

# Community Water Fluoridation

## What is community water fluoridation?

Community water fluoridation is the process of adjusting the natural fluoride concentration of a community's water supply to optimal levels that protect teeth from tooth decay. Some communities have enough natural fluoride in their water. Most communities in Saskatchewan have between 0.1 – 0.2 mg/Litre of naturally occurring fluoride in their water. Following recommendations set out by Health Canada's Guidelines for Canadian Drinking Water Quality, the optimal concentration of fluoride in drinking water to promote dental health has been determined to be 0.7 mg/L.(1)

Community water fluoridation has been identified by the Canadian Public Health Association as one of the twelve public health milestones in the past 100 years.

<http://www.cpha.ca/en/programs/history/achievements/05-he/fluoridation.aspx>

## Fluoride works to reduce tooth decay in two ways:

### Before teeth appear:

Fluoride is absorbed into the bloodstream. It becomes part of the enamel during the time teeth are developing.

### After teeth appear:

Fluoride comes in direct contact with the enamel on the outside of the tooth. It creates a tooth surface that is more resistant to cavities.

## What are the oral health benefits of community water fluoridation?

The most common oral health benefits are:

- 25-30% (2-6) less tooth decay in all ages
- prevention of pain, infection, tooth loss
- improved oral health over a lifetime

- fewer school and work hours missed due to oral health problems and dental visits
- lower dental costs for repairing decayed teeth

## Do adults also benefit from drinking fluoridated water?

Yes. People of all ages benefit from drinking fluoridated water. Adults and seniors are keeping their teeth longer. Root caries (decay found on the root surface of teeth near the gums) is increasing in this age group. (7) Research shows that drinking fluoridated water keeps the teeth strong and reduces tooth decay by approximately 25-30% in children and adults. (2-6)

## Why is community water fluoridation an ideal public health method?

Community water fluoridation is safe, effective, practical and inexpensive.

The entire community benefits regardless of:

- age
- income
- education level
- employment status
- individual motivation
- availability of dentists
- financial ability to pay for dental services

Tooth decay is one of the most common chronic diseases in North America and worldwide. (7) This makes water fluoridation an important public health measure. (8)

According to the Findings and Recommendations of the Fluoride Expert Panel for Health Canada, "Community water fluoridation remains an effective public health method to reduce the prevalence of decay in the Canadian population." (Health Canada /2007)

### Is community water fluoridation safe?

Community water fluoridation has proven to be safe through both practical experience and research. The safety of fluoride has been studied more thoroughly than any other public health measure during the past 70 years. (8) Over 90 national and international governments and health organizations including the Public Health Agency of Canada, Health Canada and the World Health Organization (WHO) endorse the fluoridation of drinking water to prevent tooth decay. (9)

### What is the current status of community water fluoridation in Saskatchewan?

According to a provincial report compiled in 2015, only 26% of the population in Saskatchewan currently has access to water with fluoridation. (10)

The cities of Humboldt, Melfort, Moose Jaw, Prince Albert, Saskatoon, Swift Current and Weyburn account for the most significant numbers of residents in the province that have access to fluoridated water.

### What are the costs to fluoridate community water sources?

Communities can provide fluoridation at an estimated cost of 60 cents to \$1.00 per person per year. (11) Every \$1 invested in a prevention measure like community water fluoridation at the optimal level can yield between \$5.00 and \$93.00 of savings per person in dental treatment costs. (3;12-14)

### Community water fluoridation:

- is safe
- is equitable
- benefits people of all ages
- requires no individual action or effort by those who will benefit (15)
- is the least expensive and most effective way to reduce tooth decay
- reduces the cost of dental treatment

**To find out if your water is fluoridated,  
contact your municipal government or the local public health office.**

### References

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