Massachusetts Dental Society Office of the President

Dr. Abe Abdul, BSChE, DMD, MBA, MAGD, ABGD

President, Massachusetts Dental Society

General Dentist and Chemical Engineer

June 10, 2025

To the Honorable Chairs and Members of the Joint Committee on Public Health:

I write to you today in strong opposition to Senate Bill S.1517 and House Bill H.2548, each titled "An Act banning artificial fluoridation schemes." As a dentist, a chemical engineer, and the elected President of the Massachusetts Dental Society, I feel compelled to speak from a position that integrates rigorous scientific understanding with extensive clinical experience. These bills, if enacted, would repeal the Commonwealth's current community water fluoridation statute (M.G.L. c. 111, §8C) and impose a statewide prohibition that would directly undermine public health, local governance, and nearly 80 years of evidence-based policymaking.

Let us be clear on the legislative language and its implications. Both bills state:

"Chapter 111 of the General Laws is hereby amended by striking out section 8C and inserting in place thereof the following section: Section 8C. The Commonwealth of Massachusetts forbids augmenting fluoride concentrations in municipal water by the addition of fluoridation water additives."

This language is sweeping and unequivocal. It would bar all municipalities in Massachusetts from adding fluoride to public water supplies, stripping this authority from local boards of health and the Department of Health and Human Services. In effect, the statute would override every local fluoridation decision made in the Commonwealth, nullifying democratic votes and longstanding public health consensus.

As a chemical engineer, I understand the precise, controlled nature of municipal water fluoridation. Fluoride is not added haphazardly; it is administered to achieve the optimal level of 0.7 milligrams per liter (mg/L). This concentration, endorsed by the U.S. Public Health Service, Centers for Disease Control and Prevention (CDC), and the American Dental Association (ADA), is equivalent to about 3 drops of fluoride in a 55-gallon drum of water—a dilution that poses no credible toxicological risk.

Opponents of fluoridation often cite flawed or mischaracterized studies to allege harm. However, the most recent review by the National Toxicology Program (NTP) does not provide evidence of a causal relationship between fluoride at 0.7 mg/L and adverse neurodevelopmental outcomes. The ADA's analysis of the NTP report highlights that the monograph does not address fluoride at the

Massachusetts Dental Society Office of the President

levels used in U.S. water systems, does not weigh the significant benefits of fluoridation, and acknowledges it cannot establish fluoride as the cause of affecting IQ.

As a dentist, I see firsthand the devastating consequences of inadequate fluoride exposure, especially for our most vulnerable. Dentists in non-fluoridated communities routinely treat children, some as young as two or three, with more than 10 cavities at a time. These children present with significant pain and abscessed teeth, requiring costly and complex procedures like root canals, crowns, and extractions under general anesthesia in a hospital operating room. One pediatric dentist recounted treating a four-year-old girl who, when offered a popsicle, quietly covered her mouth and declined because her teeth "hurt too much when she eats cold things." This should not be the norm for any child.

The economic case is just as clear. A 2025 study in JAMA Health Forum by Dr. Lisa Simon and Dr. Sung Eun Choi estimates that ending community water fluoridation nationwide would lead to 25.4 million additional decayed teeth and \$9.8 billion in additional treatment costs over five years. These burdens fall disproportionately on low-income and Medicaid-enrolled children. The CDC estimates that every \$1 invested in fluoridation saves at least \$20 in future dental treatment costs, with some estimates as high as \$38.

The same Harvard study—published June 6, 2025—noted that the cost burden from a national fluoride ban would largely fall on publicly funded programs. The analysis projected an estimated \$1.8 billion in additional dental treatment costs covered by Medicaid and the Children's Health Insurance Program (CHIP), and an additional \$3.6 billion cost to uninsured patients and families. These findings underscore that eliminating fluoride would not only worsen health disparities—it would also impose significant economic strain on public health systems and working families across the Commonwealth.

International precedent shows us what happens when fluoridation is repealed:

- Windsor, Ontario, saw the percentage of children with decay or requiring urgent care increase by 51%.

- Calgary, Alberta, experienced a 78% increase in young children requiring general anesthesia for decay-related procedures.

Both cities ultimately voted to restore fluoridation after witnessing this preventable rise in disease.

Water fluoridation is a uniquely egalitarian public health measure that benefits every resident, regardless of socioeconomic status or access to care. For many, it is the "first, and sometimes only, line of defense" against dental disease. To ban it statewide is to legislate away scientific fact and democratic will, taking a catastrophic step backward. It will exacerbate oral health disparities, strain our dental workforce, and cause preventable pain and systemic health complications for thousands of Massachusetts residents.

Massachusetts Dental Society Office of the President

This policy is supported by a broad consensus of health authorities, including the ADA, CDC, American Academy of Pediatrics, American Medical Association, Massachusetts Medical Society, and the World Health Organization. I urge this Committee to reject S.1517 and H.2548 and reaffirm Massachusetts' commitment to evidence-based public health.

Respectfully submitted,

Dr. Abe Abdul, BSChE, DMD, MBA, MAGD, ABGD President, Massachusetts Dental Society General Dentist and Chemical Engineer Drabdul@luxdental.com (617) 308 8581