

MIDDLESEX-LONDON HEALTH UNIT

REPORT NO. 040-11

TO: Chair and Members of the Board of Health

FROM: Graham L. Pollett, MD, FRCPC

Medical Officer of Health

DATE: 2011 April 14

REVIEW OF THE U.S. NATIONAL RESEARCH COUNCIL'S REPORT ENTITLED FLUORIDE IN DRINKING WATER, A SCIENTIFIC REVIEW OF EPA'S STANDARDS

Recommendation

It is recommended that the attached document entitled Review of the U.S. National Research Council Report Entitled: Fluoride in Drinking Water - A Scientific Review of EPA's Standards be received for information.

Staff members were asked to provide a review of the United States National Research Council's 2006 report entitled *Fluoride in Drinking Water, A Scientific Review of EPA's Standards*. The EPA refers to the Environmental Protection Agency which requested the U.S. National Research Council to conduct a scientific review which is summarized in their report. The Health Unit's review of the National Research Council report is provided in the attached document (Appendix A). The Summary of the National Research Council report can be found in the appendix of the attached document and the full National Research Council report, including references and appendices, can be found at http://books.nap.edu/catalog.php?record_id=11571.

The National Research Council report was intended to assess the acceptable levels for naturally-occurring fluoride in drinking water in the United States. The acceptable levels for naturally-occurring fluoride in drinking water are higher in the U.S. than in Canada (2-4 mg/L in the U.S. compared to 1.5 mg/L in Canada). It should be noted that National Research Council report was not intended to address drinking water where fluoride is added to prevent tooth decay. Fluoride is currently added to a level of 0.7-1.2 mg/L in the U.S. and 0.7 mg/L in Canada. There is a recommendation in the U.S. to lower the level of adjusted fluoride in drinking water to 0.7 mg/L.

The attached document provides background information to assist in understanding the fluoride values, epidemiologic studies and statistics used in the National Research Council report. It then reviews the information provided in the various chapters of the National Research Council report that discuss fluoride and specific body systems. For each chapter, the information in the National Research Council report is briefly reviewed and additional information and context added with regard to the potential implications from adjusted fluoride in London's drinking water supply. A summary of the findings and relevant context information can be found in Table 3 of the attached document.

This report was prepared by Dr. Bryna Warshawsky, Associate Medical Officer of Health and Director, Oral Health, Communicable Disease and Sexual Health Services.

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This report addresses the following requirement(s) of the Ontario Public Health Standards: Child Health