

# CHAPTER 32

## FLUORIDATION AND ORAL HEALTH

### BOARD OF HEALTH ROLE AT A GLANCE

- In non-fluoridated communities, the Board of Health (BOH) must determine whether community water fluoridation is in the best interest of the residents of the city, town or district within its jurisdiction and order the adjustment of the fluoride content of the water supply accordingly.
- Implement or support school-based dental programs linked to dental resources in the community.
- Provide or support programs shown to be effective in preventing and controlling oral health disease for schoolchildren, the elderly, and other groups who are at high risk.
- Promote public awareness and support local efforts of community organizations to conduct oral health screenings for early detection of oral cancer.
- Work with local organizations to provide oral health educational programs, especially to those citizens with limited access to oral health care.

### OVERVIEW

Dental caries are a major problem for a large number of people. Dental disease may be the most prevalent and preventable condition affecting Americans today. More than 50% of children and over 90% of American adults have experienced dental caries.

Financial access may be a problem for individuals who do not have access to preventive programs and dental care. Public programs pay for less than 3% of all dental services. Approximately 50% of Americans have dental insurance with varying benefit ranges.

Access to dental care for the elderly is particularly difficult, since many people lose benefits upon retirement, and Medicare covers few if any dental costs.

#### ***The Massachusetts Response***

In 1951 Danvers became the first community in Massachusetts to adjust the fluoride content of its water supply to 1 part per million, the best level for preventing tooth decay.

Before 1958, the authority to fluoridate the community water supply was vested

in the local BOH or equivalent agency. In 1958, the legislature passed a statute prohibiting the institution of fluoridation without prior approval via a referendum.

The fluoridation law underwent major changes in 1963 and again in 1968. A law signed on July 9, 1968 (Chapter 548 of the Acts of 1968) repealed compulsory referenda laws (General Laws Chapter 41B & 41C of Chapter 40 of the General Laws). If the Commissioner of Public Health decides that the fluoride content of any domestic water supply is not at an optimum level for dental health, she/he is to notify the local boards of health of these findings. Most Massachusetts water supplies were deficient in fluoride and notifications were given to each local BOH in the Commonwealth shortly after the enactment of the law. That law remains in effect today.

## **BOARD OF HEALTH RESPONSIBILITIES**

In non-fluoridated communities the BOH, having been notified by the Commissioner of Public Health, may determine that fluoridation is in the best interests of the residents of the city, town or district within its jurisdiction and order the upward adjustment of the fluoride content of the public water supply for domestic use.

The order requiring the upward adjustment of the fluoride content of the water supply must be published as a legal notice in a newspaper with a circulation in the city, town or district. The BOH must prepare a notice for publication.

Sample Board of Health Notice Regarding Fluoridation:

The Commissioner of the Department of Public Health, Commonwealth of Massachusetts, has determined the fluoride content of the public water supply for domestic use in the town, city or district of \_\_\_\_\_ is not at optimal level for sound dental health and has so notified this Board of his/her findings. The Board of Health of the city, town or district of \_\_\_\_\_ after making sufficient inquiry of the matter, considers an upward adjustment of the fluoride content of the water supply available for domestic use in the city, town or district of \_\_\_\_\_ to be in the best interests of the inhabitants of the city, town or district. Accordingly, it is hereby ordered that an upward adjustment to the optimal level for sound dental health be made in the fluoride content of the water supply available for the domestic use in the city, town or district of \_\_\_\_\_. This order shall not be effective until ninety (90) days after it has been published.

An order to fluoridate is subject to a petition initiated by 10 percent of the registered voters within 90 days from the date of the publication of the notice. If a petition is filed within 90 days of the publication of the order, the question,

“Shall the public water supply for domestic use in the district be fluoridated?” must be placed on the ballot at the next regular city, town or state election, whichever occurs first, but not earlier than 60 days following the date of filing the petition with the City or Town Clerk.

Fluoridation may not be implemented during the 90 days following the board’s order or, when a petition is successfully filed, until a favorable vote is taken. If the majority of votes are against fluoridation, the water shall not be fluoridated and no order to fluoridate may be entered for a period of two years from the prior vote.

Once a lawful order to fluoridate has been issued and the time has passed for initiating a referendum or a favorable vote has been taken on a referendum, the appropriating authority of the city or town involved must appropriate the required funds.

The BOH has the authority to order the discontinuance of fluoridation at any time if it believes the discontinuance to be in the best interests of the citizens of the community.

## **BOARD OF HEALTH RECOMMENDED ACTIVITIES**

After a Fluoridation Order has taken effect, the BOH should:

- confer with water officials and other municipal officials to inform residents of the facts about fluoridation, and to plan for implementation of the order;
- explore all potential resources, including DPH, for financial and educational assistance in implementing community water fluoridation;
- proceed with preparations for engineering plans, approved specifications, and adequate staff to carry out the fluoridation program and required monitoring procedures. Local water supply officials and other municipal officials may also be involved in this process;
- employ registered professional engineers who are experienced in water treatment design and construction to conduct engineering costs studies, prepare preliminary designs, select equipment, and prepare final plans, specifications, and contracts for the fluoridation program;
- enlist the active support of dental and medical professionals, concerned citizens, and local organizations in educating the community on the benefits of water fluoridation.

Other recommended activities to promote dental health include the following:

- educate the residents about oral health by providing material on effective

programs that prevent or control dental disease;

- in non-fluoridated communities, implement or support preventive programs in a school setting as the fluoride mouthrinse program. Sealant programs, dental examinations for children entering the school system, and periodic examinations at grade levels 3 and 6 should be promoted and supported in both fluoridated and non-fluoridated communities. Parents should be informed of the results, a referral mechanism should be in place for children with no dental provider, and a follow-up mechanism should be established to verify that treatment was provided;
- work with local organizations or recreational programs that sponsor or promote contact sports to encourage the use of mouthguards for the prevention of dental injury;
- support dental, medical, and/or civic organizations in conducting oral cancer screening for early detection of disease in older adults, especially those in community housing.

## **STATE RESPONSIBILITIES**

The Department of Public Health has the following responsibilities:

- promote community water fluoridation and provide technical assistance and information on the value of fluoridation;
- provide technical assistance and resource materials to oral health programs conducted by communities;
- advise communities of advances in the prevention of dental disease;
- identify the areas of the Commonwealth which are dentally underserved and work with federal and local agencies to identify programs that assist in dental provider recruitment and retention.

The Department of Environmental Protection (DEP) has the following responsibilities:

DEP is the Commonwealth agency responsible for engineering review and approval of all public water supply works including water sources and treatment facilities. Since this agency is also responsible for reviewing and approving plans when they are submitted, the Department's engineers must refrain from participating in the actual design and from making cost estimates.

## **FEDERAL RESPONSIBILITIES**

The primary federal agency involved in oral health is the Centers for Disease Control (CDC), Oral Health Division. This agency is responsible for a range of activities including research, recommendations, standard settings, e.g. infection control, technical assistance and financial support for community water fluoridation.

## **RESOURCES:**

The Following Materials are Available from the Department of Public Health, Office of Oral Health  
– Telephone: (617) 624-6060

### **Fact Sheets**

Sources of Fluoride  
Massachusetts Communities Receiving Fluoridation  
Fluoride: The Benefits Can Last a Lifetime  
Dispelling the Myths About Dentures  
Older Adults Get Cavities, Too!  
Oral Cancer in Adults  
Dental Sealants

### **Brochures**

Community Water Fluoridation  
Fluoridation Good for Adults – Good for All

### **Booklets**

A Healthy Mouth for Your Baby  
Snack Smart for Healthy Teeth  
Seal Out Dental Decay – English/Spanish