

Water fluoridation facts

What is fluoride?

Fluoride is a mineral found naturally in our water, air, food and soil. At low concentrations, fluoride in drinking water prevents dental cavities and improves oral health.

Fluoride is added to water in a process called water fluoridation. Natural fluoride levels in the water supply are supplemented to an amount that will help protect against tooth decay.

In Canada, the recommended amount of fluoride is 0.7 mg/L in drinking water for communities that wish to add fluoride to their water supply. Reliable equipment and careful monitoring help maintain these fluoride levels. The maximum acceptable concentration (MAC) in the Canadian Guidelines for Drinking Water Quality is 1.5 mg/L. Whether naturally occurring or added during the water treatment process, fluoride levels should never exceed this level.

Fewer than 4 percent of the population of B.C. has access to fluoridated water supply through their community.

How does fluoride prevent tooth decay?

Fluoride protects teeth when they first appear and as they develop over time. Fluoride bonds with the enamel or surface of teeth, making them more resistant to bacteria and decay. It also helps to repair the earliest stages of tooth decay.

Where can fluoridation occur?

Fluoridation can occur in public, private, and community water supplies or wells.

Water suppliers that fluoridate regularly are recommended to monitor fluoride levels in water. This is to maintain safe concentrations. All water suppliers are required to make all test results available to users and the public. If you have a private or domestic well, you should do a comprehensive chemical analysis that includes fluoride testing.

What are the benefits of water fluoridation?

Water suppliers have been adjusting fluoride levels in Canadian drinking water for over 70 years. Decades of extensive research show that water fluoridation is a safe, effective and low-cost way to improve oral health for everyone.

Studies show that children who drink fluoridated water can expect up to 25 to 30 percent less tooth decay than those who drink non-fluoridated water. By using fluoridated water, children develop strong teeth. As adults, they will have fewer cavities or missing teeth. Adults who drink fluoridated water can also expect to have less tooth decay or other cavity-related oral health problems.

Is fluoridation safe?

Yes. Fluoride has been studied thoroughly as a public health measure. It's safe in low doses.

Since the 1940s, scientists have studied the use of fluoride for oral health.

Leading experts have conducted extensive reviews on water fluoridation. They found no connection between fluoridation and cancer. There is no robust evidence that suggests exposure to fluoride in drinking water at concentrations below the MAC causes adverse health effects, reproductive issues or developmental issues. However, as with any naturally occurring element, high concentrations may be bad for your health.

Fluoride is recommended to prevent tooth decay and to improve oral health. Water fluoridation is endorsed as a valuable and beneficial public health measure by:

- Health Canada
- The Canadian Dental Association
- The Canadian Medical Association
- The Canadian Pediatric Society
- The Canadian Public Health Association
- The World Health Organization

Should water supplies be fluoridated?

Water fluoridation plays a key role in oral health. It helps protect all members of the community from tooth decay, regardless of age, education and socio-economic status. Water fluoridation requires a community vote of more than 50 percent to be installed or removed. Some communities have stopped water fluoridation. However, it's important to note that decades of research have found fluoridated water to be safe. Communities that stopped fluoridation have seen increased rates of tooth decay compared to communities that continue to use fluoridation.

For more information

For more information on water fluoridation, please contact your dentist or dental hygienist, the dental program at your local public health unit or the British Columbia Dental Association at <https://bcdental.org>.