

January 3 2011

Dear Mayors and Councillors:

Thank you for your support to remove fluoride from the Region's drinking water.

The undersigned groups, representing the largest Environmental groups in Halton, want to make our position very clear. We are not "anti-Fluoride". We agree with the science that shows fluoride can be effective in preventing caries when applied topically as toothpaste or through topical application in a dentist's office.

However, we also agree with the science that ingesting it is not effective in preventing tooth decay and is harmful to human health and the environment.

According to Health Canada, fluoride is not a nutrient. It is being added to our municipal water supplies as a medication – giving more authority to municipal authorities than we give to doctors, as they are not allowed to medicate patients without their consent.

The ingestion of fluoride in municipal water has been linked to lower IQs and dental fluorosis in children; increase in hypothyroid disease, especially in women; and an increase in hip fractures in the elderly. Some studies have also linked it to skeletal fluorosis and osteosarcoma or bone cancer.

We understand that there are differing opinions about the effect of ingesting fluoride on human health, however, we believe when scientific opinions vary, it is best to err on the side of caution. Evoking the precautionary principle in the case of fluoridating municipal water carries no risk as the widespread use of fluoridated toothpastes and the availability of dental care to our population will serve as effective preventatives to tooth decay.

More than 3,200 doctors, dentists, scientists and environmentalists have recently signed a declaration calling for the end to fluoridating municipal water. If you have not had the opportunity already, please have a look at the video at <http://www.waterloowatch.com/fan%20video.html> where some of these scientists, including a Nobel Laureate in Medicine, provide leading arguments against the fluoridation of municipal water.

Recently, The Canadian Association of Physicians for the Environment has called for an end to municipal water fluoridation as has the respected coalition Great Lakes United.

Health Canada's website clearly states "The fluoridation of drinking water supplies is a decision that is made by each municipality . . . This decision may also be taken in consultation with residents." Health Canada also gives clear guidelines about not using fluoridated toothpaste on children under three years old and advise on using fluoride carefully at all ages to "minimize risk". (Ref. <http://www.hc-sc.gc.ca/hl-vs/iyh-vsv/environ/fluor-eng.php>)

We are not comforted by the fact the Health Canada currently "has established the guideline for fluoride in drinking water as a maximum acceptable concentration of 1.5 milligrams per litre. Water containing fluoride at, or below, this maximum acceptable concentration does not pose a risk to human health," because Health Canada has previously regarded many chemicals, in many uses as safe before

eventually finding they weren't, including pesticides, flame retardants, bisphenol A and many others too numerous to mention.

Below we have included some quick facts for you to consider. If you would like more information, we would be happy to provide it. Please feel free to contact us at any time.

We look forward to working with you over this term of Council to eliminate fluoride from Halton's drinking water and we thank you for your thoughtful consideration of this issue.

Ken Woodruff, president, BurlingtonGreen Environmental Association

Liz Benneian, president, Oakvillegreen Conservation Association

Jim Steeves, chair, Milongreen

Brendan Smith, president, Protect Our Water and Environmental Resources

Key points to consider:

Limited Use

- Most countries in the world, including most European countries do not add fluoride to their municipal water.
- Countries like Germany and Finland that ended fluoridation have found no subsequent increase in cavities.
- Studies have shown that overall reduction in cavities is directly linked to fluoride toothpastes, good dental care, a nutritious diet, and in countries where dental care is not provided as a government service, by higher income level. It is not related to whether the water is fluoridated.
- According to Health Canada, only 43% of Canadians have water that is fluoridated by their municipality. (Ref. http://www.hc-sc.gc.ca/ewh-semt/consult/_2009/fluoride-fluorure/draft-ebauche-eng.php#t5) The rate of dental caries is not statistically different between Canadians in comparable fluoridated and non-fluoridated areas, for instance, between cities in the Niagara Region that don't fluoridate and cities in Halton Region that do.

Danger To Infants

- According to Health Canada, fluoride is readily transferred from mother to fetus across the placenta (IPCS, 2002). (Ref. http://www.hc-sc.gc.ca/ewh-semt/consult/_2009/fluoride-fluorure/draft-ebauche-eng.php#t5)
- In November 2006, the US Public Health Service's Centers for Disease Control and Prevention, and the American Dental Association (ADA), released a recommendation that infant formula NOT be made with fluoridated water. The ADA states: "If liquid or powdered concentrate infant formula is the primary source of nutrition, mix with water that is fluoride free, including water that is labeled purified, demineralized, deionized, distilled or reverse osmosis filtered water." This was because of concerns over the effects of fluoride on developing infants, especially in terms of developing dental fluorosis, a condition that disfigures and weakens teeth that is caused by the ingestion of fluoride.

Danger To Children

- Dental fluorosis is prevalent in our community, as it is in many parts of North America, and is caused by the ingestion of too much fluoride by babies and young children when the enamel of the tooth is forming. In the Halton Oral Report MO-19-10 the percentage of in Halton's children between 9 and 13 years old suffering from fluorosis was 21.6 in the 2007 to 2009 period. But rates vary considerably by municipality. For instance, Oakville's fluorosis rate for that age group in the 2005-2007 period was 48.4% (no breakdown by municipality was provided for 2007 – 2009). It is significant that 1 in 5 Halton children and about half of Oakville's children have been affected by fluorosis.
- One cannot assume that a medication that causes this visible damage to the tooth is not causing other unseen damage to related material (bone) in the body.

Medicating Without Consent

- A medication should never be administered without individual consent, to a broad population whose medical history is unknown or at a dose that cannot be controlled. Halton Region currently has no idea how much water any one individual drinks and how it may interact with other medications or health factors. Please note that our most vulnerable citizens – our infants – are often being fed formula made exclusively with our fluoridated tap water. What dose are they getting?
- One cannot assume that a medication that causes this visible damage to the tooth is not causing other unseen damage to related material (bone) in the body.

Toxic By-Product

- Unlike the fluoride added to toothpaste, the fluoride added to our drinking water is not medical grade. In fact, it is a toxic byproduct of the phosphate fertilizer industry and contains impurities including arsenic and lead.

Negative Health Impacts

- Studies have linked fluoride to various diseases in humans including hypothyroidism and cancer (osteosarcoma). Health Canada notes, "In view of the small difference between the estimated daily intake of inorganic fluorides and the level at which adverse effects on the skeleton are anticipated, it is recommended that exposure of the population of Canada to inorganic fluorides continue to be closely monitored." (Ref. Population Exposure, http://www.hc-sc.gc.ca/ewh-semt/pubs/contaminants/psl1-lsp1/fluorides_inorg_fluorures/fluorides_inorg_fluorures_4-eng.php 4.0 Recommendations)
- The fluoride we are exposed to in our municipal water is only one source for fluoride. We ingest additional fluoride from pesticides, dental products, some drugs and some foods.

Danger To Environment

- Less than 1% of fluoridated municipal water is actually ingested. The rest is dispersed to our environment.
- Health Canada also says: “On the basis of available information, inorganic fluorides are entering the Canadian environment from anthropogenic (human) sources in quantities resulting in concentrations in some Canadian waters, plants, and air, that may cause long-term harmful effects to biota in aquatic and terrestrial ecosystems. It has been concluded that inorganic fluorides have the potential to cause harm to the environment. (Ref. Health Canada Website http://www.hc-sc.gc.ca/ewh-semt/pubs/contaminants/psl1-lsp1/fluorides_inorg_fluorures/fluorides_inorg_fluorures_3-eng.php Under 3.0 Assessment of "Toxic" under CEPA 3.1 CEPA 11(a) Environment)
- The impacts of Fluoride on our environment and species, our Biodiversity, is a cause for concern. Fluoride bio-accumulates in the environment having the most severe consequences on the species at the top of the food chain. For instance, in the aquatic environment, effects in salmon range from delayed egg hatching to death. Studies have shown that levels of fluoride above .05 milligrams per litre (mg/l) are dangerous to these species. (Ref. <http://www.scribd.com/doc/29386809/Camargo-JA-2003-Fluoride-toxicity-to-aquatic-orgaisms-a-review-Chemosphere-50-3-251-64-PMID-12656244>)
- Current Canadian Water Quality Guidelines for fluoride in water to protect human health is 1.5 mg/l. The CWQG guideline to protect aquatic species is 0.12 mg/l. In comparing the guideline for human health to health for aquatic species is clearly out of line if we are to protect biodiversity. If you look at the research for certain aquatic species, as noted above, the CWQG for aquatic species is not protecting aquatic life. Even at CWQG for human health, a question that needs to be asked is given the bioaccumulation of fluoride is there really a safe level? Furthermore, if we use the CWQG for human health, the regard for other species and our environment is disregarded. Any reductions to man related increases in fluoride in our environment should be a priority to enable a more sustainable future for all.

Canadian Association of Physicians for the Environment Statement Against Fluoridation

- The Canadian Association of Physicians for the Environment (CAPE) statement reads in part: “The Canadian Association of Physicians for the Environment does not support fluoridation of drinking water . . . on the basis of the “weight of evidence” we believe that fluoridation of drinking water is scientifically untenable, and should not be part of a public health initiative or program.” For the complete statement go to: [http://www.cape.ca/res_cardfile.shtml?cmd\[227\]=i-227-e29cb89dc0610f57e31e5f550b936ed4&cmd\[252\]=i-252-e29cb89dc0610f57e31e5f550b936ed4](http://www.cape.ca/res_cardfile.shtml?cmd[227]=i-227-e29cb89dc0610f57e31e5f550b936ed4&cmd[252]=i-252-e29cb89dc0610f57e31e5f550b936ed4)

Great Lakes United Statement Against Fluoridation

- Great Lakes United’s Statement says in part: “Whereas the Basel Convention,

Environment Canada and the United States Environmental Protection Agency (US EPA) all state that the chemicals used in artificial water fluoridation are hazardous waste which may not be put directly into lakes, river and oceans; whereas artificial fluoridation chemicals contain between 20 to 30% hydrofluorosilicic acid (inorganic fluoride), trace amounts of arsenic, lead, mercury, radionuclides and other heavy metals, all considered to be toxic substances under the comprehensive Environmental Response, Compensation and Liability Act Priority List of Hazardous Substances in the USA, 1989 First Priority Substances List in Canada and proposed for “virtual elimination” under the Canadian Environmental Protection Act, the 1997 Binational Toxic Strategy and the 1978 Great Lakes water Quality Agreement . . . Therefore be it resolved that Great Lakes United works to reverse existing government policies supporting artificial drinking water fluoridation . . .” For the full statement go to: <http://www.glu.org/en/node/337>

For all of these reasons, the undersigned groups from all areas of Halton Region look forward to working with you to end the fluoridation of Halton’s water.

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