

Fluoride Addition Facts

Marion, Howell, Ocala, Genoa (MHOG)
Sewer and Water Authority (SWATH)



Community water fluoridation is the adjustment of the *natural level* of fluoride in the drinking water system to the level recommended for optimum dental health. The U.S. Public Health Service recommends a target concentration of 0.7 parts per million (ppm) for optimal dental health. MHOG water has approx. 0.13 ppm of natural fluoride. An additional 0.4 ppm of fluoride is applied at the MHOG water treatment plant, bringing the total fluoride in the system to approximately 0.7 ppm.

10 Reasons to Fluoridate Public Water

1. Fluoridation of the public water supply was first instituted on January 25, 1945, in Grand Rapids, Michigan. Studies in eight communities (four with fluoride addition, four without) comparing rates of tooth decay documented persuasive evidence of its effectiveness in decreasing tooth decay in children. As a result, other U.S. cities rapidly adopted this preventive intervention.
2. Currently, 74.4% of the population or more than 211 million people on public water systems receive fluoridated public water¹. The "Healthy People 2020" objective is to raise this number to 79.6% by 2020². In Michigan, approximately 7.5 million people receive optimally fluoridated water, representing nearly 92% of the population.
3. Fluoridation is the single most effective public health measure to prevent tooth decay and to improve oral health for a lifetime, for both children and adults³.
4. Studies prove water fluoridation continues to be effective in reducing tooth decay by 20-40% even in an era with widespread availability of fluoride from other sources, such as fluoride toothpaste.
5. Dental caries, commonly known as tooth decay or cavities, is an infectious multifactorial disease in which acid from bacteria dissolve the enamel of a tooth. This often results in pain and loss of tooth structure. Fluoride works by keeping the tooth strong by preventing the loss of minerals from the enamel as well as facilitating the uptake of minerals into the tooth.
6. The Centers for Disease Control and Prevention (CDC) has proclaimed community water fluoridation one of the 10 great public health achievements of the 20th century.
7. Community water fluoridation is endorsed by the American Cancer Society, the American Dental Association, the American Academy of Family Physicians, the American Academy of Nurse Practitioners, American Nurses' Association, the American Medical Association, and over 100 other national and international organizations that recognize the public health benefits of community water fluoridation for preventing dental decay.
8. During the past 40 years, over 4,000 studies have measured and confirmed the safety of fluoride. Community water fluoridation has been studied more thoroughly than any other public health measure.
9. The average cost for a community to fluoridate its water is estimated to range from approximately \$0.50 a year per person in large communities to approximately \$3.00 a year per person in small communities⁴. The average cost for one dental filling is over \$100.00.
10. The benefits of reduced dental decay in Michigan are well documented. No adverse effects claimed by those who oppose water fluoridation have been documented in any of the 7.5 million of Michigan's citizens who receive either naturally fluoridated water or community water that has been fluoridated.

1. CDC Water Supply Statistics, 2014.
2. Water Fluoridation Reporting System (WFRS); Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion (CDC/NCCDPHP) 2014.
3. Richard H. Carmona, MD, MPH, FACS, VADM, USPHS U.S. Surgeon General July 2004.
4. Griffin SO, Jones K, Tomar SL. An economic evaluation of community water fluoridation. J Public Health Dent 2001; 61 (2):78-86.

