

1 **TDC2018.01 Develop National Standards for Levels of Pharmaceuticals in Canada’s Water**
2 **Supply**

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

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6 **Whereas,** the risks to human health and aquatic ecosystems from exposure to chronic, low
7 concentrations of pharmaceuticals are unclear; and

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9 **Whereas,** in Canada there are no national standards or laws for pharmaceuticals in drinking
10 water; therefore, be it

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12 **Resolved,** that the Toronto Diocesan Council of the Catholic Women’s League of Canada urge
13 The federal government to set rigorous quality standards for the presence of
14 Pharmaceuticals in ground and surface drinking water; and be it further

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16 **Resolved,** that the federal government fund research into the identification and removal of these
17 substances in the drinking water which may be harmful to human health and distribute
18 the results of such research to the provincial, territorial and municipal authorities
19 responsible for administering water quality legislation; and be it further

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21 **Resolved,** that the Federal-Provincial-Territorial Committee on Drinking Water strongly
22 consider including researched pharmaceutical contaminants in “The Guidelines for
23 Canadian Drinking Water Quality”; and be it further

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25 **Resolved,** that this resolution be forwarded to the Ontario Provincial Council of The Catholic
26 Women’s League of Canada for consideration at its 71st Annual Convention in July
27 2018.

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35 Submitted by St. John Chrysostom Council, Newmarket, North York Region.
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2 **Drinking Water**

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4 **Brief**

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

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15 Their presence in drinking water may be a concern for sensitive populations, including pregnant
16 women and children. Pharmaceuticals are intended to deliver a response in specific populations.
17 The effects of routine, unintended exposure to pharmaceuticals to the general population are not
18 known. (Collier, Roger 2012)

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20 There are few comprehensive studies on pharmaceuticals in drinking water and limited data. As a
21 result, assessing the potential health risks from exposure to pharmaceuticals in drinking water is
22 challenging. Presently, in Canada, the maximum allowable concentration for chemical and
23 radiological contaminants are “substantially weaker” than comparable standards by the World
24 Health Organization. (House of Commons, 2017) The World Health Organization admits there is
25 a “knowledge gap” when it comes to “assessing the risks associated with long term exposure to
26 low concentrations” of drugs and “the combined effects of mixtures of pharmaceuticals.” (WHO,
27 2012)

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29 As our population ages, the amounts of pharmaceuticals which are being dispensed are increasing
30 at almost five times the rate of population growth. (Neighbourhood Pharmacy Association of
31 Canada, 2016) This is a developing problem that will probably get worse, in terms of the amount
32 of pharmaceuticals we can expect being discharged into the environment. The time for action is
33 now.

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4 **Works Cited**

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6 1. Berryman, David et al, "Water Quality Improvement", Ministry of the Environment, 2014
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8 2. Collier, Roger "Swallowing the pharmaceutical waters", Canadian Medical Association
9 Journal, 2012
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11 3. House of Commons, Report of the Standing Committee on Environment and Sustainable
12 Development, June 2017
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14 4. Neighbourhood Pharmacy Association of Canada, "Pharmacy 360+", 2016
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16 5. World Health Organization, "Pharmaceuticals in Drinking Water", 2012
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4 **Action Plan:**

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6 1. Write letters to the federal government requesting greater implementation of the
7 awareness campaign on the proper disposal of pharmaceuticals.
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9 2. Invite a guest speaker from Public Health to educate members on potential health risks
10 from exposure to pharmaceuticals in drinking water.
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12 3. Research the measures that are taken in your community for water treatment.
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14 4. Study the environmental impact of bottled water.
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16 5. Continue to monitor this issue.
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