

Fluoridation

at a glance



Background

In 2016, the Santa Clara Valley Water District (SCVWD) will join 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, the water district will adjust 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). The water district 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 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 Oakland, Los Angeles, San Diego, San Francisco, and Sacramento. 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 very 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)



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Benefits

- At a cost of less than two dollars a household per year, the dental and medical health communities support fluoridation for Santa Clara Valley consumers.
- Researchers from the Centers for Disease Control and Prevention and the University of Georgia have calculated that the average annual cost savings per person in fluoridated communities is \$19 in avoided dental bills. <http://www.cdc.gov/fluoridation/factsheets/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.

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

The Health Trust, FIRST 5 Santa Clara County, and the California Dental Association Foundation provided the water district 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 the water district's three water treatment plants. The Santa Teresa Water Treatment Plant will be the first to go online by December 2016, while the Penitencia Water Treatment Plant is expected to be completed in mid 2017. The third, Rinconada Water Treatment Plant, will begin fluoridating in 2020.

"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/2cHRYsY>

Additional Resources for Information

There are several places to go for additional information about the fluoridation of drinking water. They include:

- Centers for Disease Control and Prevention
<http://www.cdc.gov/fluoridation/>
- National Cancer Institute
<http://www.cancer.gov/about-cancer/causes-prevention/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
<http://www.awwa.org/fluoridation>
- State Water Resources Control Board, Division of Drinking Water
http://www.waterboards.ca.gov/drinking_water/programs/index.shtml

www.valleywater.org

For medical and dental inquiries, please call: 1-(844) 435-8420



The mission of the district is to provide Silicon Valley safe, clean water for a healthy life, environment, and economy.