November 27, 2012

Jack Heath
Deputy Mayor
City of Markham
101 Town Centre Blvd
L3R 9W3

Dear Deputy Mayor Heath:

Re: Toxic Fluoride in Water Supply

In response to the concerns expressed by Mr. Santianni, we offer the following current, local and Canadian information directly relating to drinking water fluoridation.

Fluoride is a naturally occurring substance, present in very small quantities in ground water. Fluoridation of drinking water in Ontario originated in Brantford in 1945, and today approximately 70% of Ontarians receive fluoridated drinking water. The benefits of adding fluoride are well known: decreased caries (tooth decay) severity and prevalence. Oral health is an important factor in overall health for all ages.

York Region Public Health supports the position of the Chief Medical Officer of Health for Ontario, that community water fluoridation is an effective method of reaching whole communities, regardless of residents’ social or economic status. The levels of fluoride are monitored closely to ensure optimum levels. In York Region, municipal water source reports show that all sources are consistently well below the maximum recommended levels. There are a number of sources of fluoridated water throughout the Region:

- In York Region, only the communities of Keswick and Sutton currently add fluoride to optimally fluoridate their drinking water.
- The municipalities of Markham, Richmond Hill and Vaughan are supplied with optimally fluoridated water through connection to the City of Toronto Water System, which has been fluoridated since 1963. These communities also receive water from the Region of Peel, which provides fluoridation as well.
- Aurora, Newmarket and parts of East Gwillimbury receive optimally fluoridated drinking water from both Toronto and Peel. However, the water is blended with groundwater from 15 wells, resulting in drinking water that is slightly below optimal fluoride levels.
- All other communities in the Region obtain their drinking water from groundwater or surface water or a blend of the two, which are well below the recommended optimal levels of 0.5 to 0.8 ppm.

The Regional Municipality of York, 17250 Yonge Street, Newmarket, Ontario L3Y 6Z1
Tel: 905-830-4444, 1-877-464-9675
Internet: www.york.ca
At all York Region, Toronto and Peel water treatment plants where fluoride is added to the drinking water, fluoride levels are continuously monitored and are subject to reporting requirements of Ontario Regulation 170/03.

Water fluoridation is one of the most thoroughly researched public health measures. Through the 65 years that fluoridation has been practiced, major scientific reviews of community water fluoridation have been performed by national, state or provincial and local governments. Since 1997, there have been reviews in Canada (4), the European Union (2), the United Kingdom (2), Ireland (1), Australia (3), the United States (6) and the World Health Organization (1). These reviews conclude that optimally fluoridated drinking water is safe and effective even with the presence of other fluoride sources such as toothpastes and topical gels.

Highlights of research regarding the safety of water fluoridation include:
- Reviews of water fluoridation indicate the weight of evidence does not support a link between fluoridation and overall cancer incidence, including osteosarcoma and bone/joint cancers, and mortality.
- No associations have been found between fluoride intake and increases in spontaneous abortions, congenital cardiac disease, or late adverse pregnancy outcomes, including congenital anomalies, stillbirths, and deaths.
- Long-term ingestion of drinking water containing fluoride at recommended levels does not have any clinically important physiological, genotoxic, immunotoxic or thyrotoxic effects in healthy adults.
- The weight of evidence does not support a link between fluoride and lower IQ and any adverse health effects.
- There is no strong relationship between fluoride exposure and bone fluoride content, no effects on bone mineralization and no negative effects on bone mechanical properties.

Governmental and professional health organizations that support the fluoridation of water to prevent tooth decay include:
- Health Canada
- The Canadian Public Health Association
- The Canadian Dental Association
- The Canadian Dental Hygienists Association
- The Canadian Medical Association
- U.S. Centers for Disease Control and Prevention
- The World Health Organization

Many countries around the world add fluoride to drinking water, including:
- United States
- Argentina
- Ireland
- Spain
- Australia
- New Zealand
- Hong Kong
- Singapore
Water fluoridation is one of several examples of public health measures where additives are used to achieve health benefits in a population. Governments and health professionals have a responsibility to make decisions and implement public health strategies that balance community health outcomes with individual choices. In countries such as Canada, there is a core set of values which allows for infringement of individual rights in certain instances such as fortification of foods with essential nutrients, routine testing for certain genetic diseases at birth and water fluoridation.

During the last 60 years, the legality of fluoridation has been thoroughly tested in the North American courts. No court has ever rendered fluoridation unlawful. Courts have reasoned that safe public health measures such as chlorination, pasteurization and fluoridation should take precedence over the wishes of the individual in order to benefit the society as a whole.

Further information may be found from the validated research references in the attached list. Please do not hesitate to contact me if you require any further assistance.

Sincerely,

Dr. Karim Kurji, MBBS, MSc, FFPHM, FRCPC
Medical Officer of Health

KK/pf

Attachments (1)

Copy to: Bill Fisch, Regional Chair
Adelina Urbanski, Commissioner of Community and Health Services
Validated Research Reference


Joint Government of Canada Response to Environmental Petition No. 221: Petition to Discontinue Water Fluoridation.
http://www.lpildwg.ca/English/e-fluoridation.html/petition

Ontario Chief Medical Officer of Health Statement on Fluoride.


http://www.cdc.gov/mmwr/preview/mmwrhtml/mm5023a1.htm


Scientific Committee on Health and Environmental Risks. Critical review of any new evidence on the hazard profile, health effects and human exposure to fluoride and the fluoridating agents of drinking water. 18 May 2010.
http://ec.europa.eu/health/scientific_committees/environmental_risks/docs/sebr_o_139.pdf

http://www.who.int/water_sanitation_health/publications/fluoride_drinking_water_full.pdf