

A Statement of Support for Community Water Fluoridation in Regina

Submitted on Behalf of:

The Saskatchewan Health Authority
The College of Dental Surgeons of Saskatchewan
The Saskatchewan Dental Hygiene Association
The Saskatchewan Dental Assistants' Association
The Saskatchewan Dental Therapists Association
The Denturist Society of Saskatchewan

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Your Worship, Mayor Master and Councillors,

This is not a briefing note or a technical report. It is a statement of support from six organizations whose primary mandate is to protect the public, which includes supporting safe, effective, and efficient population-based dental public health interventions, which is exactly what community water fluoridation (CWF) is.

CWF is endorsed globally. CWF is endorsed by every credible dental organization from the World Health Organization to the Australian, American, British and Canadian Dental Associations to the organizations submitting this joint statement. It is endorsed by medical, nursing and public health organizations in Saskatchewan and abroad.

CWF is effective. When CWF community studies began in Grand Rapids Michigan in 1945 followed by community comparison studies in Kingston and Newburgh New York as well as Sarnia, Kingston and Brantford, after a number of years it became clear in all the studies that children born after the introduction of CWF has up to 60 percent fewer cavities than children in the non-fluoridated communities. The significance in reduction of decay at a time when dental caries was endemic was so staggering that it was recommended that it would be unethical to continue and that the non-fluoridated communities should have access to CWF.

Think about that for a moment. It would be unethical to deprive the test subjects in non-fluoridated communities of CWF.

The Centers for Disease Control and Prevention called CWF one of the ten greatest public health achievements of the 20th century.

1. Vaccinations
2. Motor vehicle safety
3. Workplace safety
4. Control of infectious diseases
5. Reduction in death from coronary heart disease and stroke
6. Safer and healthier foods
7. Healthier mother and babies
8. Family planning
9. Community water fluoridation
10. Recognition of the dangers of tobacco use

In Saskatchewan, children living in communities with CWF have statistically lower decay rates than non-fluoridated ones. Regina has higher decay rates than Saskatoon, which has CWF. The latest longitudinal research comparing Edmonton (CWF) and Calgary (no CWF) using data since fluoridation began in Edmonton to the current days demonstrates this clearly. Current research suggests that CWF reduces dental decay by 25 to 30 percent across population demographics. Higher rates of caries reduction in high-risk populations.

CWF is Safe. The original fluoride studies continue to monitor the health of the generations of participants in the studies and have found no negative health outcomes related to CWF. Canada, the UK, the USA, Australia and New Zealand have produced national systematic reviews of the effectiveness and safety of fluorides including CWF. None of these reviews found any evidence to support links between CWF and cancers (including osteosarcoma), kidney diseases, Down's Syndrome, immune system dysfunction, bone fractures, intellectual deficits or any other diseases, dysfunction or impairment.

Fluoride is one of the most abundant minerals in the soil and is present in varying amounts in most water sources but most often not at a concentration to prevent decay. Skeletal fluorosis can occur when there is natural or industrial contamination leading to fluoride levels in drinking water manifold times higher than the level we fluoridate at. The global recommendation has been to fluoridate water at 0.7 mg/l (0.7 parts per million) to still prevent decay while minimizing over-fluoridating the population when all sources of fluoride are taken into consideration.

The most significant form of excess fluoride is dental fluorosis which is the result of fluoride interfering with the enamel development of teeth creating white lines or brown stains, which is a cosmetic issue. The Canadian Health Measures Survey in 2007-2009 established moderate fluorosis to be the level of fluorosis that becomes a significant cosmetic issue and their survey did not find enough moderate fluorosis to be scientifically relevant to report. Sixty percent of Canadian children have no fluorosis, 24 percent have questionable fluorosis that could be another white lesion, 12 percent had at least one tooth with very mild fluorosis and 4 percent had mild fluorosis.

The fluoride used for CWF is a by-product of the phosphate industry given its abundance in soil and it is utilized in making hydrofluorosilicic acid, which is the form of fluoride used in CWF. At a concentration of 0.7 mg/l, fluoride does not pose any environmental or human risks in water treatment plant or sewage effluent.

CWF is cost effective. It costs about \$1 per person per year to provide CWF. Any other form of community-based prevention will cost many times more. For example, providing toothbrushes and toothpaste is over 8 times more expensive. No compliance is required for CWF to be effective unlike other preventive modalities. People just need to drink the water to get the benefit. In comparison, treatment by a dental professional to restore a decayed tooth that could have been prevented by CWF will cost \$100 or more.

CWF assures health equity. While decay is present across the entire population, the risk is higher amongst vulnerable populations who face access to care barriers in seeking dental care. The 80/20 rule applies whereby most severe disease is concentrated in a small segment of the population. If they face access to care barriers, CWF may be their only cavity prevention tool.

CWF is politically-charged. It is the simple difference between treating the community as the patient vs individuals believing they have an individual right to drink community water that is non-fluoridated. But fluoride benefits everyone regardless of their age, gender, oral hygiene

habits or professional care-seeking behaviour. The benefits to the many outweigh the outrage of the few.

CWF is the right choice for Regina. The Saskatchewan Oral Health Professions Group and Saskatchewan Health Authority endorse Regina City Council's motion to fluoridate Regina's water supply because it is in the best interest of the entire population and especially those who are the most vulnerable in our society.

Thank you for your time.