Fact Sheet

Flouridation at a Glance



Background

In 2016, the Valley Water (Santa Clara Valley Water District) joined a majority of the country's public water suppliers in adjusting the fluoride level of drinking water in order to prevent tooth decay. In line with recommendations from the State Water Resources Control Board, Division of Drinking Water (DDW), as well as the U.S. Centers for Disease Control and Prevention, Valley Water adjusts the natural fluoride level in the water it provides to target the optimal level for dental health of 0.7 parts per million.

About Fluoride

- Fluoride is a naturally occurring mineral found both in surface water (water from snowmelt, rivers and streams) as well as groundwater.
- Fluoride's benefits for teeth were discovered in the 1930s by scientists who saw extremely low tooth decay rates among people whose water supplies had a significant amount of natural fluoride.
- Fluoride helps teeth resist decay by strengthening the protective layer of tooth enamel, and can reverse newly forming cavities.
- Fluoride has been added to U.S. drinking water supplies since 1945.
- The three primary agents used to fluoridate water are sodium fluoride (made
 of sodium and fluoride atoms bonded together), sodium fluorosilicate (sodium,
 silicon and fluoride), and fluorosilicic acid (hydrogen, silicon and fluoride).
 Valley Water has selected to use fluorosilicic acid because of the safety and
 reliability this agent offers.
- Of the 50 largest cities in the U.S., three have naturally occurring fluoride at an optimal level and 44 cities fluoridate their drinking water. (Source: American Dental Association.)
- Three out of every four Americans served by public water supplies, including more than 24 million Californians enjoy the benefits of community water fluoridation. Other California communities that are fluoridated include Los Angeles, Oakland, Sacramento, San Diego and San Francisco. Most of the Bay Area is fluoridated including most of Marin, Contra Costa, Alameda and San Mateo counties.
- While exposure to fluoride from multiple sources can cause dental fluorosis in young children, the majority of children are unaffected. Most cases of fluorosis in communities with optimally fluoridated water are mild and characterized by barely visible white areas on the teeth.
- There are no adverse health effects from optimally fluoridated water.
 The U.S. Department of Health and Human Services has rejected claims that low-level fluoride exposure is linked to occurrences of cancer, brain damage or osteoporosis.

(Source: U.S. Public Health Service Recommendation for Fluoride Concentration in Drinking Water for the Prevention of Dental Caries. Public Health Reports. 2015 Jul-Aug; 130(4):318-31)



Benefits

- The 2016 study, "Costs and Savings Associated with Community Water Fluoridation in the United States" calculated that the average annual cost savings per person in fluoridated communities is \$32 in avoided dental bills. https://www.cdc.gov/fluoridation/statistics/cost.htm
- More than 70 years of scientific research and experience have found that people living in communities with optimally fluoridated water have healthier teeth, fewer teeth extracted and fewer cavities than people living where water is not optimally fluoridated.
- Fluoridated water cuts across socioeconomic groups, offering everyone equal health benefits.

Supporters

- Community water fluoridation is supported by the vast majority of major national and international health service organizations. Supporters include: The American Dental Association, American Medical Association, American Academy of Pediatric Dentistry, U.S. Centers for Disease Control and Prevention, and the World Health Organization.
- The U.S. Centers for Disease Control and Prevention has recognized fluoridation of drinking water as one of the 10 great public health achievements of the 20th century.

Valley Water's Position

In 1995, Governor Pete Wilson signed a state law conditionally requiring fluoridation of any public water supply with at least 10,000 customers. Because the law did not provide funding for utilities, many water agencies found the cost of fluoridating prohibitive. Valley Water's Board of Directors first took a serious look at fluoridation in November 2010 by holding the first of two public workshops on fluoridation.

Although Valley Water as a wholesale water provider is exempt from the conditions of the law, local public health officials pressed hard for large-scale fluoridation at Valley Water water treatment plants. Subsequently in November 2011, the Valley Water Board of Directors adopted a policy that directed the cavity-fighting agent to be added to Valley Water's water treatment processes.

The Health Trust, FIRST 5 Santa Clara County, and the California Dental Association Foundation provided Valley Water a total of \$2.4 million in grant monies for the capital cost to plan, design, purchase, and install the equipment necessary to begin fluoridation at each of Valley Water's three water treatment plants. The Santa Teresa Water Treatment Plant was the first to start adding fluoride by December 2016, while the Penitencia Water Treatment Plant started fluoridating by July 2017. The third, Rinconada Water Treatment Plant, is undergoing major upgrades, which will include fluoridation in the future.

"Community water fluoridation continues to be the most cost-effective, practical and safe means for reducing and controlling the occurrence of tooth decay in a community."

U.S. Surgeon General David Satcher, 2001
 http://bit.ly/2m14mM6

Additional Resources for Information

For additional information about the fluoridation of drinking water, please refer to the following:

- Centers for Disease Control and Prevention http://www.cdc.gov/fluoridation/
- National Cancer Institute http://www.cancer.gov/about-cancer/causesprevention/risk/myths/fluoridated-water-fact-sheet
- American Dental Association http://www.ada.org/fluoride

- National Institute of Dental and Craniofacial Research http://www.nidcr.nih.gov/OralHealth/Topics/Fluoride/
- American Water Works Association
- State Water Resources Control Board,
 Division of Drinking Water

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

For medical and dental inquiries, please consult with your physician. Valley Water Fluoride Hotline: 1 (408) 630-2020. **www.valleywater.org**

