DEPARTMENT OF HEALTH AND HUMAN SERVICES ISSUES FINAL RECOMMENDATION FOR PUBLIC WATER FLUORIDATION

In late April, the US Department of Health and Human Services (HHS) released the final Public Health Service recommendation for the optimal level of fluoride in drinking water to prevent tooth decay.

The new recommendation is for a single level of 0.7 milligrams of fluoride per liter of water. The adjusted level updates and replaces the previous recommended range (0.7 to 1.2 mg/L) issued in 1962.

In a news release, HHS said the change was recommended because “Americans now have access to more sources of fluoride, such as toothpastes and mouth rinses, than they did when water fluoridation was first introduced in the United States.” More fluoride has meant an increase in fluorosis, which in most cases manifests as barely visible white markings or spots on tooth enamel. “The new recommended level,” HHS said, “will maintain the protective decay prevention benefit of water fluoridation and reduce the occurrence of dental fluorosis.”

Fluoride occurs naturally in water systems but often at levels too low to prevent tooth decay. For the past 70 years, communities across the United States have added fluoride to their public drinking water to improve the oral health of their residents. Nearly 75% of Americans served by public water systems receive fluoridated water.

“While additional sources of fluoride are more widely used than they were in 1962, the need for community water fluoridation still continues,” said US Deputy Surgeon General Rear Admiral Boris D. Lushniak, MD, MPH. “Community water fluoridation continues to reduce tooth decay in children and adults beyond that provided by using only toothpastes and other fluoride-containing products.”


STUDENT USE OF E-CIGARETTES TRIPLES IN 1 YEAR, CENTERS FOR DISEASE CONTROL AND PREVENTION REPORTS

The use of e-cigarettes among middle and high school students tripled from 2013 to 2014, federal health information published in April showed.

Findings from the 2014 National Youth Tobacco Survey (NYTS) note that current e-cigarette use (using an e-cigarette at least 1 day in the past 30 days) among high school students increased from 4.5% in 2013 to 13.4% in 2014, rising from approximately 660,000 to 2 million students. Among middle school students, current e-cigarette use more than tripled, rising from 1.1% in 2013 to 3.9% in 2014, an increase from approximately 120,000 to 450,000 students.

Data published by the US Centers for Disease Control and Prevention (CDC) and the US Food and Drug Administration’s Center for Tobacco Products appeared in CDC’s April 16 issue of Morbidity and Mortality Weekly Report.

The CDC noted in a new release that this was the first time since the tobacco survey began collecting data on e-cigarettes that current e-cigarette use has surpassed current use of all other tobacco products overall, including conventional cigarettes. The survey showed that e-cigarettes were the most used tobacco product for non-Hispanic whites, Hispanics, and non-Hispanic other races. Cigars were the most commonly used tobacco product among non-Hispanic African Americans.

“We want parents to know that nicotine is dangerous for kids at any age, whether it’s an e-cigarette, hookah, cigarette or cigar,” said Tom Frieden, MD, MPH, CDC director. “Adolescence is a critical time for brain development. Nicotine exposure at a young age may cause lasting harm to brain development, promote addiction and lead to sustained tobacco use.”

In 2014, the products most commonly used by high school students were e-cigarettes (13.4%), hookah (9.4%), cigarettes (9.2%), cigars (8.2%), smokeless tobacco (5.5%), snus (1.9%), and pipes (1.5%).

Products most commonly used by middle school students were e-cigarettes (3.9%), hookah (2.5%), cigarettes (2.5%), cigars (1.9%), smokeless tobacco (1.6%), and pipes (0.6%). The study also showed that hookah smoking roughly doubled for middle and high school students. The increase in e-cigarette and hookah use offset declines in the use of more traditional products such as cigarettes and cigars.

The CDC noted that several states have passed laws establishing a minimum age for purchase of e-cigarettes or extending smoke-free laws to include e-cigarettes, “both of which could help further prevent youth use and initiation.”

The NYTS is a school-based, self-administered questionnaire given annually to middle and high school students in both public and private schools. In 2014, NYTS surveyed 22,000 students.

To review the full study, visit http://www.cdc.gov/mmwr/preview/mmwrhtml/mm6414a3.htm.
A cohort study from Journal of Clinical Periodontology reviews the effects of gastric bypass surgery (GBS) on periodontal disease in 50 randomly selected obese patients.

A research team from Brazil collected data from 50 patients who underwent bariatric surgery, collecting the data in 3 periods: before surgery, 6 months after surgery, and 12 months after surgery. They explored various periodontal conditions, such as pocket depths and clinical attachment levels.

Findings included a substantial reduction in serum C-reactive protein and glucose levels after surgery. Probing depth and clinical attachment levels increased significantly in the postoperative period of 6 months. In the same period, the amount of Porphyromonas gingivalis increased, and other bacteria decreased slightly. The systemic inflammation resolution due to bariatric surgery in obese patients does not seem to affect the course of periodontal disease, the study showed.

In their discussion, researchers noted that GBS induces substantial weight loss in most morbidly obese patients. They also noted that risk factors of periodontitis progression are related to the reduction of obesity. But in their study, they found that “the periodontal conditions did not improve, even after significant weight loss.” They also noted that “periodontal disease seems to have increased in severity after gastric bypass surgery, which may increase the risk of cardiovascular disease.”

Oral health, they added, plays an important role in nutritional status; thus, adequate chewing and healthy nutritional habits are essential for maintaining the systemic benefits achieved through GBS.

The authors received grants and scholarships for this study from the National Council for Scientific and Technological Development in Brazil and the São Paulo Research Foundation.


**CALENDAR OF EVENTS**

**ADA–AMERICA’S DENTAL MEETING**

2015 Nov. 5-10, Washington, DC

2016 Oct. 20-25, Denver, CO

2017 Oct. 19-24, Atlanta, GA

Copyright © 2015 American Dental Association. All rights reserved.