



## Community Water Fluoridation

### **IMPORTANCE:**

Dr. C. Everett Koop, Surgeon General of the United States, 1981-1989: "Fluoridation is the single most important commitment a community can make to the oral health of its children & to future generations."

Centers for Disease Control & Prevention statement: "For 65 years, community water fluoridation (CWF) has been a safe and healthy way to effectively prevent tooth decay." "CDC has recognized water fluoridation as one of 10 great public health achievements of the 20th century."

### **SAFETY:**

American Public Health Association policy: The scientific evidence base continues to support CWF as a safe and effective public health measure. Reviews of the scientific literature on the health effects of fluoride in the last 18 years have been conducted by:

- The National Health and Medical Research Council, Australian Government (2007);
- National Research Council, USA (1993, 2006);
- World Health Organization (1994, 1996, 2006);
- US Agency for Toxic Substances and Disease Registry (2003);
- International Programme on Chemical Safety, World Health Organization (2002);
- Forum on Fluoridation, Ireland (2002);
- Medical Research Council, UK (2002);
- University of York, UK (2000);
- Institute of Medicine, USA (1999);
- Health Canada (1999);
- Lewis and Banting, Canada (1994);
- US Public Health Service (1991); and
- Kaminsky et al., New York State Department of Health (1990).

In addition, the environmental impact of CWF has been reviewed. All of these reviews have found CWF to be safe and effective. Opponents have claimed potential toxicity from fluoridated water, but none of these claims has been supported by studies of scientific merit.

### **CURRENT STATUS:**

CDC data 2008: The number of communities and people who benefit from water fluoridation is continuing to increase. This safe, healthy, and effective public health intervention was initiated in 1945. In 2008, 72.4% of the U.S. population on public water systems, or a total of 195,545,109 people, had access to fluoridated water.

"One of water fluoridation's biggest advantages is that it benefits all residents of a community—at home, work, school, or play," said HHS Assistant Secretary for Health Howard K. Koh, MD, MPH. "Today's announcement is part of our ongoing support of appropriate fluoridation for community water systems, and its effectiveness in preventing tooth decay throughout one's lifetime."

"Today both HHS and EPA are making announcements on fluoride based on the most up to date scientific data," said EPA Assistant Administrator for the Office of Water, Peter Silva. "EPA's new analysis will help us make sure that people benefit from tooth decay prevention while at the same time avoiding the unwanted health effects from too much fluoride."

*Internet Resources on Fluoride & Fluoridation:* [www.ada.org](http://www.ada.org)

### **FLUORIDATION FACTS:**

Fluoride is nature's cavity fighter, with small amounts present in all water sources. CWF simply adjusts the level of fluoride in water to what is considered an optimal level to protect your teeth.



Adding fluoride to drinking water is like the addition of vitamin D to milk, iodine to table salt, and folic acid to bread and cereals.

The American Dental Association unreservedly endorses the fluoridation of community water supplies as safe, effective and necessary in preventing tooth decay. This support has been the Association's position since policy was first adopted in 1950. The American Dental Association's policies regarding CWF are based on the overwhelming weight of credible, peer reviewed, scientific evidence.

Challenges: CWF has been shown to be the most cost-effective public health measure for the primary prevention of dental caries and has been shown to be the most effective public health strategy to reduce disparities in dental caries between ethnic and racial groups. Yet, the US public is generally uninformed about the appropriate use of fluoride and CWF, and information available to the public on CWF is not always evidence based. (APHA Policy 2008)

## THE AMERICAN PUBLIC HEALTH ASSOCIATION:

- Recommends that federal, state, and local agencies and organizations in the United States promote water fluoridation as the foundation for better oral health;
- Recommends promotion and increased support by federal, state, and local entities for adequate public health infrastructure to ensure safe and effective water fluoridation practices, including monitoring, training, technical and financial assistance, and promotion to expand and maintain water fluoridation programs;
- Recommends increased support by federal agencies for continued research on the safety and effectiveness of water fluoridation and other measures to deliver fluoride to communities and individuals, including effective programs and long-term outcomes;
- Supports efforts to educate public health and other

When fluoridated water is consumed while the bones and teeth are still growing, fluoride works in two ways.

## HOW FLUORIDE WORKS

Fluoride mixes with saliva to reach the surface of the teeth, where acid from bacteria in the mouth can cause damage. Fluoride heals that damage and shields teeth from further decay.

Fluoride is absorbed into the bloodstream through the stomach, and enters the teeth and bones.

Fluoride combines with the phosphate and calcium to create a strong barrier to protect teeth from cavities. Fluoride makes teeth stronger and able to withstand the acid produced by bacteria found in the mouth.

health professionals, decision-makers, and the public on CWF and other appropriate uses of fluoride in the prevention of tooth decay;

- Recommends that bottled water manufacturers offer an option of bottled water with an optimal level of fluoride, and that all bottled water be labeled with its fluoride concentration.

For additional information on , please contact the author of this brief:

**Howard Pollick, BDS, MPH**  
UCSF School of Dentistry  
Department Preventive & Restorative Dental Sciences  
707 Parnassus Ave, Dentistry  
San Francisco, CA, 94143  
[Howard.Pollick@ucsf.edu](mailto:Howard.Pollick@ucsf.edu)

# LEGISLATIVE AND EXECUTIVE RESOURCE HANDBOOK



## REFERENCES:

*Government Action & Communication Institute (GACI) has partnered with the Pacific Center for Special Care at the University of the Pacific, Arthur A. Dugoni School of Dentistry to distribute this brief as part of their legislative and executive education and training efforts through generous funding from the San Francisco Foundation.*

*APHA Policy Statement: Community Water Fluoridation in the United States 2008: [www.apha.org](http://www.apha.org)*

*ADA Fluoridation Policy & Statements: [www.ada.org](http://www.ada.org)*

*Centers for Disease Control and Prevention: Community Water Fluoridation: [www.cdc.gov](http://www.cdc.gov)*

*National Center for Fluoridation: [waterfluoridationcenter.org](http://waterfluoridationcenter.org)*

*The Campaign for Dental Health: [www.ilikemyteeth.org](http://www.ilikemyteeth.org)*