the Environment and Human Health. 2/ 21/2017. <http://www.cela.ca/sites/cela.ca/files/1107-Updated%20statement%20on%20Triclosan.pdf>

5. Canadian Environmental Law Association, and Clean Production Action. Chemicals in Consumer Products are Draining Trouble into the Great Lakes Ecosystem. GreenScreen® Assessment Shows Triclosan and Triclocarban Should Be Avoided. July 2014. http://www.cela.ca/sites/cela.ca/files/TC-TCC-CELA-997_0.pdf

6. Halden, Rolf U., Avery E. Lindeman, Allison E. Aiello, David Andrews, William A. Arnold, Patricia Fair, Rebecca E. Fuoco, et al. “The Florence Statement on Triclosan and Triclocarban.” *Environmental Health Perspectives* 125, no. 6 (June 20, 2017). <https://doi.org/10.1289/EHP1788>

By way of further background, this is an important issue for Canadians, because:

1. chlorinated antimicrobials from consumer goods are persistent and prevalent in the environment and are evident from biomonitoring data (e.g. Canadian Health Measures Survey);
2. triclosan has numerous adverse impacts on the developing foetus and child, including affecting metabolism (e.g. obesity or diabetes), neurodevelopment and the immune system (which is of particular relevance in the context of pathogens);
3. triclosan is not all removed in sewage treatment, so is released from sewage treatment plants, enters waterways and is applied to farmland in sewage sludge.
4. in surface waters, two triclosan molecules react with one another to form highly toxic dioxin – another chemical that is persistent and enters the food chain in environments impacted by this unnecessary, non-beneficial antimicrobial chemical.

There is extensive research illuminating numerous adverse effects of chlorinated antimicrobials in common products, while *there is no evidence of potential countervailing benefits*. This is reviewed in the **Florence Statement**,⁶ that was recently published in the authoritative journal *Environmental Health Perspectives*, and summarized as follows:

The Florence Statement on Triclosan and Triclocarban documents a consensus of more than 200 scientists and medical professionals on the hazards of and lack of demonstrated benefit from common uses of triclosan and triclocarban. These chemicals may be used in thousands of personal care and consumer products as well as in building materials. Based on extensive peer-reviewed research, this statement concludes that triclosan and triclocarban are environmentally persistent endocrine disruptors that bioaccumulate in and are toxic to aquatic and other organisms. Evidence of other hazards to humans and ecosystems from triclosan and triclocarban is presented along with recommendations intended to prevent future harm from triclosan, triclocarban, and antimicrobial substances with similar properties and effects. Because antimicrobials can have unintended adverse health and environmental impacts, they should only be used when they provide an evidence-based health benefit. Greater transparency is needed in product formulations, and before an antimicrobial is incorporated into a product, the long-term health and ecological impacts should be evaluated.

<https://doi.org/10.1289/EHP1788>

We thank you for your consideration of these matters in your current study of Antimicrobial Resistance, and urge action that protects human health and the environment. Please do not hesitate to contact us if any assistance is required in this important work.

Sincerely,

Meg Sears
Chair
Prevent Cancer Now
meg@preventcancer.ca
613-297-6042

Fe de Leon
Researcher and Paralegal
**Canadian Environmental
Law Association**
deleonf@cela.ca
416-960-2284 ext 7223

Sandra Madray
**Chemical Sensitivities
Manitoba**
madray@mts.net
204-256-9390