

FLUORIDATION

WHAT IS FLUORIDE?

Fluoride is an abundant element in the Earth's crust that is naturally found in rocks, soil, and fresh and ocean water. The erosion of rocks and soils containing fluoride contribute to dissolving of fluoride at varying levels in both surface and groundwater. Other sources of fluoride in water supplies include emissions from industrial processes and man-made fluoridation.

WHAT IS FLUORIDATION?

When fluoride is present in drinking water at the recommended optimal level, it has been shown to promote oral health benefits. The amount of natural fluoride in water supplies varies between communities. In some community water supplies, naturally occurring fluoride is too high and must be removed. In other communities, such as ours, naturally occurring fluoride is generally not enough to provide benefits. Water fluoridation is the addition of a small amount of fluoride to a community water supply to achieve the optimal fluoride level that helps prevent tooth decay. State law AB 733 requires that public water systems with 10,000 or more water connections fluoridate their water supply.

The San Francisco Public Utilities Commission (SFPUC) has been supplying fluoridated water to San Francisco residents and wholesale customers in the northern peninsula area since the early 1950s. As of November 2005, fluoridated water has been supplied to all SFPUC wholesale and retail customers in the Bay Area.

FLUORIDE MONITORING

Drinking water quality is regulated by established limits for the protection of public health. Drinking water quality regulations, including fluoride levels in public drinking water systems, are set by the Division of Drinking Water of the State Water Resources Control Board (SWRCB). The SFPUC routinely monitors for the levels of fluoride in drinking water to meet the state regulation and submits fluoride monitoring results to the SWRCB each month.

The SFPUC monitors fluoride in all its waters, including surface water reservoirs, groundwater wells, and treated water delivered to homes.

The SFPUC's drinking water is safe to drink, with fluoride levels in water delivered to customers far less than the State's maximum limit. From 2019-2023 the average fluoride level in the SFPUC's treated drinking water was 0.7 mg/L, which is consistent with the optimal fluoride level established by the State.



HOW MUCH FLUORIDE IS IN MY WATER?

Our fluoride target level for drinking water is 0.7 milligrams per liter (mg/L, or parts per million, ppm), consistent with the April 2015 State regulatory guidance on optimal fluoride level. This amount is about equal to a few drops of fluoride in a water heater. Currently, the State maximum limit for fluoride is 2 mg/L. This is the highest level of fluoride that is permitted in drinking water.

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WHAT ARE THE BENEFITS OF FLUORIDATION?

One of the most common chronic diseases of childhood are cavities or tooth decay, specifically for those who lack access to dental care. Water fluoridation is a widely accepted practice proven to be safe and effective for preventing and controlling tooth decay. In addition, medical and dental experts endorse water fluoridation as the single, most effective public health measure to improve oral health. Therefore, fluoridated water benefits the entire community, children and adults of all ages, especially low-income and underserved populations.

Fluoride supplementation in levels administered for drinking water, in addition to fluoride intake accounted from all other sources, is safe for humans and all animals.

ARE THERE ANY HEALTH CONSIDERATIONS OF FLUORIDATED WATER?

San Francisco residents have been drinking fluoridated water for more than 70 years with no known and/or apparent adverse health impacts. Infants fed formula mixed with water containing fluoride at the optimal level of 0.7 mg/L recommended by the Centers for Disease Control and Prevention (CDC) may have an increased chance of developing tiny white lines or streaks in their teeth. These marks are referred to as mild to very mild fluorosis and are often only visible under a microscope. Even in cases where the marks are visible, they do not pose any health risk. CDC considers it safe to use optimally fluoridated water for preparing infant formula.

To lessen this chance of dental fluorosis, you may choose to use low-fluoride bottled water to prepare infant formula. Nevertheless, children may still develop dental fluorosis due to fluoride intake from other sources such as food, toothpaste and dental products. For additional information on infant formula and fluorosis, please visit the CDC website at the link on the next page.

Public health and professional organizations recognize the oral health benefits of drinking fluoridated water. Scientific research of fluoridation of community water systems at the regulated levels have not shown any health risks. There have been some recent studies suggesting that fluoride may impact childhood cognitive development. In September 2024, a U.S. District Court directed the US Environmental Protection Agency (EPA) to examine the potential risk of fluoride levels in drinking water and to prepare a response. The judge emphasized that there is no certainty that fluoridated water endangers public health. EPA is appealing the case. The American Dental Association (ADA), American Academy of Pediatrics, California Department of Public Health (CDPH), and CDC continue to support fluoridation as safe and beneficial to oral health. Following the court ruling, the ADA said it “remains staunchly in support of community water fluoridation at optimal levels to help prevent tooth decay.” The CDPH stated that “Optimally fluoridated drinking water is a safe and effective measure that helps prevent dental decay and is especially important in underserved communities where access to dental health care is limited.”



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CONSUMER RESOURCES: REGULATION/HEALTH



SFPUC: ANNUAL WATER QUALITY REPORT
www.sfpuc.gov/WaterQualityReport



SWRCB: FLUORIDATION
www.waterboards.ca.gov/drinking_water/certlic/drinkingwater/Fluoridation.html



CDC: COMMUNITY WATER FLUORIDATION
www.cdc.gov/fluoridation/faq

WE'RE COMMITTED TO QUALITY

Our highly trained chemists, technicians and inspectors consistently monitor the water we serve—throughout our system, every day of the year. For additional information and materials, please visit sfpuc.gov/waterquality.

For questions about YOUR water, please call 311. You can also visit sf311.org.



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