

his year, more than 3.8 million people living in 137 communities in Massachusetts will have the health and economic benefits of community water fluoridation (see Table 1).¹ However, Massachusetts is ranked only 35th in the country for fluoridation, with just 63 percent of our population on public water supplies living in fluoridated communities. Nationally, more than 170 million Americans, or 67.3 percent, of the U.S. population on a central water supply live in fluoridated communities.2 The goal in Healthy People 2010, the United States' national health objectives to increase the quality and years of healthy life and to eliminate health disparities, is that 75 percent of the U.S. population will live in fluoridated communities by the year 2010.3 Sadly, it appears unlikely that Massachusetts will reach this goal. However, this goal could be achieved nationally, as the San Diego area metropolitan water districts, affecting approximately 17 million people, have already agreed to fluoridate and are expected to become fluoridated in the next few years.

Although there has been some activity to move ahead with fluoridation in Massachusetts in recent years, progress has been slow for a variety of reasons. In order to achieve fluoridation for a community, the decision-makers and the public need to be well informed. A low-key educational campaign that may take several years, depending on the community involved, is necessary to dispel misinformation and achieve success. For example, the City of Worcester had a referendum vote on fluoridation in 2001; however, it was defeated for the fourth time with 56 percent of the vote in opposition. Although a significant amount of money was spent to achieve fluoridation, not enough time was spent to adequately educate all the constituents, given the history of strong antifluoridation sentiment in the city since the 1950s. In contrast, the effort to achieve fluoridation for Boston was an eight-year effort and the movement to fluoridate the San Diego area began in the 1980s. This is not to imply that that many years are needed to fluoridate every community; both the Greater Boston and San Diego water districts are very large and complex. Every community has its own unique characteristics and decision-making process, but a low-key educational effort for all constituencies about fluoridation is a must.

#### Fluoride Misinformation and the Internet

Due to the Internet, there is much more misinformation readily available to the public today on fluorides and fluoridation than in the past. This results in healthcare professionals having to spend more time to properly educate the public and policymakers on the health, safety, and economic benefits of fluoridation. When one "Googles" the word "fluoride," there are more than

Table 1: 137 Massachusetts Communities Receiving Water Fluoridation—2006 Fluoridated at 1 ppm—1 part fluoride per million parts water (ppm) or mg/l

City/Town	Year of Start-up	2000 Population	City/Town	Year of Start-up	2000 Population
Acton	1970	20,331	Millis	1983	7,902
Acushnet***	2006	10,161	Milton*	1978	26,062
Amesbury	1968	16,450	Nahant*	1978	3,632
Amherst	1987	34,874	Natick	1997 1971	32,170 28,911
Andover	1969 1996	31,247 - 80(E)	Needham (FL)* New Bedford***	2006	93,768
Aquinnah (WHA part)	1978	42,389	Newbury (Part)	1969	1,000(E)
Arlington* Ashburnham	1957	5,546	Newburyport	1969	17,189
Athol	1952	11,299	Newton (FL)	1963	83,829
Attleboro	1973	42,068	Norfolk (Part)	1977	40(E)
Bedford	1978	12,595	North Andover	1975	27,202
Belchertown (part)	1987	243(E)	North Attleboro	2002	27,143
Belmont*	1978	24,194	Northborough	2001	14,013
Berlin (SP Mall only)	1997	70.007	North Reading	1971 1978	13,837 28,587
Beverly	1952	39,862	Norwood* Oak Bluffs	1991	28,587 3,713
Billerica	1992	38,981 589,141	Orange (Part)	1975	120(E)
Boston* Bourne (Otis ANG)	1978 1960	1,000(E)	Oxford	1987	13,352
Bridgewater (MCI)	1989	2,230	Peabody	1983	48,129
Brookline*	1978	57,107	Pelham (Part)	1987	309(E)
Burlington	1993	22,876	Pembroke	1969	16,927
Cambridge (FL)*	1974	101,355	Plainville (Part)	•	
Canton	1978	20,755	Quincy*	1978	88,025
Charlton**		150(E)	Reading	1970	23,708
Charlton (Part)	1996	150(E)	Revere*	1978	47,283
Chelsea	1978	35,080	Rockport (Part Natural)	1984	7,767 400(E)
Cohasset	1956	7,261	Royalston (Part) (SRIC)**	1985	6,353
Concord	1970	16,993	Rutland Salem	1952	40,407
Danvers	1951 1977	25,212 23,464	Saugus*	1978	26,078
Dedham Dighton (Part)	1971	2,200(E)	Scituate	1954	17,863
Dover (Part)	1997	159(E)	Seekonk	1952	13,425
Dracut	1982	28,562	Sharon	1953	17,408
Dudley (Part)**	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	45(E)	Shrewsbury	1953	31,640
Duxbury	1987	14,248	Somerset	1969	18,234
Essex	1970	3,260	Somerville*	1978	77,478
Everett*	1978	38,037	Southborough	1996	8,781 17,214
Fall River	1973	91,938 39,102	Southbridge Stoneham*	1971 1978	22,219
Fitchburg	. 1975 1970	66,910	Sturbridge	1990	7,837
Framingham (FL)* Franklin	1970	29,560	Sudbury	1960	16,841
Freetown Water Co.	1978	2,500(E)	Swampscott*	1978	14,412
Gardner	1987	20,770	Swansea	1969	15.901
Gloucester	1981	30,273	Taunton	1981	55,976 6,799
Groveland	1995	6,038	Templeton	1951	6,799
Hamilton	, 1956	8,315	Tewksbury	1983	28,851
Hardwick-EHS**		50(E)	Topsfield	1953 1987	6,141 11,081
Haverhill	1971	58,969 10,883	Tyngsboro Wakefield*	1978	24,825
Hingham Holden	1953 1995	19,882 15,621	Walpole	1977	22,824
Holliston	1970	13,801	Waltham*	1978	59,226
Holyoke	1970	39,838	Watertown (FL)*	1971	32,986
Hudson	1985	18,113	Wayland	2000	13,100
Hull ,	1953	11,050	Wellesley	1987	26,613
lpswich	1971	11,873	Wenham	1967	4,440
Lawrence	. 1983	72,043	Westborough	1974	17,997
Lexington*	1978	30,355	Westfield (White Oak S	H)**	20,754
Lincoln	1971	7,666	Westford	1994 1968	20,754 6,907
Longmeadow	1989	15,633	Westminster West Newbury	1969	4149
Lowell	1982 1983	105,167 89,050	West Newbury Weston (FL)*	1973	11,469
Lynn Lynnfield (FL)*	1972	11,542	Westport (Part)	1975	1,000(E)
(Lynnfield Center)	1959	111076	Westwood	1977	14,117
Malden*	1978	56,340	Wevmouth	1972	53,988
Manchester-by-the Sea	1983	5,228	Winchester (FL)*	1956	20,810
Mansfield	1997	22,414	Winthrop*	1978	18,303
Marblehead*	1978	20,377	Woburn (Part)*	1978	20,615(E)
Marlborough	1982	36,255	Worcester (Part)	1995	250(E)
Medford*	1978	55,765	Tatal Bandatian		3,869,799
Medway	1953	12,448	Total Population Natural & Adjusted		2,600,755
Meirose* Middleton	1978 1951	27,134 7,744	Matural & Aujusteu		
WINDLETOD	1951	7./ <del>44</del>			·

<sup>\*-</sup> Members of the Massachusetts Water Resources Authority (MWRA) fluoridated in 1978 (old MDC)

\*\*- Naturally fluoridated at .7 or higher ppm

\*\*\*- Expected to fluoridate in mid-2006
(Part) - Communities partially fluoridated—check with local water department/board of health
(FL) - Fluoridating prior to MDC
(E) - Estimated population served
Prepared by: Massachusetts Department of Public Health-Office of Oral Health

www.mass.gov/dphffchlooh.htm
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5.4 million references; the first six are negative sources with misinformation, while entry number 7, the American Dental Association (ADA), is the first credible resource, followed by number 9, the National Center for Fluoridation.5 In other words, of the first 10 references to come up, only two are credible resources. The findings are similar for the words "fluoridation," "water fluoridations," and even "fluoride toothpaste." For the phrase "community water fluoridation," the first 10 references are credible. When "tooth brushing" is used as a control, there are 3.2 million hits, with no negative references in the first 20. What this means is that the public or decision-makers who wish to learn about fluoridation end up receiving a lot of misinformation that could confuse them, create doubts, or convince them there is something wrong with fluoridation, when in fact, nothing could be further from the truth.

## Recent Antifluoridation Activity and the Harvard Study

In June 2005, the Environmental Working Group (EWG) petitioned the National Institutes of Health to list fluoride in tap water as a carcinogen based on "new data" from a Harvard School of Dental Medicine study.6 The EWG is a Washington, DC, advocacy organization that has been characterized as "a peddler of fear . . . using unsound science to foment health scares . . . "7 On July 22, 2005, the Wall Street Journal published an article titled "Fluoridation, Cancer: Did Researchers Ask the Right Questions?"6 The article reported, "Questions about fluoridation have returned with renewed vigor because of allegations of scientific misconduct against a prominent researcher at the Harvard School of Dental Medicine." The article goes on to say that "a study done by a doctoral student at Harvard reported an increase in the risk of osteosarcoma in boys who had lived in fluoridated communities."

The alleged misconduct arose because the student's professor had stated in writing to the National Research Council that there was no evidence that fluoridation increased the risk of osteosarcoma, a rare form of bone cancer that occurs in about 400 Americans each year. The student's study had not been published or submitted for peer review. According to the ADA, "the student

notes in her thesis that there are several limitations to her study and recommends that the findings be confirmed with data from other studies . . . she notes that the study may not accurately reflect the actual amount of fluoride consumed by study subjects."

This is not the first time in the history of fluoridation that antifluoridationists have tried to confuse the public with misleading information and limited or nonpeer-reviewed studies. The Harvard student's retrospective study was part of a much larger study that is more sophisticated and includes bone specimens. If public policies were changed to allow one limited, nonpublished paper done by one student to dictate policy, we would be living in a very chaotic society. The bulk of the evidence released by previously published studies on cancer, osteosarcoma, and fluoridation show no evidence of a relationship. Even the Wall Street Journal article stated, "to be sure, one study proves nothing."6

The media likes to present both sides and the antifluoridationists take advantage of this. In August 2005, a letter was sent to the Environmental Protection Agency (EPA) administrator and key congressional committees calling for a nationwide moratorium on fluoridation, citing the Harvard student's study.9 The EPA responded by stating, "EPA is aware of this work . . . it must be considered . . . scientific information must undergo independent peer review before being included for EPA decision making . . . and dose response evaluation is needed."10 Two months later, in October 2005, Time magazine published an article titled "Not in My Water Supply," which reiterated the Harvard allegations and the alleged concerns about fluoridation.11

Once the full Harvard study is completed, one expects that it will show, as previous reputable studies have shown, no relationship between osteosarcoma and fluoridation. The American Cancer Society and the National Cancer Institute continue to recognize the public health benefits of fluoridation.

## Overwhelming Support for Fluoridation

The safety, health, and economic benefits of fluoridation have been well documented. 12,13 As a matter of fact, the U.S. Centers for Disease Control and

Prevention have called fluoridation "one of the top 10 public health achievements of the 20th century." More than 100 major reputable health and scientific organizations and agencies in the United States and abroad, including the World Health Organization, have recognized the public health benefits of fluoridation (see Table 2). Since 1950, when the U.S. Public Health Service first endorsed community water fluoridation as a beneficial public health measure, every U.S. Surgeon General henceforth has also supported it.

In spite of the overwhelming evidence and more than half a century of fluoridation safety and benefits, there is still resistance to fluoridation. January 25, 1945, was the first day of adjusted community water fluoridation in the United States. This means we have had 60-plus years of experience with fluoridation, with millions of people in more than 10,000 water systems. We have yet to see any credible evidence of the allegations that have been made concerning negative health effects of fluoridation over the years. The allegations have ranged from "a Communist plot" to AIDS, cancer, heart disease, birth defects, allergies, mutagens, and kidney failure. In the past, these allegations have been refuted by reputable scientists, studies, organizations, agencies, and the courts, and they continue to be refuted today.15-19 The National Research Council is currently reviewing all the recent studies on fluoride to determine whether there is a need to change the EPA's maximum contaminant level of fluoride for a public water supply, which is now 4 parts per million-four times greater than the recommended level for fluoridation. This report is expected to be available in 2006.

## History of Fluoridation in Massachusetts

In 1950, the U.S. Public Health Service and the ADA recommended fluoridation as a public health measure. One year later, in 1951, the first three Massachusetts communities became fluoridated: Danvers, Middleton, and Templeton. These communities now have a total population of approximately 39,755. From 1951 to 1956, another 14 communities became fluoridated, adding a population of about 257,811.

#### Table 2: National and International Organizations That Recognize the Public Health Benefits of Community Water Fluoridation for Preventing Dental Decay12

Academy for Sports Dentistry Academy of Dentistry International

Academy of General Dentistry

Alzheimer's Association

America's Health Insurance Plans

American Academy of Family Physicians American Academy of Nurse Practitioners

American Academy of Oral and Maxillofacial Pathology

American Academy of Orthopaedic Surgeons

American Academy of Pediatric Dentistry

American Academy of Pediatrics

American Academy of Periodontology American Academy of Physician Assistants

American Association for Community Dental Programs

American Association for Dental Research American Association for Health Education

American Association for the Advancement of Science

American Association of Endodontists

American Association of Oral and Maxillofacial Surgeons

American Association of Orthodontists

American Association of Public Health Dentistry

American Association of Women Dentists

American Cancer Society American College of Dentists American College of Physicians

-American Society of Internal Medicine

American College of Preventive Medicine American College of Prosthodontists

American Council on Science and Health

American Dental Assistants Association

American Dental Association

American Dental Education Association American Dental Hygienists' Association

American Dietetic Association

American Federation of Labor and Congress

of Industrial Organizations American Hospital Association

American Legislative Exchange Council

American Medical Association

American Nurses Association American Osteopathic Association

American Pharmacists Association

American Public Health Association

American School Health Association American Society for Clinical Nutrition

American Society for Nutritional Sciences

American Student Dental Association

American Veterinary Medical Association

American Water Works Association

Association for Academic Health Centers

Association of American Medical Colleges

Association of Clinicians for the Underserved

Association of Maternal and Child Health Programs

Association of State and Territorial Dental Directors Association of State and Territorial Health Officials

Association of State and Territorial Public Health

**Nutrition Directors** 

British Fluoridation Society

Canadian Dental Association

Canadian Dental Hygienists Association

Canadian Medical Association Canadian Nurses Association

Canadian Pediatric Society

Canadian Public Health Association

Child Welfare League of America

Children's Dental Health Project

Children's Health Fund, The

Chocolate Manufacturers Association

Consumer Federation of America

Council of State and Territorial Epidemiologists

Delta Dental Plans Association

Dental Health Foundation (of California), The

FDI World Dental Federation

Federation of American Hospitals

Hispanic Dental Association

Hispanic Dental Association (U.S.A.)

Institute of Medicine

International Association for Dental Research

International Association for Orthodontics

International College of Dentists

March of Dimes Birth Defects Foundation

National Association of Community Health Centers

National Association of County and City Health Officials

National Association of Dental Assistants

National Association of Local Boards of Health

National Association of Social Workers

**National Confectioners Association** 

National Council Against Health Fraud

National Dental Assistants Association

National Dental Association

National Dental Hygienists' Association

National Down Syndrome Congress

National Down Syndrome Society

National Eating Disorders Association

National Foundation of Dentistry for the Handicapped

National Head Start Association

National Health Law Program

National Healthy Mothers, Healthy Babies Coalition

National Kidney Foundation

Oral Health America

Robert Wood Johnson Foundation

Society for Public Health Education

Society of American Indian Dentists

Special Care Dentistry

—Academy of Dentistry for Persons with Disabilities

—American Association of Hospital Dentists

—American Society for Geriatric Dentistry

U.S. Department of Defense

U.S. Department of Veterans Affairs

U.S. Public Health Service

—Centers for Disease Control and Prevention (CDC)

—Health Resources and Services Administration (HRSA)

-National Institute of Dental and Craniofacial

Research (NIDCR)

World Federation of Orthodontists

World Health Organization

In 1957, the Massachusetts state legislature passed a law requiring a public vote—a binding mandatory fluoride referendum—before a local board of health could order fluoridation. From 1957 to 1967, while this law was in effect, only five communities, with a combined population now of 94,815, implemented fluoridation. The City of Cambridge voted for fluoridation and implemented it in 1960—and then voted it out in 1963. This was due to an intense antifluoridation campaign that included a postcard with a picture of a dead rat that was mailed to every household right before the vote.

In 1967, Massachusetts was ranked 48th in the country for fluoridation, with only 8.2 percent of the population on public water supplies living in fluoridated communities.<sup>20</sup> That same year, a Special Legislative Commission on Dental Health recommended and filed a bill calling for the mandatory fluoridation referendum to be repealed and stating that upon the recommendation of the State Commissioner of Public Health, a local board of health may order fluoridation.21 After an intense and successful educational effort by the dental, public health, and health communities, the bill passed the state legislature in 1968.22 The new fluoridation law also allowed a public vote if 10 percent of the registered voters filed a petition within 90 days of the public notice of the fluoridation order. The vote would then have to be on the ballot at the next town or city election. This fluoridation law has essentially been the same since 1968.

From 1968 to 1997, 78 communities implemented fluoridation as a result of 135 fluoridation orders by 112 communities.23 Another 18 communities also became fluoridated due to a shared water supply or fluoridation orders that were not documented. Thus, during this time frame, another 3.1 million people were living in fluoridated communities.23 Studies of antifluoridation activity were done during that time.24,25 The largest increase in the number of people with fluoridation occurred in 1978, when the 33 cities and towns of Greater Boston, now affecting 2.5 million people, became fluoridated after a well-planned and well-organized community effort. During that eight-year period, about 70 bills were filed in the state legislature to stop or weaken fluoridation efforts; all were defeated.4

Only three communities became fluoridated in the period from 1998 to 2005: North Attleborough, Northborough, and Wayland, a total of 54,256 people. In November 2000, the voters in North Attleborough approved fluoridation in a public referendum, 59 percent to 41 percent. In 2005, the North Attleborough Board of Health invited three known antifluoridationists from out of state to speak in their community. In 2006, this board of health plans to file a suit in Superior Court to discontinue fluoridation.26 Although one would expect that there is no merit to this lawsuit, it will be up to the courts to decide. Also, in January 2006 the Yarmouth Board of Health decided against fluoridating its community's water supply at this time.27 New Bedford and Acushnet are expected to implement fluoridation by mid-2006, adding another 103,929 people living in fluoridated communities.

#### **Major Cities and Towns**

All of the largest cities and towns in Massachusetts are fluoridated, except for five: Barnstable, Brockton, Chicopee, Springfield, and Worcester, with a total population of about 526,852 (see Table 3). (New Bedford is expected to be fluoridated in 2006.) Fluoridation has been defeated four times by referenda in Worcester, was ordered in Brockton in 1972 but never implemented, and was defeated 2-1 by referendum in Springfield in 1983. It has never been ordered in Chicopee or Barnstable; Cape Cod and western Massachusetts have very few fluoridated communities. Fluoridation activity in Massachusetts in recent years had been quite limited, until 2005.

#### **Mandatory Fluoridation Bill**

CONTROL PROPERTY

In December 2004, Health Care for All, a consumer advocacy organization that has an Oral Health Advocacy Task Force made up of both dental and nondental

Table 3: 2006 Fluoridation Status of the 25 Most Highly Populated Cities/Towns in Massachusetts

City/Town	Population* 4-1-2000	Fluoridated "	Year Implemented
Boston	589,141	Yes	-1978**
Worcester	172,648	No	
Springfield	152,082	No	
Lowell	105,167	Yes	1982
Cambridge	101,355	Yes	1974
Brockton	94,304	No	
New Bedford	93,768	No	***
Fall River	91,938	Yes	1973
Lynn	89,050	Yes	1983
Quincy	88,025	Yes	1978**
Newton	83,829	Yes	1963
Somerville	77,478	Yes	1978**
Lawrence	72,043	Yes	1983
Framingham	66,910	Yes	1970
Waltham	59,226	Yes	1978**
Haverhill	58,969	Yes	<sup>7</sup> 1971
Brookline	57,107	Yes	1978**
Malden	56,340	Yes	1978**
Taunton	55,976	Yes	1981
Medford	55,765	Yes	1978**
Chicopee	54,653	No	
Weymouth	53,988	Yes	1972
Peabody	48,129	Yes	1983
Barnstable	47,821	No	
Revere	47,283	Yes	1978**

<sup>\*</sup>Source: http://www.citypopulation.de/USA-Massachusetts.html; accessed January 31, 2006.

<sup>\*\*</sup>Members of Massachusetts Water Resource Authority

<sup>\*\*\*</sup>Expected to fluoridate in mid-2006

individuals, was instrumental in the submission of a statewide mandatory fluoridation bill, HB-2633 and SB-122. This bill—titled "An Act to Improve the Oral Health of Children and Other Residents of the Commonwealth"—would require all municipal water supplies in Massachusetts serving more than 5,000 people to become fluoridated. Subject to appropriation, the Massachusetts Department of Public Health would pay reasonable expenses for compliance with this law. The public hearing was held in October 2005.

This bill was developed and submitted without a long-term, low-key education effort of constituencies and decision-makers. As a result, it stimulated and organized the antifluoridationists in Massachusetts, instilling doubts about fluoridation among state legislators. The proponents of the bill requested it be put into "study" rather than be voted on. For such a mandatory fluoridation law to be approved, a well-thought-out strategy and education plan needs to be developed.

#### What Dental Professionals Can Do

The following are recommendations for what dental professionals—dentists and hygienists—can do to improve a commu-

nity's knowledge and attitudes toward fluoride and fluoridation:

- Be well versed on the facts of fluoridation. There are many different resources for this information, including reputable sources on the Internet (see Table 4). One of the best is the ADA's Fluoridation Facts, which was just updated in 2005. 12 It includes well-documented information on such topics as benefits, safety, public policy, and cost-effectiveness.
- Continue to educate patients on the safety, health, and economic benefits of fluoride and fluoridation. This should be done whether the dentist practices in a fluoridated or nonfluoridated community and irrespective of whether his or her patients

live in a fluoridated or non-fluoridated community. The Massachusetts Dental Society has produced a sign "This Office Recommends Water Fluoridation for Healthier Teeth" that should be posted in every dental office.

 Make a special effort to educate community leaders and decisionmakers on the benefits of fluoridation. A previous study of Massachusetts legislators showed that although most of them saw a dentist on a regular basis and were prevention oriented, they received most of their information on fluoridation from people against this preventive measure, not their own dentists.<sup>25</sup> If dentists cannot answer questions about fluoridation asked by decision-makers, they may obtain information from the resources listed in Table 4 or Fluoridation Facts.<sup>12</sup>

 Prescribe systemic fluoride drops and tablets for patients 6 months to 16 years of age who live in nonfluoridated communities (see Table 5). This should be done routinely, and the parents of these children should be educated on the benefits of fluoride and fluoridation. A copy of the Massa-

chusetts Department of
Public Health's
"Listing of Fluoridated
Communities in Massachusetts" (see Table 1)
should also be available
in every dental office as a
reference. For more up-todate information on the
fluoridation status of a community, contact the community's local board of health.

**Table 4: Fluoridation Information Resources** 

Agency/Organization	Web Address	Phone Number	
Local Board of Health	Check your local listings	Check your local listings	
Massachusetts Dental Society	www.massdental.org	(800) 342-8747	
Massachusetts Department of Public Health— Office of Oral Health	www.mass.gov/dph/fch/ooh.htm	(617) 624-6074	
American Dental Association (ADA)	www.ada.org/goto/fluoride	(800) 621-8099, ext. 2860 CAPIR*	
U.S. Centers for Disease Control and Prevention (CDC)	www.cdc.gov/oralhealth	Email <i>oralhealth@cdc.gov</i>	
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\*CAPIR is the Council on Access, Prevention, and Interprofessional Relations.

Table 5: Recommended Dietary Fluoride Supplement Schedule

Concentration of Fluoride in Drinking Water (ppm)\*

Age of Child	<0.3	0.3-0.6	>0.6	<b>Preparation</b>	
6 months-3 years	0.25 mg**	0	0	Drops	
3–6 years	0.50 mg	0.25 mg	0	Tablets	
6-16 years	1.0 mg	0.50 mg	0	Tablets	

Amounts recommended by the American Dental Association, American Academy of Pediatrics, and American Academy of Pediatric Dentistry, 1994

\*\*2.2 mg sodium fluoride contains 1 mg fluoride ion

<sup>\*1.0</sup> part per million (ppm) = 1 milligram per liter (mg/l)

- If you live or practice in a nonfluoridated community, find out what can be done to move your community toward fluoridation. For assistance, contact any of the Massachusetts resources listed in Table 4. The ADA also has an excellent planning manual, titled "Community Organization for Water Fluoridation," and it also has a Community Water Fluoridation Resource Kit that is very helpful and quite comprehensive.
- Become involved in the leadership of your local community. Massachusetts has more than 300 local boards of health, but less than a handful have a dentist or hygienist as a board member. The majority of board members are interested laypersons. Dental professionals need to become more involved in the leadership of their local communities, whether as members of the board of health, school board, library board, or town meeting.

#### **Summary**

Massachusetts has a long history of activity with community water fluoridation. Although the state has 3.8 million people living in 137 fluoridated communities, there are more than 2 million people who do not have these benefits. The Bay State is ranked 35th in the country regarding the percent of people on public water supplies with fluoridation. We can do better than that.

We have more than 60 years of experience receiving the health and economic benefits of fluoridation in our country; however, there is still a lot of misinformation about fluoridation, and the unreliable nature of information posted on the Internet exacerbates much of this misinformation.

Dental professionals, their patients, and decision-makers must be continuously educated about the safety, health, and economic benefits of community water fluoridation. Patients from 6 months to 16 years of age living in nonfluoridated communities should be prescribed supplemental fluoride. Dental professionals in nonfluoridated communities should assist them to become fluoridated. All dental professionals need to become more involved in the leadership of their communities.

# Author's Addendum National Research Council Report Doesn't Affect Community Water Fluoridation

As this issue of the JOURNAL was going to press on March 22, 2006, the National Research Council, National Academy of Sciences released its report, "Fluoride in Drinking Water: A Scientific Review of EPA Standards." The purpose of this review was to determine if the Environmental Protection Agency's (EPA) current maximum contaminant level goal (MCLG) at 4 parts per million (ppm) fluoride should be changed for naturally fluoridated communities.

The committee recommended that the goal be lowered to protect against severe dental fluorosis. Severe dental fluorosis doesn't occur in communities where the fluoride level is lower than 2 ppm. The EPA will now have to determine what the maximum contaminant level (MCL) should be based on benefit, risk, cost, and practicality. (The MCLG is a goal and nonenforceable, whereas the MCL is a limit that is enforceable by the EPA.) The committee had no new data for this recommendation but reinterpreted previous data. This report does not affect community water fluoridation at the recommended level of 0.7 to 1.2 ppm, but antifluoridationists may use excerpts of this report to confuse the public.

For more information about fluoridation and this study, please visit www.ada.org.

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