

15 January 2012

To: Civic Works Committee, City of London

Re: Support for Continuing Water Fluoridation for the City of London

Dear Committee Members,

I would like to lend support to those with an interest in continuing water fluoridation for residents of the City of London.

I am full-time faculty in Pediatric Dentistry at the University of British Columbia in Vancouver and a practising pediatric dentist. Prior to this appointment, I lived and practised in London for many years. In both provinces the majority of my practice experience has been limited to treatment of society's most disadvantaged children. In both regions, at-risk children have limited access to fluoride supplements or even daily use of fluoridated toothpaste. In contrast to London, however, Vancouver and the outlying communities of the Lower Mainland have never had water fluoridation. I believe I am in a unique position to comment with observations regarding children's teeth, comparing children with similar background demographics.

The distribution and severity of decay in the primary teeth remains similar between London children and Vancouver/Lower Mainland children. **However, the severity of decay in permanent teeth, especially the first permanent molar** (erupts around age six) of the Vancouver/lower Mainland children is **strikingly worse**, and affects more of the in-between surfaces of the tooth that cannot be easily cleaned and cannot be protected with sealant. I am finding that **we are more often applying much more invasive procedures** (root canals, caps or even extraction) on very young permanent molars here in this community, as compared with London children I have seen. I believe there may be a biological basis for these observations:

1. From lack of exposure to optimal levels of fluoride from birth, the inherent substructure of the developing permanent teeth is possibly weakened;
2. Without continued exposure to optimum levels of fluoridation throughout tooth eruption, the final 'maturation' or surface hardening effect that occurs after the new tooth erupts is compromised.

I hope these observations help to further reinforce arguments of my fellow dental and public health colleagues. I urge you to continue to support water fluoridation in London, especially for the benefit of your most vulnerable residents.

Respectfully,

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