

Optimal Fluoride Level Recommendations

Community Water Fluoridation



Oral Health in Wisconsin — A Fact Sheet

Introduction

The U.S. Department of Health and Human Services (HHS) recently recommended that the fluoride level in fluoridated drinking water be set at 0.7 milligrams per liter (mg/L). In response to this new recommendation, the Department of Health Services has updated guidance for Wisconsin Public Water Systems (PWS) that participate in community water fluoridation. The recommended optimal fluoride level for Wisconsin PWS is 0.7 mg/L. This recommendation, based on the latest scientific research and guidelines established by HHS, is the lowest effective level of fluoride that will ensure optimal oral health benefits. Health officials remain highly supportive of fluoridated water's value and confident of its safety.

Fluoride is a mineral that exists naturally in nearly all public water systems. Research proves that at a certain level in drinking water, fluoride prevents tooth decay. This optimal level is reached when a public water system makes adjustments by either increasing or lowering the fluoride level.

What is the public health issue?



Oral health is integral to general health.² Although preventable, tooth decay is a chronic disease affecting all age groups. Fluoride added to community drinking water has repeatedly been shown to be a safe, inexpensive and extremely effective method of preventing tooth decay. Because community water fluoridation benefits everyone in the community, regardless of age and socioeconomic status, fluoridation provides protection against tooth decay in populations with limited access to prevention services.

In Wisconsin, 55% of third grade students screened have experienced tooth decay.

In communities that initiated fluoridation, the decrease in childhood decay was almost 30% over a 3 to 12 year follow-up period.³

The American Academy of Pediatrics, the American Dental Association, CDC and other leading health and medical organizations support water fluoridation as a safe, effective strategy to reduce tooth decay.



What impact will the new fluoride level have on Americans who are served by a public water system that's fluoridated?

First, it will continue to protect teeth by helping to reduce tooth decay. Second, the new level will minimize the chances of fluorosis, a condition that typically causes a minor discoloration of teeth that is usually visible only to a dentist.

Water fluoridation helps to prevent tooth decay, but is that really a concern in the U.S. anymore?

Yes, it remains a concern. Although dental health has improved for many Americans, tooth decay remains the most common chronic childhood disease and is five times more prevalent than asthma. Tooth decay causes problems that affect children's schooling and can last long into adulthood, potentially harming their ability to get jobs.

If I use fluoridated toothpaste, am I getting enough fluoride to protect against decay?

No. Using toothpaste alone would leave teeth unprotected for several hours in the day. However, if you also drink fluoridated water, teeth are protected with low levels of fluoride in the saliva until the next brushing.

What if my community leaders have questions, are approached by a concerned citizen or are considering discontinuing the community water fluoridation program?

If you become aware of community water fluoridation activity in your community, you should notify the oral health program. The Wisconsin Division of Public Health's fluoridation program coordinator has the educational resources to assist community leaders in the decision making process.

Reasons to Fluoridate Public Water

- ✓ **For more than 65 years, the best available scientific evidence consistently indicates that community water fluoridation is safe and effective.**
- ✓ **The average lifetime cost per person to fluoridate a water supply is less than the cost of one dental filling. For most cities, every \$1 invested in water fluoridation saves \$38 in dental treatment costs.⁴**
- ✓ **The Healthy People 2020 goal is for 79.6% of the population on public water systems to have access to fluoridated water. In Wisconsin, 90% of the population on public water receives fluoridated water.**
- ✓ **Fluoridation is safe and provides benefits that continue for a lifetime.**
- ✓ **An estimated 51 million school hours are lost each year due to dental-related illness.**

References

1. Centers for Disease Control and Prevention. Fluoridation of drinking water to prevent dental caries. *Morbidity and Mortality Weekly Report* 48 (1999): 933-40.
2. U.S. Department of Health and Human Services, National Institute of Dental and Craniofacial Research. Oral Health in America: A Report of the Surgeon General. Rockville, MD: U.S Department of Health and Human Services, National Institute of Dental and Craniofacial Research, 2000.
3. Truman BI, Gooch BF, Sulemana I, et al., and the Task Force on Community Preventive Services. Reviews of evidence on interventions to reduce dental caries, oral and pharyngeal cancers, and sports related craniofacial injury. *American Journal of Preventive Medicine* 23 (2002, 1S): 1-84.
4. Griffin S.O., Jones K, Tomar SL. An Economic Evaluation of Community Water Fluoridation. *J Publ Health Dent* 2001; 61 (2): 78-86.
5. The Pew Children's Dental Campaign. <http://www.pewstates.org/research/analysis/water-fluoridation-frequently-asked-questions-85899379776>

For more information contact:



Department of Health Services

Division of Public Health

Oral Health Program

PO Box 2659

Madison WI 53701-2659

(608) 266-0876

P-00457 (1/2013)