ADA American
Dental
Association®

Fluoridation Talking Points

Key Messages

- Fluoride is nature's cavity fighter with small amounts present in all water sources such as lakes, rivers and wells. Community water fluoridation is simply the addition of fluoride to water to a level that helps prevent tooth decay.
- Fluoridation of community water supplies is the single most effective public health measure to prevent tooth decay.
- Throughout more than 75 years of research and practical experience, the best available scientific evidence has consistently shown that fluoridation of community water is safe.
- The ADA supports community water fluoridation as a safe, effective, cost-saving and socially
 equitable way to prevent tooth decay.
- The ADA continues efforts to expand access to fluoridation as it works to meet the Healthy People 2030 goal of providing fluoridated water to 77% of the U.S. population on public water systems.

Talking Points

What is community water fluoridation?

- Community water fluoridation is simply the adjustment of fluoride that occurs naturally in water up to the level recommended for preventing tooth decay
- The optimal level of fluoride in drinking water established by the U.S. Public Health Service is 0.7 milligrams per liter (or parts per million). That means the amount of fluoride diluted in water is comparable to approximately 1 inch in 23 miles or 1 minute in 1,000 days.
- Water that has been fortified with fluoride is similar to fortifying salt with iodine, milk with vitamin D, bread and cereal with folate, and orange juice with calcium – none of which are medications.

Is fluoridation safe?

- Throughout more than 75 years of research and practical experience, the best available scientific evidence has consistently shown that fluoridation of community water is safe.
- With thousands of studies published in peer-reviewed, scientific journals, fluoridation is one of the most studied public health measures in history.

- The accumulated dental, medical and public health evidence concerning fluoridation has been
 reviewed and evaluated numerous times by academicians, committees of experts, special
 councils of government and many of the world's major national and international health
 organizations. The verdict of the scientific community is that fluoridation safely helps to prevent
 tooth decay.
- Considering the extent to which fluoridation has been implemented in numerous countries for decades, the lack of documentation of adverse health effects is remarkable testimony to its safety.

Is fluoridation effective?

- Studies show that community water fluoridation prevents at least 25% of tooth decay in children and adults even in an era with widespread availability of fluoride from other sources, such as fluoride toothpaste.
- According to the best available scientific evidence, community water fluoridation is an effective public health measure for preventing, and in some cases, reversing tooth decay, in children, adolescents and adults.
- Based on strong evidence of effectiveness, the U.S. Task Force on Community Preventive Services has strongly recommended that community water fluoridation be included as part of a comprehensive strategy to prevent or control tooth decay in communities.

Who benefits from fluoridated water?

- Water fluoridation benefits everyone in the community regardless of income, education, race or access to dental care.
- Community water fluoridation benefits everyone, but especially those without access to regular dental care. Community water fluoridation (CWF) is a powerful tool in the fight for social justice and health equity.
- Former U.S. Surgeon General Dr. David Satcher noted that water fluoridation is a powerful strategy in efforts to eliminate health disparities among populations.
- According to the CDC, in 2020, 74% of the U.S. population on public water systems, or a total of 211.4 million people, had access to fluoridated water. The Healthy People 2030 Objective is to reach 77%.
- From 2012 to 2018, communities voted to adopt or retain fluoridation almost twice as often as they voted against it.

What does fluoridation cost?

- The cost of a lifetime of water fluoridation for one person is less than the cost of one filling.
- By preventing tooth decay, community water fluoridation has been shown to save money, both for families and the health care system.
- An analysis of Medicaid claims in three states found that children living in fluoridated communities had lower treatment costs related to tooth decay than did similar children living in non-fluoridated communities.
- The return on investment for community water fluoridation varies with size of the community, and in general, increases as the community size increases. Community water fluoridation is cost-saving, even for small communities.
- Fluoridation not only saves money, but it saves time less time lost from school or work because of dental pain or visits to the dentist.

Additional Messages

- In addition to the ADA, a number of leading national health organization support fluoridation including the American Academy of Pediatrics, American Medical Association, American Public Health Association and the World Health Organization.
- The Centers for Disease Control and Prevention has proclaimed community water fluoridation (along with recognition of tobacco use as a health hazard and control of infectious disease) as one of ten great public health achievements of the 20th century.
- More than 100 national and international health, service and professional organizations recognize the public health benefits of community water fluoridation for preventing dental decay.

New Studies on CWF

- Public health policy is built on the weight of scientific evidence, not a single study. There are
 decades of research and practical experience indicating fluoridation is safe and effective in
 reducing cavities by 25% for adults and children drinking fluoridated water compared to those
 living in communities that are not fluoridated.
- The newly released JAMA study should be considered exploratory because a much larger sample size and improved methods are needed to overcome the limitations mentioned by the study's authors. This study found <u>no statistically significant association</u> between spot measurements of fluoride in urine of predominantly Hispanic women collected during pregnancy with most of the behavioral variables among 3-year-olds in Los Angeles.
- Looking at the authors' own assessment of the limitations of the study, the results are not nationally representative because of the small sample size from one geographic location, with

no data on daily behavior or actual consumption of tap water during pregnancy being evaluated in the study. The maternal fluoride intake measurement took place in one spot sample, rather than samples taken over a 24-hour period, and most of the women did not fast prior to urine collection, making it subject to random error. Other important factors that influence a child's cognitive and behavioral development, such as mother's IQ, home environment, etc. were not assessed or reported.