



# Brief Fluoridation Information for Physicians

## What is fluoridation?

- Fluoride (F-) is a mineral, necessary for high quality tooth enamel. It reduces demineralization, and assists remineralization of enamel in early stages of caries.
- It occurs naturally in Calgary water but not enough for optimal protection of teeth.
- Fluoridation raises the fluoride level in city water to 0.7 parts in a million.
- We have 76 years of evidence that this level is safe.
- Claims about harms to the developing brain, thyroid gland, kidneys, bone have all been debunked.

## Why do we need fluoridation?

- Fluoridation assists dental integrity at all ages. It incorporates into tooth enamel during tooth development. Throughout life, fluoride in saliva assists remineralization of decayed enamel all day long.
- If not treated early, dental decay can cause tooth destruction and dental pain.
- Dental pain causes difficulty in eating, which leads to nutritional deficits, and in children, growth disturbances. The remedy is expensive dental treatment.
- Tooth loss in children can affect speech development and create cosmetic issues that lead to loss of confidence. Dentures are a poor substitute for natural teeth.
- Dental decay can cause serious oral infections that can affect the airway and spread to surrounding structures.

## Fluoridation is common in developed countries

- Most cities in North America. In Canada 39% of the population have fluoride.
- The majority of Australia and New Zealand are fluoridated.
- Public water supplies in Singapore, Hong Kong and Ireland are fluoridated.
- Some European countries have water fluoridation to varying degrees, others provide fluoride through supplementation in salt or milk.

## Fluoridation is beneficial

- Fluoridated water helps prevent and reduce dental cavities for people of all ages, not just children. It has more effect among those more disadvantaged.
- Fluoridated water reaches people who otherwise struggle to afford or access dental care, or even good dental hygiene.
- Fluoridated water saves money by reducing the need for dental fillings or other treatments. The average Calgarian will save \$55 in yearly dental costs in return for \$1.29 per year invested in fluoridation.

## For more information:

- [Alberta Health Services](#)
- [Public Health Agency of Canada](#)
- [US Centers for Disease Control](#)