

American Dental Association Supports Fluoride in Water

- The American Dental Association (ADA) relies on more than 80 years of scientific data that clearly demonstrates fluoridated water is safe and effective. There is no credible scientific evidence that supports the need to stop, ban, or remove fluoride from water systems.
- The ADA and major medical groups like the American Academy of Pediatrics and American Academy of Family Physicians continue to recommend community water fluoridation because it's safe and helps prevent tooth decay by at least 25% in children and adults.
- The ADA and dentists have seen first-hand the importance of having water fluoridation programs and fluoride in topical products that work together to offer more protection against tooth decay - the most prevalent chronic disease in both children and adults.
- **The opposition to fluoride promotes studies that are either low quality or have been mischaracterized to show that water fluoridation isn't effective or that at U.S. optimal levels it causes neurodevelopmental issues and lowers IQ in children. There is no credible evidence showing that water fluoridated at the optimal level of .7 mg/L is dangerous to one's health.**

Impact of Water Fluoridation

Water fluoridation is one of the safest ways we can prevent cavities for children and adults. Approximately 63% of the U.S. population receives the benefits of fluoridated water. The current recommended amount of fluoride in water is 0.7 parts per million (ppm) which is comparable to 3 drops in 55 gallons of water.

Optimal levels of water fluoridation prevent cavities by providing frequent and consistent contact with low levels of fluoride, reducing tooth decay by at least 25% in children and adults. While community water fluoridation is the most efficient method to deliver this preventive benefit, alternative means of decay prevention may become necessary if this is not available.

If the recommended level of fluoride for community water systems at 0.7 mg/L is reduced or terminated, health experts will need to look to other public prevention programs to combat tooth decay and mitigate barriers to dental care treatment options in communities. In the meantime, communities will face a significant loss of preventive protection, triggering a rise in tooth decay and broader systemic health consequences.

Costs of Removing Fluoride

According to the Centers for Disease Control and Prevention (CDC), which has long promoted the benefits of community water fluoridation, providing optimally fluoridated water to U.S. communities saves \$6.5B each year in dental treatment costs and leads to fewer missed work and school days. While not fluoridating water may result in a short-term cost saving, health economists have shown that for every \$1 invested on fluoridation there is at least a \$20 saving in dental treatment costs. In other words, that cost will be shifted to consumers and the government through Medicaid. When community water fluoridation is eliminated, children in low-income families and people with little access to care will be the ones that suffer the most.

Studies from Juneau, Alaska and Calgary, Canada; demonstrate an increase in decay and dental treatment costs when fluoridation is stopped. For instance, Calgary saw a 78% increase in cases where young children required general anesthesia for severe dental decay, when compared to Edmonton over the same period. These cases cost between \$7-\$8,500 USD each. It is estimated that the US saved \$25.7 billion in dental treatment costs between 1990 and 2000 due to community water fluoridation.

Untreated oral health problems like tooth decay, gum disease and tooth loss can be prevented with regular dental services and access to fluoridated water and dental products. Strategies are needed to prevent chronic conditions in the mouth and improve overall health that is often impacted by dental issues. Poor oral health is connected to poor overall health. Significant associations between oral health status and a number of systemic diseases have been established, including, but not limited to, cardiovascular diseases, Alzheimer's disease and dementia, obesity, diabetes and metabolic disorders, rheumatoid arthritis, and several cancers.

Fluoride Intake-

While fluoridated toothpastes and rinses are widely available today, fluoridated drinking water continues to play a crucial role in oral health. It provides a consistent, low level of fluoride throughout the day to remineralize the damage done to enamel from sugary and acidic foods and drinks. Brushing twice daily with a high concentration fluoride toothpaste containing 1000-1500 ppm offers an additional layer of protection. We often use the analogy of seatbelts and airbags – each serves a purpose, but together, they provide the best protection.

Most people in the United States consume adequate amounts of fluoride through fluoridated tap water, food products made with fluoridated tap water and foods naturally containing fluoride. However, natural levels of fluoride in most foods are minimal. Fluoride is not typically added to bottled drinking waters but may contain fluoride depending on the water source. Some prescription medications contain fluoride but not as an active ingredient and few over-the-counter dietary supplements include it. Foods rich in fluoride include black tea, seafood and foods grown in mineral rich soil may also contribute to fluoride intake but may not reach therapeutic levels based on NIH recommendations. The research shows that daily administration of fluoride tablets or drops at home are safe and effective to prevent tooth decay and cavities by making teeth stronger. Fluoride supplements have traditionally been considered for children at risk for cavities who do not have optimally fluoridated water. There is limited data on the impact or use of fluoride tablets in states that have low levels of community fluoridation. Studies show that fluoride tablets or drops are safe and effective, but daily administration of tablets at home requires a very high level of parental involvement and to date has been less successful in underserved communities.

Changing the Levels of Fluoride

The Environmental Protection Agency (EPA) established the maximum allowable level of naturally occurring fluoride in drinking water at 4 mg/L. The current standard is set so that if a public water supply exceeds the maximum contaminant level (MCL) the water supplier is required to lower the level of fluoride below the MCL by a process called defluoridation. The EPA has a secondary maximum contaminant level of 2 mg/L in drinking water. The World Health Organization recommends the limit for fluoridating water at 1.5 mg/L. The National Toxicology Program's report encouraged the US District Court judge last fall to order the EPA to "engage with a regulatory response" but did not specify exact regulatory response in the pending lawsuit under appeal.

The ADA strongly supports fluoridation of community water to adjust the fluoride in drinking water to an optimal level (0.7 milligrams per liter of water) for the prevention of tooth decay along with brushing with a fluoridated toothpaste to reduce tooth decay and maximize oral health in our communities. The ADA has long supported the adjustment of fluoride, including the previous range of 0.7ppm-1.2 ppm, to be set at the level recommended by the USPHS, currently set at 0.7 milligrams per liter, as the effective level of fluoride to reduce incidence of tooth decay while minimizing the rate of fluorosis. There is no new scientific evidence that would suggest the ADA or others would alter the recommendation because the gold standard for scientific review assess this level as optimal to balance the prevention benefits of tooth decay and limits any unwanted health effects.

For more information [visit ADA.org/fluoride](https://ada.org/fluoride).