

Via email: cwc@london.ca



January 4, 2019

Civic Works Committee  
City of London  
300 Dufferin Avenue  
PO Box 5035  
London, ON N6A 4L9

Dear Committee:

**Re: Community Water Fluoridation**

On behalf of the Canadian Dental Hygienists Association (CDHA), the collective national voice of more than 29,500 registered dental hygienists working in Canada, including over 200 CDHA members in London and surrounding area, I am writing to express our strong support for City Council to continue to keep its residents healthy by maintaining community water fluoridation in its public water system.

Fluoride is a mineral that exists naturally in virtually all water supplies. Communities, including London, adjust the amount of fluoride in their water source to levels that protect teeth from decay. Canadian communities have been adjusting fluoride levels in their water supplies for nearly 70 years. That experience, along with hundreds of studies and international experiences, validate water fluoridation as the most effective and safe means of achieving community-wide exposure to the cavity prevention effects of fluoride. Leading health authorities, including the [Public Health Agency of Canada](#), [Centers for Disease Control and Prevention](#), and the [Canadian Association of Public Health Dentistry](#), continue to support water fluoridation as a means of preventing tooth decay for all residents regardless of age, socioeconomic status, education, employment or dental insurance status.

Currently, more than 70% of Ontarians have access to this essential public health practice. For every \$1 invested in community water fluoridation, \$38 is avoided for dental treatment costs by reducing the need for fillings and other costly dental procedures; that's a return on investment of 3700%! On the other hand, when water fluoridation is discontinued, research demonstrates that the oral health of the community declines. For example, the City of Calgary discontinued fluoridation in 2011 and the rate of tooth decay increased significantly. Closer to home, the Windsor-Essex County Health Unit committed to looking at [community oral health data](#) over a period of five years following the discontinuance of water fluoridation in 2013. Unsurprisingly, City Council recently voted 8-3 to resume water fluoridation in response to the dramatic declines in the oral health of its residents.

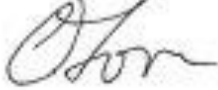
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THE CANADIAN DENTAL HYGIENISTS ASSOCIATION  
L'ASSOCIATION CANADIENNE DES HYGIÉNISTES DENTAIRES

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As you continue to discuss community water fluoridation, I urge you to consider the overwhelming evidence that supports community water fluoridation. CDHA gives the City of London permission to publish this letter of support public and in the council meetings minutes. Please don't hesitate to contact me should you have any questions.

Sincerely,

A handwritten signature in dark ink, appearing to read 'Ondina', with a stylized flourish at the end.

Ondina Love  
Chief Executive Officer

Encl: CDHA Position Statement: Community Water Fluoridation

cc: Christopher Mackie, Medical Officer of Health  
Middlesex-London Health Unit  
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THE CANADIAN DENTAL  
HYGIENISTS ASSOCIATION  
L'ASSOCIATION CANADIENNE  
DES HYGIÉNISTES DENTAIRE

A close-up photograph of a water drop falling from a chrome faucet. The drop is elongated and clear, with a bright reflection on its surface. The background is a soft, out-of-focus light blue.

# CDHA POSITION STATEMENT: COMMUNITY WATER FLUORIDATION

Endorsed by CDHA's Board of Directors, March 2017

A high-speed photograph of a water drop hitting a surface, creating a series of concentric ripples. The drop is captured mid-impact, forming a crown-like shape. The water is a deep blue color, and the background is a light, neutral tone.





# Canadian Dental Hygienists Association Position Statement

The Canadian Dental Hygienists Association (CDHA) supports community water fluoridation (CWF) as an effective and equitable approach to helping prevent dental decay. The evidence clearly demonstrates that CWF protects the oral and overall health of communities. All levels of government must take steps to ensure that all Canadians benefit from CWF. Municipal governments should provide fluoridated water for residents. Provincial/territorial governments should amend pertinent legislation and regulations to require CWF for all municipal drinking water systems when source-water levels are below the optimal concentration range. Finally, the federal government must take a leadership role in developing a national community water fluoridation strategy, including investments in education about the science and evidence to support this vital preventive public health initiative.

## Introduction

Oral health affects overall health, self-confidence, and quality of life. While many of us enjoy the benefits of good oral health, dental decay (cavities) is still a significant problem for Canadians.<sup>1</sup> For example, it is the leading cause of day surgery among children under the age of six, and children from disadvantaged communities have day surgery rates much higher than other Canadian children.<sup>2</sup> Dental decay can lead to pain and difficulty eating, and can put one at a significant educational and professional disadvantage because of lost school and work days due to illness. Community water fluoridation (CWF) has been used around the world as an equitable and cost-effective means of reducing cavities in all population groups.



## The Importance of Fluoride for Oral Health

Fluoride is a mineral that exists naturally in the environment and in virtually all water supplies. Many communities adjust the level of naturally occurring fluoride in drinking water to protect against dental decay. This process is commonly known as CWF. The fluoride in drinking water helps to protect teeth in two ways. First, for Canadians of all ages, the fluoride mixes with saliva to help counteract acids in the mouth created by bacteria and sugar. These acids are responsible for dental decay. CWF provides teeth with consistent, low-level exposure to fluoride throughout the day and across a lifetime. Second, during children's tooth-forming years, the fluoride helps to strengthen the enamel of developing teeth, making them more resistant to decay and setting the foundation for good oral health. In 2013, CWF was identified as one of the US Centers for Disease Control and Prevention's ten greatest public health achievements of the 20th century.<sup>3</sup>

## Safety, Effectiveness, and Equity

The safety and effectiveness of water fluoridation have been frequently studied and continue to be supported by scientific evidence. The ability of fluoridated water to prevent dental cavities in people of all ages has been well documented in the literature.<sup>2-7</sup> Canadians have benefitted from CWF for over 70 years, which means that we have more than seven decades of evidence to show that this practice is an important, safe, and effective way to reduce dental decay across populations. Leading national and international health bodies, including Health Canada and the Public Health Agency of Canada, the Canadian Association of Public Health Dentistry, the World Health Organization, and the US Centers for Disease Control and Prevention, all strongly support CWF.

In addition to protecting against dental decay, CWF has been proven safe for overall health and for the environment.<sup>4,8</sup> High-quality evidence does not support a link between exposure to fluoride in drinking water at the optimal concentration to protect dental health in Canada and adverse health effects, such as cancer risk, bone fracture, toxicity, and lowered IQ. Fluorosis is a change in the appearance of tooth enamel. It does not affect the health or function of the teeth. It is important to note that the prevalence of moderate to severe dental fluorosis was considered too low to report in the most recent oral health component of the Canadian Health Measures Survey.<sup>1</sup>

One of the significant advantages of CWF is that it not only helps to reduce the scale and severity of dental decay, but it benefits residents in a community, regardless of age, socioeconomic status, education, employment or dental insurance status.<sup>7,9,10</sup> This is particularly important because lower income Canadians are almost twice as likely to suffer from poor oral health than higher income Canadians.<sup>1</sup> Residents of a community with fluoridated drinking water can enjoy fluoride's protective benefits just by turning on the tap.

In addition, CWF is the most economical method of reducing the burden of dental disease in a population.<sup>11-13</sup> The cost to adjust fluoride levels in municipal drinking water supplies is much lower than the costs of restorative dentistry for children living without fluoridated water, and is also lower than the cost of providing other potential sources of fluoride to residents.<sup>10</sup>

The benefits of CWF extend beyond cost savings. Dental problems may lead to frequent absences from school and lost parental working days,<sup>14,15</sup> which could have a significant impact on learning, productivity, and the larger economy. By reducing the risk of dental cavities in communities, CWF prevents needless pain, discomfort, stress, and quality of life burdens in people of all ages and circumstances.



## The Regulation of Community Water Fluoridation in Canada

The responsibility of providing safe drinking water and CWF is shared by the federal, provincial/territorial, and municipal governments. Health Canada works in collaboration with the provinces and territories to maintain and improve drinking water quality by providing the scientific rationale and technical expertise to establish guidelines for fluoride in drinking water. Currently, the optimal concentration of fluoride to protect dental health in Canada is 0.7 mg/L or 0.7 parts per million, which takes into consideration all sources of fluoride.<sup>16</sup>

The primary enabling legislation for community water fluoridation is enacted at the provincial level, as the provincial and territorial governments regulate the quality of drinking water in their jurisdiction. However, the fluoridation of drinking water supplies is a decision that is made by each municipality.

In the United States, many states now require municipalities and counties to introduce and/or maintain CWF through mandates and legislation.<sup>17,18</sup> These laws often specify the minimum population threshold to which these mandates are applicable. For example, Connecticut's law applies to community water systems serving at least 20,000 residents, while in other states the threshold may be 5,000 residents. The 2013–2018 Canadian oral health framework recommends that provincial and territorial governments adopt a similar approach by mandating the practice of CWF through legislation.<sup>19</sup>





## Unequal Access to this Public Health Approach

Although CWF is supported locally, nationally, and internationally by governments and health organizations, there is still a small but vocal minority opposed to its use. As a result, some municipalities in Canada have discontinued CWF in recent years,<sup>20</sup> which is concerning because research on CWF cessation and dental decay points increasingly to a rise in cavities post-cessation.<sup>1</sup> Although some communities in Canada have discontinued water fluoridation, there is reason for hope. Many other communities have been successful in maintaining or initiating this practice thanks to the efforts of oral health practitioners, public health professionals, members of the

academic and research community, and concerned community representatives. Canadians are hearing their voices and starting to recognize oral health as an important public good.

Even in an era of widespread availability of fluoride from other sources, evidence continues to reaffirm that CWF, at the optimal concentration level, is a safe, effective, and socially equitable approach to reducing dental decay and does not pose risks for adverse health outcomes. Researchers from around the world conclude that community water fluoridation delivers a return on investment; it saves money as well as teeth!

**Community water fluoridation remains an important, safe, effective, and equitable means of reducing dental decay in Canadian communities!**



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