ONTARIO PROVINCIAL COUNCIL
of
The Catholic Women's League of Canada

ON.18.01

Develop National Standards for Levels of Pharmaceuticals in Canada's Drinking Water

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Whereas, in Canada there are no national standards or laws for pharmaceuticals in drinking water; and

Whereas, traces of pharmaceuticals have been reported in the water cycle, including surface waters, wastewater, groundwater and drinking water; and

Whereas, the risks to human health and aquatic ecosystems from exposure to chronic, low concentrations of pharmaceuticals are unclear; therefore, be it

Resolved, that the Ontario provincial council of The Catholic Women's League of Canada in 71st annual convention assembled, request national council to urge the federal government to:

- Fund research into pharmaceuticals in drinking water
- Set rigorous quality standards for the presence of pharmaceuticals in ground and surface drinking water comparable to the World Health Organization (WHO) standards; and be it further

Resolved, that this resolution be forwarded to national council of The Catholic Women's League of Canada for consideration at 98th Annual Convention August 2018.

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Brief

There are few comprehensive studies on pharmaceuticals in drinking water and limited data. As a result, assessing the potential health risks from exposure to pharmaceuticals in drinking water is challenging. "The maximum allowable concentrations for chemical and radiological contaminants included in the Canadian Guidelines are 'substantially weaker' than comparable standards or guidelines … by the World Health Organization (WHO)" (House of Commons, 2017). WHO admits there is a "knowledge gap" when it comes to "assessing the risks associated with long-term exposure to low concentrations" of drugs and "the combined effects of mixtures of pharmaceuticals" (WHO, 2012).

Pharmaceuticals are synthetic or natural chemicals that are designed to cure and prevent the spread of disease in humans or animals. The widespread use of pharmaceuticals from agricultural practice, veterinary practice and human consumption has led to the release of pharmaceuticals in the environment (Berryman et al. 2014). To date, many pharmaceuticals have been detected in finished drinking water worldwide (Collier, 2012). The detection of these compounds in drinking water is largely due to their presence in source water and the inability of treatment processes to reduce pharmaceuticals below detection limits.

The presence of pharmaceuticals in drinking water may be a concern (Trimble, 2011). Pharmaceuticals are intended to deliver a response in specific populations. The effects of routine, unintended exposure of the general population to pharmaceuticals is not known and data is needed (Collier, 2012).

"The number of prescriptions dispensed are increasing at almost five times the rate of population growth" (Neighbourhood Pharmacy Association of Canada, 2016). This is a developing problem that will probably get worse, in terms of the amount of pharmaceuticals we can expect being discharged into the environment. "None of the wide range of drinking-water treatment processes available have been designed specifically to remove pharmaceuticals that may be present in source waters" (WHO, 2012).

Works Cited

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2. Collier, Roger "Swallowing the pharmaceutical waters", Canadian Medical Association Journal, 2012 http://www.cmaj.ca/content/184/2/163

3. House of Commons, Report of the Standing Committee on Environment and Sustainable Development, June 2017 http://publications.gc.ca/collections/collection_2017/parl/xc50-1/XC50-1-1-421-8-eng.pdf

4. Neighbourhood Pharmacy Association of Canada, "Pharmacy 360+", 2016 http://www.myneighbourhoodpharmacy.ca/?articleattachment=509

5. Trimble, David, US Government Accountability Office, August 2011 https://www.gao.gov/new.items/d11346.pdf

6. World Health Organization, "Pharmaceuticals in Drinking Water", 2012 http://www.who.int/water_sanitation_health/publications/2012/pharmaceuticals/en/

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Action Plan:

1. Write letters to the federal government requesting greater implementation of the awareness campaign on the proper disposal of pharmaceuticals.

2. Invite a guest speaker from Public Health to educate members on potential health risks from exposure to pharmaceuticals in drinking water.

3. Research the measures that are taken in your community for water treatment.

4. Continue to monitor this issue