

Fluoridation: The Foundation of Cavity Prevention

The Importance of Prevention

- ▶ Tooth decay remains the most common chronic childhood disease in America.
- ▶ In New York State, one in four 3rd graders has untreated decay.¹
- ▶ By age 15, approximately 60% of all adolescents will have experienced tooth decay.²
- ▶ According to a recent report from the CDC, less than half of children through age 21 used dental care in the past year.³
- ▶ Tooth decay is a persistent and progressive disease. If it is not prevented, it must be treated or it can threaten a person's overall health.
- ▶ More than sixty-five years of research and experience have shown that prevention is the best way to avoid the pain, cost and other negative impacts of tooth decay. One effective, cost-effective, natural and safe way to prevent tooth decay is using fluoride.



- ▶ Thousands of studies have been published assessing the safety and effectiveness of fluoridation, including a number done by the New York State Department of Health. The evidence reinforces the safety of fluoridation and has led 125 national and international health organizations to recognize the benefits of the practice.

Recommendations

New York should promote good oral health for children and adults by protecting and expanding the use of community water fluoridation. The state can provide science-based information and technical assistance to help communities that want to add fluoride. New York should explore funding strategies for fluoridation systems to assist new communities in adding fluoride and to help communities replace aging equipment.

All New Yorkers deserve good oral health. Community water fluoridation is the best foundation to keep New Yorkers healthy and smiling.

How Fluoride Works

Fluoride works by being absorbed onto the surface of a tooth, where demineralization (the formation of tooth decay) has taken place. The fluoride remineralizes tooth surfaces (replaces lost minerals), actually reversing the effects of decay. Fluoride also helps to make teeth stronger and more resistant to future decay.

The Science of Fluoride

- ▶ Fluoridation, the practice of adjusting the level of naturally occurring fluoride to the optimal level, is the single most effective and least expensive way to reduce decay for both children and adults.
- ▶ It has been shown to reduce tooth decay by about 25% over a person's lifetime.⁴
- ▶ A 2010 study revealed that low-income children in less fluoridated counties of New York needed 33% more fillings, root canals, and tooth extractions than those in counties where optimally fluoridated water was available.⁵

Endnotes

- ¹ New York State Department of Health, 2012 NY Oral Health Surveillance Project
- ² Dye BA, Tan S, Smith V, et al. Trends in oral health status: United States, 1988–1984 and 1999–2004. *Vital Health Stat* 11;2007:1–92.
- ³ Griffin, S., PhD, Barker, L.K., MSPH et al, Use of Dental Care and Effective Preventive Services In Preventing Tooth Decay Among Children and Adolescents – Medical Expenditure Panel Survey, United States, 2003–2009, and National Health and Nutrition Examination Survey, 2005–2010. September 12, 2014 / 63(02);54–60
- ⁴ Centers for Disease Control and Prevention, Fluoridation Basics. July 25, 2013. Accessed at <http://www.cdc.gov/fluoridation/basics/>
- ⁵ Kumar J.V., Adekugbe O., Melnik T.A., “Geographic Variation in Medicaid Claims for Dental Procedures in New York State: Role of Fluoridation Under Contemporary Conditions,” *Public Health Reports*, (September–October 2010) Vol. 125, No. 5, 647–54.