



Share & Learn: Let's Talk About Community Water Fluoridation

June 20, 2024

Speakers

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Aubri Kottek, COHTAC at UCSF

Housekeeping

- Meeting is being recorded and will be posted on the COHTAC website and YouTube channel – follow up materials and recording link will be emailed
- Questions, comments, and resource sharing are welcomed in the chat box and will be answered at the end of the presentations – please stay muted until called on
- As always, we appreciate your feedback please take a minute at the end to complete our evaluation survey
- Disclaimer: The presentations today are the content of the speakers and do not necessarily represent the views of the Office of Oral Health or the California Oral Health Technical Assistance Center (COHTAC)



Learning Objectives & Agenda

Objectives

- Recognize how community water fluoridation can prevent tooth decay and improve oral health
- Understand how to access and use the California Fluoridation Manual
- Use effective communication techniques to educate their community about water fluoridation
- Develop an advocacy plan in support of fluoridation
- Understand best practices when creating partnerships with water professionals/districts

Agenda

- Overview from UCSF experts
 - How fluoride works & the California
 Fluoridation Manual Howard Pollick
 - Community education communication techniques Marjorie Stocks
 - Best practices for partnerships with water professionals – Mark Bartson
- Case studies
 - Oroville Eva Yeeda
 - Sacramento Jennifer Fitzpatrick
 - Marin Danika Ng
- Wrap up



Workplan Objective 2.4

Fluoride 2.4	Conduct training for community members/partners/stakeholders who desire to learn about the safety, benefits and cost effectiveness of community water fluoridation and its role in preventing dental disease.	07/01/22- 06/30/27	A) Agenda/Training B) Materials/Talking Points/List of Participants C) Submit data annually on number trained to CDPH/OOH
2.4.a	Share trainings for Regional Water District engineer/operator training on the safety, benefits of fluoridation and the important role water engineers/operators have in preventing dental disease. *Note: This activity is water systems that are fluoridating or considering fluoridation and is optional in jurisdictions with less than 10,000 water connections.	07/01/22- 06/30/27	A) Number of engineer/operators who participated in trainings and submit data annually to CDPH/OOH B) List of engineer/operator, and training completed
2.4.b	Conduct a community public awareness campaign on fluoridation and its effectiveness in preventing dental caries.* *Note: Materials and campaign require pre-approval from the OOH.	07/01/22- 06/30/27	A) Marketing materials, such as Public Service Announcements (PSAs), radio ads, letters to the editor, etc. B) Submit data annually on number of public awareness campaigns to CDPH/OOH
2.4.c	Create LHJ specific webpage on fluoridation and its effectiveness in preventing dental caries.	07/01/22- 06/30/27	A) Webpage URL



Howard Pollick



Share & Learn: Let's Talk About Community Water Fluoridation

Howard Pollick, BDS, MPH

Health Sciences Clinical Professor School of Dentistry, UCSF

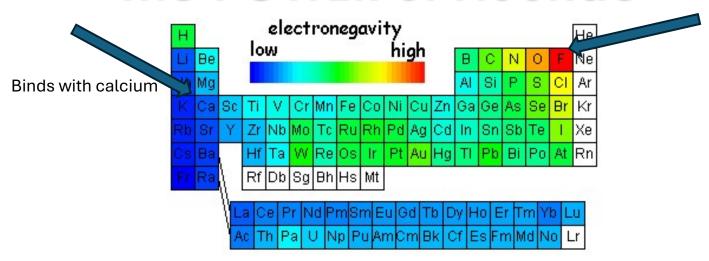


Objectives

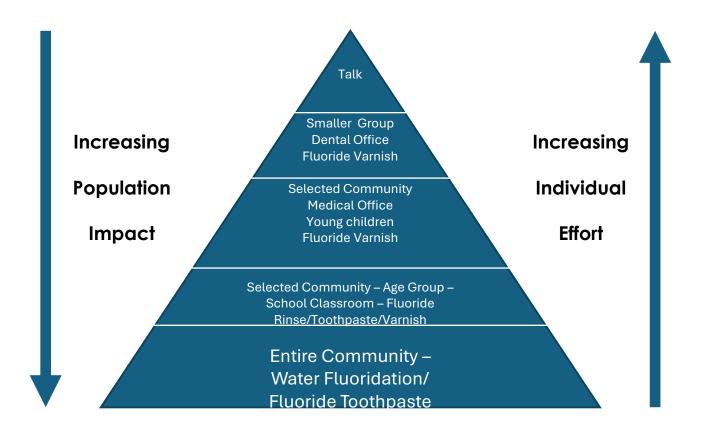
- Attendees will be able to:
 - 1. Explain how community water fluoridation prevents tooth decay and improves oral health.
 - 2. Access and use the California Fluoridation Manual.

Fluoride is like a super magnet Fluoride is the most electronegative element in the Periodic Table

The POWER of Fluoride



Strategies for Preventing Tooth Decay for Individuals and the Community



9

<u>The Role of Fluoride in the Prevention of Tooth Decay.</u>

Pollick H.

Pediatr Clin North Am. 2018 Oct;65(5):923-940

KEY POINTS

- Fluoride is the key to prevention of tooth decay.
- There are multiple fluoride modalities.
- Effectiveness and safety of fluoride depend on dose and concentration.
- Individual level fluoride use occurs at home and with professional application.
- Community level prevention occurs through fluoridation of water or salt.

There are multiple mechanisms by which fluoride works

- Through reducing demineralization of enamel in the presence of acids produced by cariogenic bacteria in dental plaque breaking down fermentable carbohydrates (sugar)
- Through remineralization of early enamel caries
- Through inhibition of bacterial activity in dental plaque.

<u>The Role of Fluoride in the Prevention of Tooth Decay.</u>
Pollick H.

Pediatr Clin North Am. 2018 Oct;65(5):923-940

Community Water Fluoridation is the norm in the USA

- In the United States, more than 209 million people—or about 73% of the population served by public water supplies—have access to fluoridated water.
- In California, more people than in any other state are served by fluoridated water:
 more than 21 million

Introduction of community water fluoridation results in:

- 35% reduction in the mean number of decayed, missing, and filled primary teeth
 and
- 26% reduction in the mean number of decayed, missing, and filled permanent teeth in children.
- increased percentage of children with no decay by 15%

https://www.cochrane.org/CD010856/ORAL_water-fluoridation-prevent-tooth-decay

Discontinuation of community water fluoridation results in:

- 35% increase in the mean number of decayed, missing, and filled primary teeth
 and
- 26% increase in the mean number of decayed, missing, and filled permanent teeth in children.
- Decreased percentage of children with no decay by 15%
- Increased general anesthetics for treating decayed teeth
- Increased costs for families

California Oral Health Technical Assistance Center

CDPH Office of Oral Health ▼

Toolkits ▼

Our Programs ▼

Home > Our Programs > Water Fluoridation

Water Fluoridation

We offer educational materials and guidance on water fluoridation to promote safe drinking water as an effective and efficient way to prevent tooth decay.

https://oralhealthsupport.ucsf.edu/our-programs/fluoridation

Water Fluoridation Resources and Publications

- NEW California Fluoridation Manual (updated August 31, 2022)
- Lunch and Learn: Introducing California Fluoridation Manual webinar 4.20.2022 Slide Deck
- Lunch and Learn: Introducing California Fluoridation Manual webinar 4.20.2022 Recording (1:32:51)
- All About Fluoride and How to Take Action on Water Fluoridation
- · American Dental Association
- California Public Water Systems
- · Campaign for Dental Health: life is better with teeth
- · Centers for Disease Control and Prevention
- Chief Dental Officers' Statement of Support of Community Water Fluoridation Commemorating the 75th Anniversary
- Fluoridation Learning Online (FLO): CDC Water Fluoridation Training Course
- · American Fluoridation Society

California Oral Health Technical Assistance Center

A support and resource center

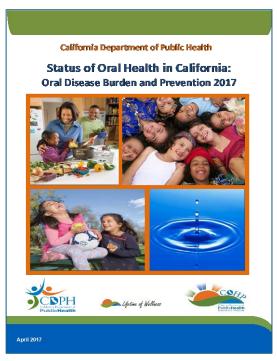
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Outline

• Tooth Decay (dental caries) is a serious disease

Burden of oral diseases - Tooth Decay

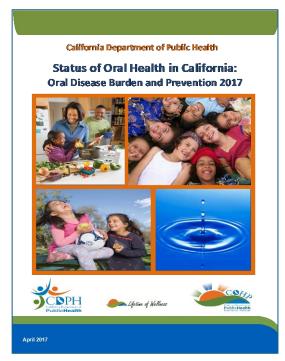


Highlights of the report include:

- Tooth decay is the most common chronic condition experienced by children—far more common than asthma or hay fever.
- In California, 54 percent of kindergarteners and 70 percent of third graders have experienced dental caries (tooth decay), and nearly one-third of children have untreated tooth decay (2004 data – most recent available).
- In California, Latino children and poor children experience more tooth decay and untreated tooth decay than other children.

State Burden Report

Burden of oral diseases - Tooth Decay



State Burden Report

Boy Dies After Bacteria From Tooth Spread to Brain

 2007 case of Deamonte Driver, a 12-year-old Maryland boy

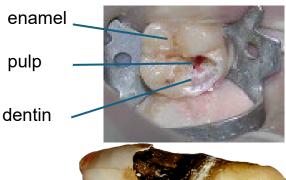
Tooth infection suddenly kills Sacramento truck driver, 26

- Vadim Kondratyuk 2017
- https://www.sacbee.com/news/l ocal/health-andmedicine/article129870124.html

Explain with pictures: Tooth Decay - Dental Caries: What happens when the rot sets in? What are the costs?

- Primary and Permanent Tooth Surfaces
- Coronal (crowns):
- Pit & Fissure (biting surfaces of back teeth)
- Approximal (between teeth)
- Root surfaces (after gum recession)
- Pain (OW!!!)
- Infection (local and systemic)
- Abscess (swelling)
- Restorations (\$)
- Root Canal (\$\$)
- Extraction (\$)
- General Anesthesia (\$\$\$)
- Replacement (\$\$\$\$)





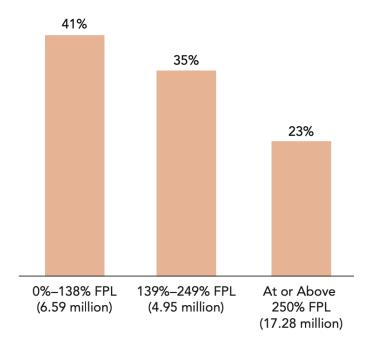




Poor people need to visit a dentist for problems

Last Dental Visit for Specific Problem by Federal Poverty Level (FPL), Adults Ages 18 and Older, California, 2017–2018

Pourat N, Ditter M. 2020. Despite Insurance, the Poorest Adults Have the Worst Access to Dental Care. Los Angeles, Calif.: UCLA Center for Health Policy Research.



Sources: 2017 and 2018 California Health Interview Surveys

Show with pictures: Optimum Goal – Minimal decay; minimal fluorosis

80% of 6-39-year-olds have no signs of enamel fluorosis in front teeth – NHANES 1999-2002*

No severe enamel fluorosis in fluoridated communities

Urgent Dental Needs: Fluoridated: 4%
Non-fluoridated: 25%

California Oral Health Needs Assessment: High School

Students: 10th grade: 1993-94











Questionable

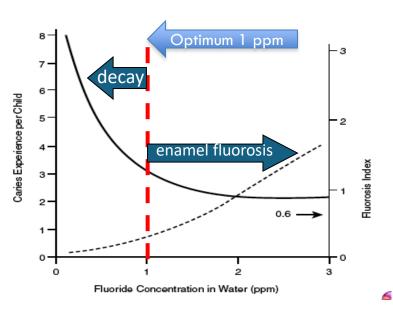




Decay – Abscess

^{*} https://www.cdc.gov/mmwr/preview/mmwrhtml/ss5403a1.htm

Fluoride in water: Caries and Fluorosis: Pre-1945 data The scientific basis for fluoridation

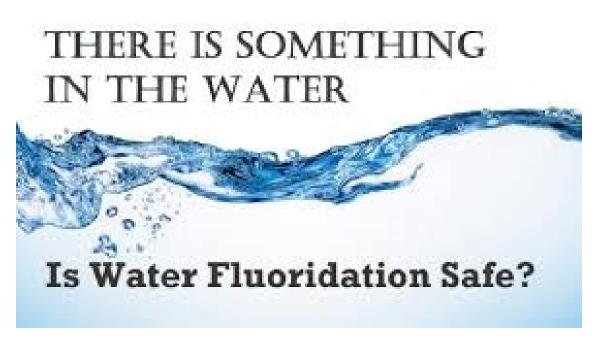


- Suboptimal fluoride levels benefits
- 0.5 0.9 ppm reduced DMFT compared to <0.5 ppm
- Greater benefit 1.0 1.4 ppm
- But increasing enamel fluorosis

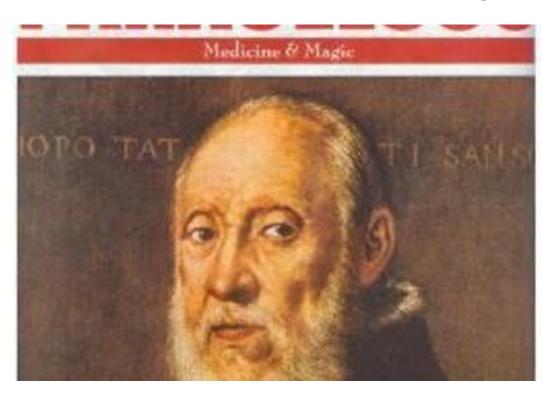
Number of cities studied	Number of children examined	Number of DMF teeth per 100 examinees 0 100 200 300 400 500 600 700	Fluoride content of water (ppm)
11	3 867		< 0.5
3	1140		0.5 - 0.9
4	1 403		1.0 - 1.4
3	847		> 1.4

Dean, H.T. in *Dental caries and Fluorine*, Washington, American Association Advancement Science, pp. 5-31, 1946





It's not the substance – it's the dose. The dose differentiates a poison from a remedy



Paracelsus

- Theophrastus Philippus Aureolus Bombastus von Hohenheim
- 1493 1541
- Born in Switzerland; Died in Austria
- appointed town physician in Basel in 1527
- · famous quote
- "Everything is a poison...the dose differentiates a poison from a remedy."

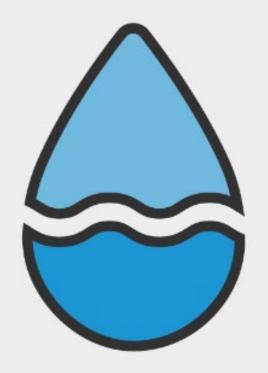
Woman dies after being in water-drinking contest.

Is water poisonous?

- A mother of three died from water intoxication after a radio station drinking competition, a California coroner said on Saturday. (2007)
- Jennifer Strange, 28, competed in Sacramento station KDND 107.9's "Hold Your Wee for a Wii" contest to try to win Nintendo's console for her children.
- Participants competed to see how much water they could drink without going to the bathroom.
- Initially, contestants were handed eight-ounce bottles of water to drink every 15 minutes.

https://www.cnet.com/news/djs-axed-after-woman-dies-in-wii-water-drinking-contest-9678573/





Recommended Level 0.7 mg/L

Natural Level of Fluoride in Water (mg/L)

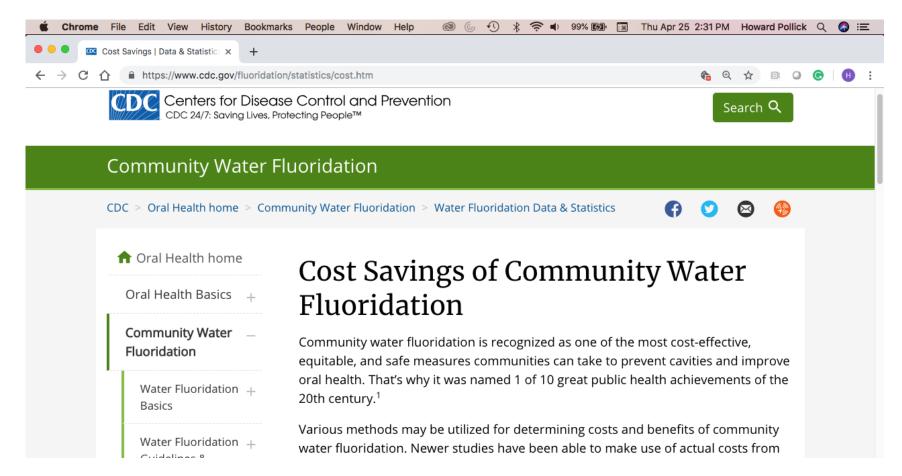


Adjusted Level of Fluoride in Water (mg/L)

Knowledge Check

A surface water source has a natural fluoride concentration of 0.12 mg/L. What is the direction and level of adjustment required to meet the recommended level of fluoride in drinking water?

- Adjust upward by .05 mg/L
- B. Do not adjust
- C. Adjust upward by 0.58 mg/L
- D. Adjust upward by 0.5 mg/L
- Adjust downward by .05 mg/L



Knowledge Check

Which of the following are measures of cost effectiveness in support of community water fluoridation? (Select all that apply)

- Reduction in the cost associated with dental procedures to treat dental cavities.
- Reduction of lost productivity and time due to dental appointments
- Reduction in dental cavities
- Reduction in the amount of money spent treating water with fluoride.
- Reduction in the cost associated with traveling to dental appointments and procedures

American Dental Association Fluoridation Facts (2018)

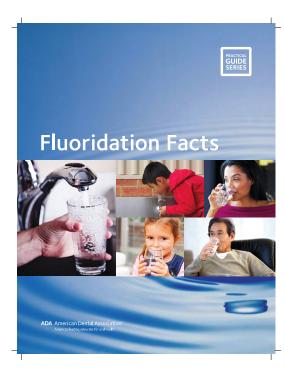
American Dental Association Fluoridation Facts 2018

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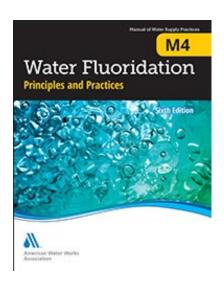
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American Water Works Association - 2016



- Essential information for decision makers planning fluoridation installations, engineers designing them, and water utility personnel operating them.
- 6th edition

https://www.awwa.org/Store/Product-Details/productId/58340796

New Reports

- Association between fluoride and neurodevelopment (IQ)
- No causation from fluoridation
- Draft National Toxicology Program (NTP)
 - When focusing on findings from studies with exposures in ranges typically found in the United States up to 1.5 ppm in drinking water, effects on cognitive neurodevelopment are inconsistent, and therefore unclear.
 - National Academy of Sciences: 1/26/2021
 - the (NTP) monograph cannot be used to draw conclusions regarding low fluoride exposure concentrations (less than 1.5 mg/mL), including those typically associated with drinking water fluoridation.
- FPA
 - Ongoing legal case

Best strategies for educating parents about fluoridation and addressing concerns about fluoridation myths.

- Evidence-based science
- Use authoritative websites

- Acknowledge concerns
- Don't dismiss concerns

California Fluoridation Manual

- Say this not that; from ilikemyteeth.org
- https://ilikemyteeth.org/wpcontent/uploads/2014/10/Say ThisNotThat.pdf

California Fluoridation Manual

California Oral Health Technical Assistance Center







California Fluoridation Manual Authors

- Marjorie Stocks, MPH
- Howard Pollick, BDS, MPH
- Rosanna Jackson, BA
- Jayanth Kumar, DDS, MPH, California State Dental Director



What is Community Water Fluoridation?

Community water fluoridation (CWF) is the controlled adjustment of the natural fluoride concentration in community water supplies to the concentration recommended for preventing tooth decay. It is a public health intervention undertaken by a community to bring about lasting improvements in the oral health of its residents. Efforts to add fluoride to drinking water supplies require policy, system and environmental changes such as passing laws, regulations and resolutions, creating infrastructure and training, and making structural changes.

History of Fluoridation in California

San Francisco was one of the first communities in California to fluoridate its water supply. Approval was given by voters in November 1951 (proposition M) and fluoridation started in 1952. By 1992, 117 California water systems were serving 4.85 million residents with fluoridated water.⁶

The California Fluoridation Act of 1995^Z requires water systems with 10,000 or more service connections to fluoridate their water supply when funding becomes available from a source other than the rate payers or taxpayers.

Section 116410 (a) of the California Health and Safety Code states:

"Each public water system with at least 10,000 service connections and with a natural level of fluorides that is less than the minimum established in the regulations adopted pursuant to this section shall be fluoridated in order to promote the public health of Californians of all ages through the protection and maintenance of dental health, a paramount issue of statewide concern."

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Marjorie Stocks will continue to discuss:

Effective communication techniques to educate your community about water fluoridation.

Developing an advocacy plan in support of fluoridation

Marjorie Stocks





California Fluoridation Manual

California Oral Health Technical Assistance Center









Topics Covered Today



- Education in a community served by fluoridated water.
- Education in a community without fluoridated water.
- The components of an advocacy plan.
- How to address a rollback.



California Communities/Systems Fluoridated since 1995





Daly City

Authority



Fluoridation by Public Water Systems

Is My Water Supply Fluoridated?

- List of Fully Fluoridated Water Systems all water is fluoridated
- Water Systems Providing a Mixture of Fluoridated and Non-Fluoridated Water

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



I. Strategy

The process of fluoridating your community's water supply begins with a strategy consisting of the following steps:

Assessing the region's water supply

- · Where does the water come from?
- . How much fluoride is in the water?
- · How is the water system governed?
- What are the capital costs of initiating fluoridation?
- · Learning the area's fluoridation history
- Developing a steering committee or coalition
 - · Prepare for the first meeting
- Developing a communication plan
 - · Develop a problem statement
 - Develop a facts statement/question and answer sheet
- Identify spokespersons and draft a sample talk
- Provide training on the media
- · Work with the media
- Educate community educators
- · Suggested educational opportunities

o Defining a project plan

- Review the planning documents in Appendix A
- · Meet with your leadership team

Assessing the Region's Water Supply

Start by identifying the geopolitical boundaries of the regional area to be served. There may be one or more water districts within a county or regional area. The California State Water Resources Control Board, Division of Drinking Water (DDW) can be consulted to identify the water districts in your county or areas. DDW divides California into 24 districts, which can be seen with the contact information for each, on the page 7 map. 12

For your water district, review your water bill to identify the water agency or agencies that supply your drinking water.





Communication in a Fluoridated Community

- Create website or pages linked to your Oral Health Program.
- Use sources such as ilkemyteeth.org.
- Employ social media.
- Extend your messaging:
 - Integrate your efforts with rethink your drink, nutrition, wellness programs and maternal and child health messaging.
 - Work with outside organizations that have a shared audience to integrate your message into theirs.





Communication in a Fluoridated Community

- Train community health workers to be effective in their communication with families.
- Develop materials to share with families in appropriate languages.
- Connect with your local Dental Society: Offer a presentation about your work in the community and schools.
 - Incorporate communication about fluoridation.
- Don't lose the relationship of fluoridation to oral health.





Communication in a Non-Fluoridated Community

- Develop a problem statement. Talk about the state of oral health in your community.
- Gather school screening data.
- FQHC's and dental clinics can provide data and support.
- Educate the educators—turn to dentists in your community.
 - Link with local dental society executives.
- When appropriate, educate the decisions makers.





Communication in a Non-Fluoridated Community

- Initiate one-to-one dialogues with decision makers.
 - Be prepared with data specific to your community.
- Invite decision makers to a dental clinic to educate them about the state of oral health in your community.
- Invite key leaders to a CDA Cares event in your community to illustrate firsthand the need for fluoridation.
- Focus on the state of oral health. Fluoridation is one remedy.





II. Education and Advocacy

The plan developed in Section I indicates who is likely to support or oppose fluoridation. Once the plan has been finalized, education and advocacy efforts can begin. Before beginning, it is important to note the key differences between education, advocacy and lobbying.

Education: Education is the foundation of your plan and includes creating written materials, websites or social media explaining the safety and benefits of fluoridation.

Advocacy and Lobbying: Advocating for fluoridation requires the joint efforts of a core group of individuals and organizations working toward the common goal of enacting this local health policy.

The National Association of County and City Health Officials (NACCHO) provides useful definitions of Advocacy and Lobbying⁴². (see next page)



What is Advocacy?

Advocacy is the "promotion of an idea that is directed at changing a policy, position, or program at an institution." (IRS, 2016) Advocacy is a strategy that aims to draw attention to or educate a policymaker on a particular issue. Health advocacy includes educating policymakers and the public about evidence-based policy. Advocacy can often be non-partisan and based in research and analysis.

Effective advocacy can do the following:

- · Build relationships with policymakers.
- Educate and influence a policymaker or lawmaker's decision.
- Alter existing policies, laws, and budgets.
- Encourage the creation of new programs.

What is Lobbying?

Lobbying is the attempt to influence a legislative body through communication with a member or employee of the legislative body or with a government official who participates in constructing legislation. Lobbying can include written or oral communication for or against specific legislation. Rules about lobbying vary according to local jurisdictions. Check the rules in your local health department.

The National Conference of State Legislatures lists state definitions of lobbying and lobbyist. $\frac{43}{2}$

TIP It is best to check with your administrator before implementing your education and advocacy plan. Lobbying by local and state government employees is generally prohibited. See Fluoridation Education and Advocacy Checklist in Appendix B.





Planning for Advocacy

- A community must own the task of fluoridating the water supply.
- Education is the foundation of your plan and includes creating written materials, websites or social media explaining the safety and benefits of fluoridation.
- Advocacy requires the joint efforts of a core group of individuals and organizations working toward the common goal of enacting local health policy.
- Your role is not to perform each of the required tasks but to provide a foundation on which to build your oral health coalition.



ANSWERS TO ALL YOUR FLUORIDATION QUESTIONS ILikeMyTeeth.org

Advocacy Activities Include:

- Engaging volunteers to build your coalition.
- Educating the educators and the community:
 - Approach local leaders, decision-makers, residents.
 - Include a science expert on your team.
- Obtaining letters of support for decision-makers.
- Preparing for a public forum.
- Researching and identifying possible funding agencies.



Educating the Community

Important: Your advocacy team must always include at least one scientific expert, preferably a dentist, physician, or professor of dentistry, medicine, or public health. Seek guidance from the California Oral Health Technical Assistance Center to identify an expert. These experts play a vital role in communicating the science of fluoridation. They are uniquely qualified to quickly dispel misconceptions about fluoride based on misinformation.

Local leaders and decision-makers have authority over the water system. Meet with each decision-maker individually so you can ask each other questions. Focus the meeting on the need for fluoridation.

Support your position with local data, the safety and benefits of fluoridation, and initial cost projections, if available, for implementing and maintaining the water system. Cost projections, however, are difficult to obtain without the input of a professional engineer.

If a scientist is not available to attend the meeting, offer to provide access to a science advisor to answer decision-makers' questions at the earliest opportunity. It is essential to counter misinformation promptly when dialoguing with city council members, the water system's board of directors, and the media.

Residents

Prepare handouts, press releases, a media kit, and any other type of media likely to be read. Identify existing educational networks in your community. Make your fluoridation information available to them. Local health organizations integrate information describing the safety and benefits of fluoridation into their messaging as one element of oral health management. The most effective educators are practitioners who can discuss oral health with patients in their own language. Relevant practitioners include dentists, dental hygienists, pediatricians, nurses, community health workers, family resource center staff⁴⁵ and promotores.

Consumers need to be able to approach their health care providers with questions. A one-on-one conversation with a trusted health provider is often the most successful means of informing consumers about fluoridation. See Appendix A for a sample script that walks health care providers through discussing fluoridation with patients.





Ensure that your community of dentists and pediatricians from the private and public sectors are informed about your educational efforts and are comfortable with the topic of fluoridation. Dentists, dental hygienists, and pediatricians are trusted professionals, well positioned to provide education on fluoridation. They also address questions patients raise about fluoridation. Community health workers and promotores³⁹ also engage with families about oral health. Provide these valuable contacts with addresses of informative websites and access to resources. such as the ADA's Fluoridation Facts⁴⁰. Offer lectures or workshops for interested professionals.



Obtaining Letters of Support for Decision-makers

As part of your advocacy effort, you must document, for the public record, the support you have obtained for fluoridation in the community. When seeking support from an organization or individual, request that they send you a letter of support, written on their letterhead, addressed to the governing body of the water system. Provide a template or sample letters.

Appendix A includes samples of the kinds of letters that might further your cause. Such letters and oral testimony can come from school nurses, surgery center staff, parents, dental patients or their parents, social workers, and family members. The letters should focus on personal experiences that tell stories about the impact of poor dental health on, for example, education, self-esteem, employment, health, and speech.

Request the opportunity to review the letter of support before it is sent. Most likely, a letter of support for fluoridation will require agency or board approval, so be sure to allow enough time to receive the letters. Ask an executive team member to review the letter. After the review, ask the writer to send the approved letter directly to the governing body of the system, that is, the mayor and council members or the board of directors. Contact the city clerk for specific directions.

Such letters alone will not ensure the success of your initiative, but they will document the fact that you have secured support for fluoridation in your community.

Researching and Identifying Possible Funding Agencies

See Section V Capital Funding

Preparing for a Public Forum

Complete the following preparations before participating in a public forum.

- Offer to train steering committee and collaborative members on how to speak with media and handle media inquiries.
- Prepare speakers to respond effectively to opposing arguments based on misinformation posed by individuals or the media.
- Encourage speakers to practice answering the 3-4 toughest questions they might anticipate, avoiding using defensive language (for example, "It is not true that...").
- Provide sample scripts to those who will testify before a public body. These could be adapted from the sample talk that your coalition has created for its spokespersons.
- Check in with the board secretary or city clerk to acquaint yourself with how the council or board of directors works.
- Find out how much time each speaker will have.
- Plan what each speaker will address to avoid repeating the same points.
- If it is available, review the staff report.
 This report is usually prepared by a city manager at the request of a city council or by a general manager at the request of a board of directors. The staff report might include a recommendation for or against fluoridation.





The First 5 years.
Make them count.

January 26, 2016

The Honorable Barbara Keegan Chair, Santa Clara Valley Water District 5750 Almaden Expressway San Jose, CA 95118-3686

Dear Chair Keegan:

On behalf of FIRST 5 Santa Clara County, I am writing to express our continued support for community water fluoridation. Tonight's approval of the Fluoridation Construction Contract is an important milestone in realizing the policy the Board adopted on November 15, 2011 to fluoridate the District's three water treatment plants. We thank the Board for its leadership to fluoridate the District's water treatment facilities.

Tooth decay is the most common chronic disease found in young children, and one effective method to prevent tooth decay in children is fluoridation. In Santa Clara County, roughly 50 percent of low-income children have a history of cavities before they enter Kindergarten. Oral health diseases can affect children's growth, speech development, nutritional intake, and overall quality of life. As a leading provider of programs and services for children prenatal through age 5 in Santa Clara County, FIRST 5 is committed to ensuring that children are born healthy and stay healthy. Our Health & Wellness Initiative takes a multi-pronged approach to prevent oral health diseases and ensure optimal oral health for our youngest children. This is why FIRST 5 Santa Clara County has committed over \$1 million to the implementation of fluoridation at the District's water treatment plants, along with The Health Trust and the California Dental Association. Some children in our County have enjoyed the benefits of fluoridated water for decades. We are committed to health equity and believe that all children in Santa Clara County should have access to the same health benefits.

We are proud to stand as a funder and supporter of community water fluoridation and oral health disease prevention. Thank you again for your actions to ensure that children in Santa Clara County experience optimal oral health.

Sincerely,

Jolene Smith, Chief Executive Officer

Jolen Smith



Letter from a School Nurse

I have worked as a Registered Nurse in (location) for eight years and have been a Public Health Nurse working with very low-income school-age children for six of those years. I have seen lots of injuries and illnesses over the years. Tooth decay is a health issue that can easily be prevented in children with fluoride. However, most of the city does not have fluoridated water and many children suffer.

While I worked at a school site one day, Rita (not her real name) came into the school office crying and holding her left cheek. When I asked Rita what happened, I expected her to say she was hit with a ball on the playground. Instead, Rita said she had a toothache. She had been up all night because of the pain and now her head was throbbing. She couldn't stand the pain anymore. I called Rita's parents and had them pick her up from school. She had trouble paying attention in class because of the pain. If she stayed in class, her crying would have distracted other students. I asked Rita's parents to take her to the dentist as soon as possible.

As soon as possible turned out to be several days later. Rita missed a total of five days of school because the dentist could not treat Rita right away and she missed one day for the procedure and one day after to recover. Rita lost valuable classroom learning time because of her toothache. She was also embarrassed and ashamed for having "rotten teeth."

Water fluoridation could have helped prevent Rita's pain and suffering and keep her in school. It also could have saved money because one of her parents couldn't work while caring for Rita. It also would have been more cost effective than Rita's dental procedure. Rita is just one child, out of thousands in this area, who could benefit from water fluoridation, regardless of income level or access to dental care.





IV. Preventing or Reversing a Rollback

- A Rollback is the cessation of fluoridation.
 - It can happen after many years of fluoridation.
- Investigate the reason for the proposed Rollback.
 - Why was the cessation of fluoridation proposed?
 - Who initiated?
 - Was it cost?
 - If funding, can you help locate resources?
 - Was it opposition to fluoridation?
- Form a coalition and mobilize your community.
- Do not wait to respond!



Marjorie Stocks Marjorie.Stocks@ucsf.edu







Mark Bartson





Stay Informed with the Conference App



Fluoridation – Essential Information & the Role of the Operator

Mark J. Bartson, P.E. University of California, San Francisco

Outline

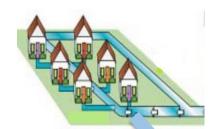
- 1. Regulatory requirements
- 2. State Water Board field review
- 3. Results of UCSF Operator Survey
- 4. Training Resources & References

Essentials for Success

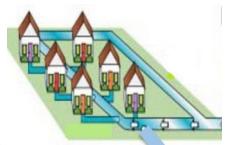
- Understand Regulatory requirements
- Be aware of specific permit requirements
- ☐ Communicate with regulators

Percentage of population fluoridated water

National	73%
California	58%



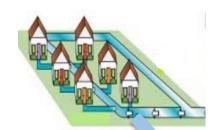




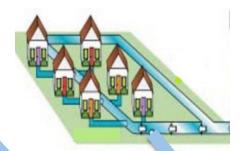


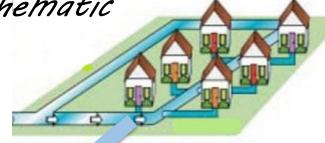
Source 1

Flow & Fluoride







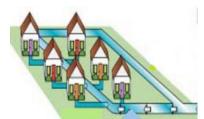


Source 1

Flow & Fluoride level

Source

Flow & Pauoride level



What is the fluoride level?

Zone $2 = 0.2 \,\text{mg/l}$ (?)

ZOITE 2

Zone 1 = 0.5 mg/l (?)

500 gpm @ 0.6 mg/l

1,000 gpm @ 0.1 mg/l

Types of Fluoridation

- 1. Fully fluoridated systems
- 2. Partially Fluoridated systems
- 3. Naturally Fluoridated systems
- 4. Non-fluoridated systems

Typical reasons for Partial Fluoridation

- ✓ Seasonal Use of Local Sources that are not Fluoridated
- ✓ Peak demand use of Un-fluoridated water
- ✓ Only the Wholesale purchased water is Fluoridated.

California Statistics	
Number of community systems	~2,950
Number that are FULLY fluoridated	91
Number that are PARTIALLY fluoridated	79
Percentage of population receiving fluoridated water	58%

State Regulations on Fluoridation	
64433	System Requirements and Exemptions
64433.2.	Optimal Fluoride Levels
64433.3	Monitoring and ComplianceFluoride Levels
64433.5	Fluoridation System
64433.7	Record-keeping, Reporting, and Notification
64433.8	Fluoridation System Operations Contingency Plan
64590	Drinking Water Direct Additives

Challenges related to fluoridation system

- 1. Metering pump issues; saturator clogging
- 2. Corrosion of Equipment
- 3. System design
- 4. More training needed on Safety and Sampling/operation

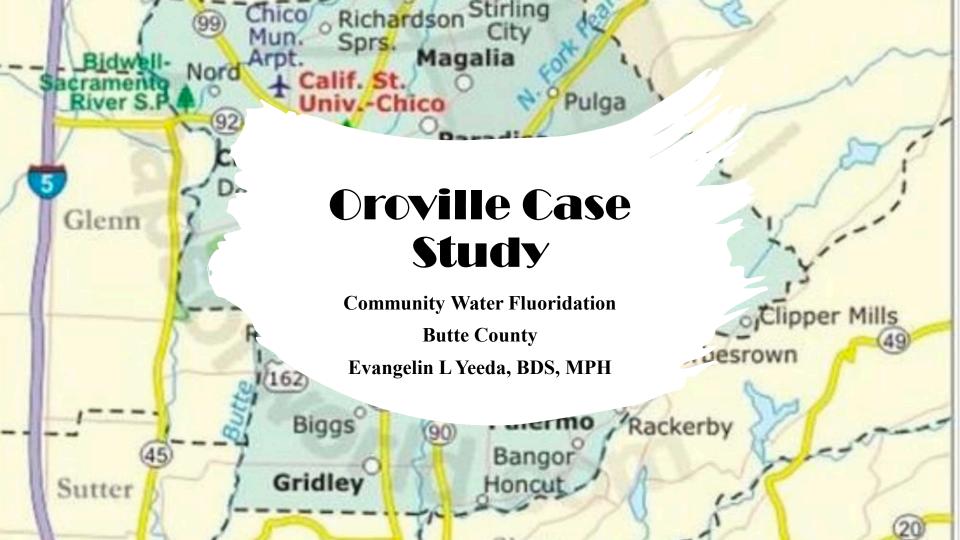
AWWA Fluoridation Policy Statement

Supports the recommendations of the World Health Organization (WHO), American Medical Association (AMA), Canadian Medical Association (CMA), Centers for Disease Control (CDC), American Dental Association (ADA), and Canadian Dental Association (CDA), for the fluoridation of public water supplies as a public health benefit...

Oroville Case Study

Evangelin Yeeda





Oroville Demographics

• Oroville, California 2024 Population: 20,124

• White: 66.47%

• Asian: 12.08%

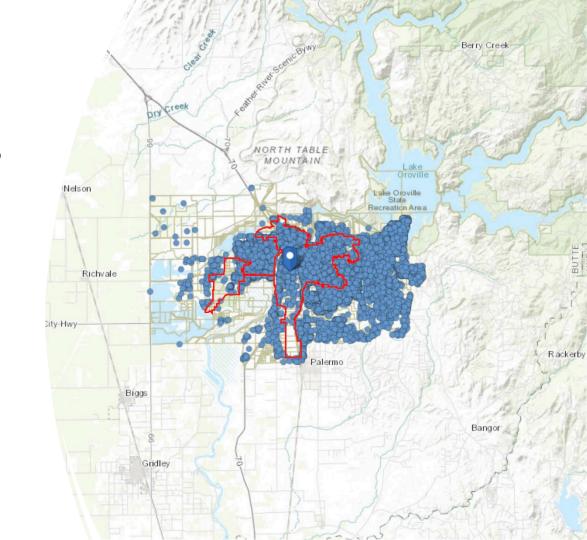
• Two or more races: 11.82%

• Black or African American: 3.82%

• Other race: 3.53%

• Native American: 2.11%

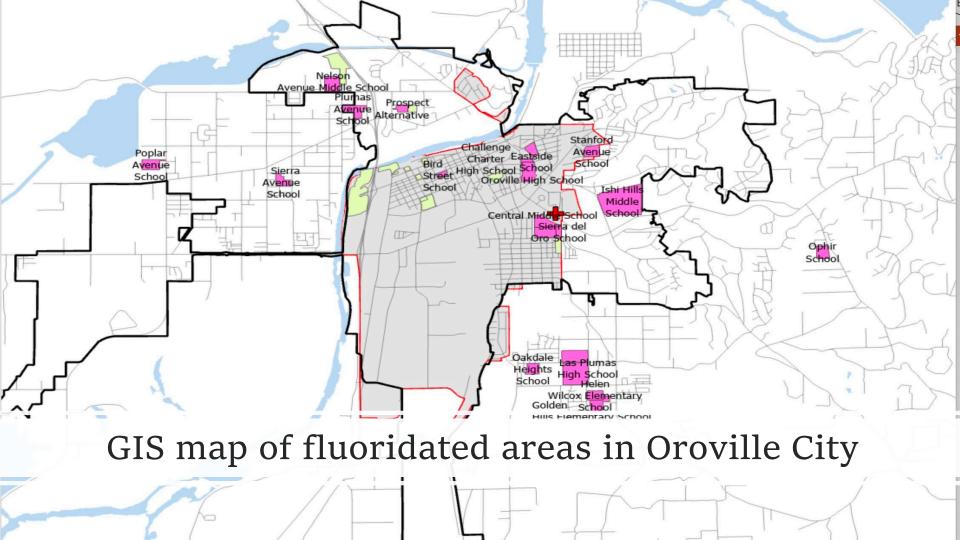
• Native Hawaiian or Pacific Islander: 0.17%





Oroville considers lifting fluoride requirement

- May 20, 2024: Oroville water fight.
- Oroville is the only city in Butte County to fluoridate its water.
- According to the 2022 water report, Cal Water has provided high-quality water utility services in Oroville since 1927.
- During the city council meeting, Cal Water Operations Manager, Loma Lind, mentioned that Oroville requested to fluoridate their water in 1954.
- In 1957, the bill was passed to fluoridate the water in Oroville.





Our Work

- During KOHA's assessment, we found that 1 in 10 children had visible decay and 1 in 10 had emergency visits in the past three years at Stanford Elementary School in Oroville.
- We educate the community through "Rethink Your Drink" campaigns in schools and Federally Qualified Health Centers (FQHCs).

Advocating for continuing water fluoridation

- On May 21st, at the first city council meeting, public health professionals addressed the water fluoridation issue by giving public comments.
- Angela Martin, Program Manager, gave a public comment, presenting facts from California's Fluoridation Manual on how fluoride helps prevent cavities.
- She requested to take this issue to the next meeting to bring experts from UCSF and California.

News Articles:



Fluoride water fight in Oroville

By: Sade Pullen May 20, 2024 Updated May 20, 2024

on News Now reporter Sade Pullen tells us more.

OROVILLE, Calif. - On Tuesday night, the Oroville City Council will consider lifting the fluoride requirement in city water.

Action News Now spoke with an Oroville council member, a Cal Water manager and a

Oroville plans to lift fluoride requirements – Chico Enterprise-Record







Fluoride ingestion a personal choice, say Oroville councilors



TRENDING NATIONALI

NYC to see dang week: How hot v it last?

Puerto Rican mu battling cancer

Why is the NFL 'Sunday Ticket' j

How Disneyland their share of \$9 settlement

John Oliver Bear bonanza for food

Challenges

- All the city council members are against community water fluoridation.
- Without the involvement of public health professionals in advocacy, the law would have passed.
- Many individuals, including some dentists and public health medical officers, spoke against fluoride, citing its effects on pregnancy based on anti-fluoride social media pages.
- One challenge is the article on fluoride from Gridley.

STORM TRACKER WEATHER | Forecast

ACTION NEWS NOW: | Download Our Apps | Sign Up For Email Alerts

https://www.actionnewsnow.com/news/some-schools-in-south-butte-county-plagued-with-contaminated-drinking-water/article_ddd3eec4-1d02-11ed-9949-2b0761251906.html

Some schools in South Butte County plagued with contaminated drinking water

By: Tori Apodaca

Aug 15, 2022

Letter of Support and Experts guidance

- Formed an expert coalition on water fluoridation.
- Received letters of support for continuing water fluoridation from the California Dental Association (CDA), public health professionals from Oroville city, local dentists, and the dental society.
- Conducted an oral health community survey, revealing that 66% of respondents in Butte County support fluoridation, with 25% of them being from Oroville city.



June 14, 2024

David Pitman, Mayor Eric Smith, Vice Mayor Tracy Johnstone, Councilmember Janet Goodson, Councilmember Shawn Webber, Councilmember Scott Thomson, Councilmember Krysti Riggs, Councilmember

City of Oroville 1735 Montgomery Street Oroville, CA 95965

RE: Oroville Community Water Fluoridation

Dear Oroville City Councilmembers,

The California Dental Association (CDA), representing 27,000 member dentists across the state, respectfully writes to express our support for the continuation of optimal community water

Present Situation

- On June 4th, we had a second hearing on the water fluoridation issue in Oroville.
- The city wants the community to make the choice rather than experts.
- We have a relationship with one of the city managers and are coordinating with him on the next steps.
- We hope community water fluoridation continues in the city of Oroville.

Sacramento Case Study

Jennifer Fitzpatrick

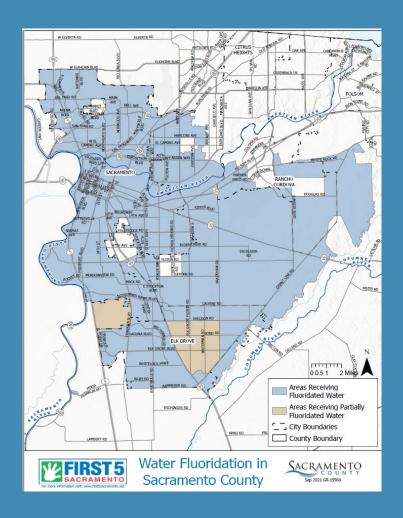




TAP INTO A HEALTHY SMILE!



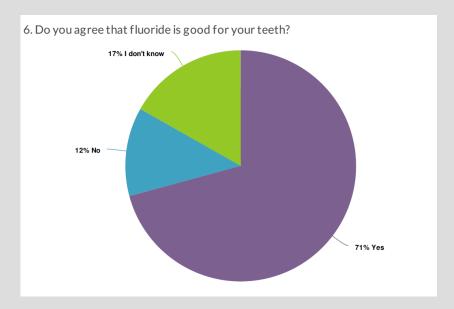


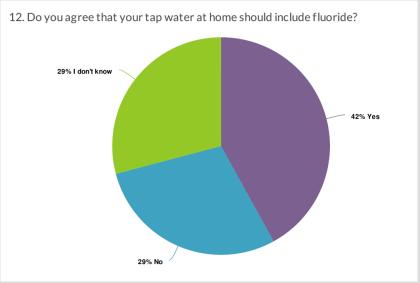


SACRAMENTO COUNTY

- 9 out of 27 districts provide optimally fluoridated water
- 885,470 (65%) residents have access to fluoridated drinking water

2020 COMMUNITY DRINKING WATER SURVEY

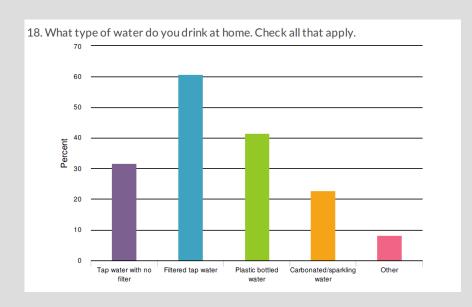


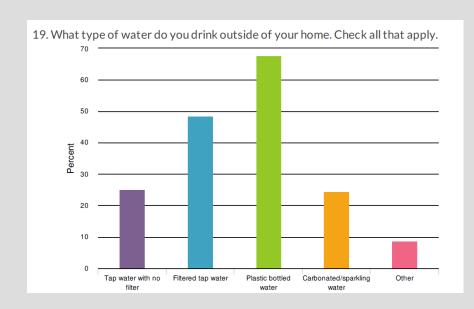


71% agree that fluoride is good for teeth

42% agree that tap water should include fluoride

2020 COMMUNITY DRINKING WATER SURVEY





41% drink plastic bottled water at home

67% drink plastic bottled water outside of home

PAID SOCIAL MEDIA CAMPAIGN

- Ads targeted and boosted to caregivers of young children
- Promote awareness and acceptance of drinking fluoridated tap water
- Drive traffic to the SCOHP webpage on community water fluoridation



Water with fluoride helps smiles stay healthy for life!









www.saccountyoralhealth.net

Is your community helping smiles stay healthy?

Water with fluoride benefits everyone.

Turn on the tap and drink up!



- 618,961 total impressions
- 2,482 clicks to Sac County Oral
 Health website = 5x average
- Ad featuring "Tooth decay gets in the way of learning." received the most sustained interest
- Demographic: Female, aged 35-44 or 65+ years old







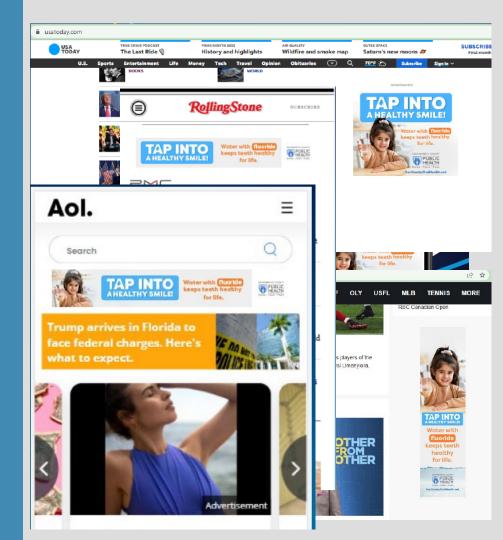


BILLBOARD AND TRANSIT SHELTER ADS

- 9 weeks/100 transit shelters located in fluoridated districts all over Sac County = 21 million impressions
- Electronic billboard display on Hwy 99 & Calvine Rd in Elk Grove
- Wall-sized poster hung in Public Lobby of Sac County main offices at 700 H Street

TARGETED MOBILE DISPLAY AD CAMPAIGN

- Re-targeting ads to mobile and desktop devices to enhance reach and drive engagement
- Ads targeted by location and audience to households with children living in fluoridated water districts
- Anticipating 1.1 million impressions



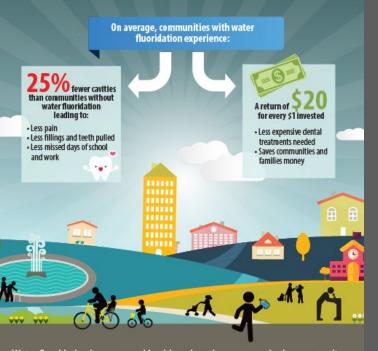


BRUSH-BOOK-BED IN A BOX

- BBB kits packed in sturdy mailing boxes featuring the "Tap into a Healthy Smile" water with fluoride message
- Classroom posters promoting awareness and acceptance of community fluoridated water
- Potter the Otter: A Tale
 About Water for classroom
 library

Communities Benefit from Water Fluoridation

Water fluoridation is safe, effective, and saves communities money.



Water fluoridation improves oral health and reaches everyone in the community.

Visit www.cdc.gov/fluoridation for information about community water fluoridation.

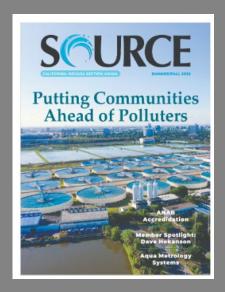
U.S. Department of Health and Human Services Centers for Disease Control and Prevention

KEY PARTNER OUTREACH AND EDUCATION

- Public Health Nurses
- Pediatric Primary Care Providers
- Dental Professionals
- Dental and Dental Hygiene Students
- School Nurses and Support Staff

For 75 years, you have helped people in the United States improve their dental health by adding fluoride to community drinking water. Thank You. Water with fluoride reduces cavities by about 25 percent over a person's lifetime. Thank you for providing this valuable service. 75 years and still going strong. SACRAMENTO COUNTY Oral Health Program

WATER OPERATOR AND ENGINEER OUTREACH







JENNIFER FITZPATRICK

HEALTH PROGRAM COORDINATOR

FitzpatrickJ@SacCounty.gov

916-875-4507



Marin Case Study

Danika Ng





Marin County LOHP Fluoridation Social Media Messages





Background: Marin County and Community Water Fluoridation

- Estimated Population: 262,321
- Primary Water Districts:
 - North Marin Water District:
 - Population Served: ~63,940
 - Area Served: Novato area, some West Marin
 - Marin Municipal Water District:
 - Population Served: ~192,961
 - Area Served: Southern, Central, and some West Marin







Background: Marin County and Community Water Fluoridation

- Areas with Community Water Fluoridation:
 - All areas served by Marin Municipal Water District
 - Majority of Marin County's population
 - Has been fluoridating since around 1973
 - No plans to change fluoridation procedures
- Areas w/out Community Water Fluoridation:
 - All areas served by North Marin Water District
 - Receive their water from Sonoma County Water Agency, which does not fluoridate
 - Predominant areas of West Marin
 - Significant portion of population uses well water







Keeping Fluoridation Up Front without "Rocking the Boat"

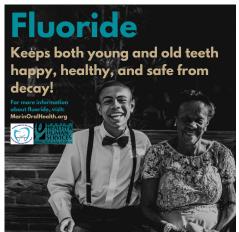
- Subtle Messaging
 - Educational messaging:
 - Utilizing language regarding "drinking water, preferably fluoridated" or benefits of fluoridated tap water vs. bottled water
 - Social media messaging:
 - Some more overtly promoting the use of fluoride and community water fluoridate while others are more subltle







Examples of Fluoride- specific Messages:









Examples of Community
Water Fluoridation/Drinking _
Fluoride Water Messages







Marin LOHP Website Resources

 Marin LOHP's website (<u>www.marinoralhealth.org</u>) also boasts many resources for the community regarding community water fluoridation, importance of drinking fluoride water, and general fluoride use.

Fluoride and Sealants Resources

- CDPH Community Water Fluoridation Factsheet
- California's Water Systems that are Fluoridated
- Fluoride Varnish Helping Smiles Stay Strong
- · Dental Health and Fluoridation
- · Fluoride Myths and Facts
- Dental Sealants Most States Lag on Dental Sealants
- CDC Information on Community Fluoridation
- Fluoride: Campaign for Dental Health

Infographics for Infants / Children

- · Protect Tiny Teeth
- · Milestones for Mini Mouths
- · Rethink Your Drink: Healthy Drink Race
- · Why Do Children Need Fluoride?
- Common Questions About Fluoride
- Healthy Tips from Potter the Otter
- Teach Your Children About Oral Hygiene



Choose Oral Health Friendly Drinks

December of DDE

Oral Health Activites for Children (All Activities From the American Dental Association):

- Tooth Brushing Calendar (English), (Spanish)
- Dental Crossword Puzzle (English), (Spanish)
- Dental Maze (English), (Spanish)
- Fluoride is Important Coloring Page (English), (Spanish)
- Children Dental Activity Set (English), (Spanish)



The Dental Decay Process

Download PDF



Healthy Snacks For Your Teeth

Download PDF

How Community Water Flouridation Prevents Tooth Decay

Fluoridation Prevents Tooth Decay

For children

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How Community Water

Inter-Department Public Health Partnerships

- Marin County LOHP resides within the Community Health and Prevention (CHP) unit of Public Health
- •Residency allows for collaboration between different Public Health programs, including the Nutrition Wellness Program, Tobacco Control, and many others.
- Collaborations like these allow for information guidance from subject matter experts and support for program implementation
- •With Community Water Fluoridation, the most significant partners are within the Nutrition Wellness Program (NWP)







NWP Support of Fluoride Water

- NWP Team has historically sat on our OHAC and OH Workgroups, and provided subject matter expertise on nutritional tips and rethink your drink
- Through Rethink Your Drink messaging, have shared the message of drinking fluoridated water as a protective measure for teeth in both formal presentations and outreach events.

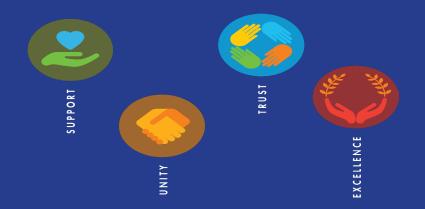


Rethink Your Drink

- · Water is healthiest drink available
- · Our bodies are made of 60% water
- Water helps your body get rid of waste products, gives your skin a healthy glow and keeps your muscles moving
- Drinking water really helps your teeth stay healthy – especially if it's fluoridated







Thank You!

Danika Ng, MPH
Danika.ng@marincounty.gov
www.MarinOralHealth.org





Thank You

