

# Community Water Fluoridation



"...one of the 10 great public health achievements of the twentieth century."<sup>1</sup>



*Oral Health in Rhode Island: A Fact Sheet*

## What is the public health issue?

Oral health is integral to general health.<sup>2</sup> Although preventable, tooth decay is a chronic disease affecting all age groups. In fact, it is the most common chronic disease of childhood.<sup>2</sup> The burden of disease is far worse for those who have limited access to prevention and treatment services. Left untreated, tooth decay can cause pain and tooth loss. Among children, untreated decay has been associated with difficulty in eating, sleeping, learning, and proper nutrition.<sup>3</sup> Among adults, untreated decay and tooth loss can also have negative effects on an individual's self-esteem and employability.

### In the U.S., tooth decay<sup>3</sup> affects:

- ✓ 1 in 4 elementary school children
- ✓ 2 out of 3 adolescents
- ✓ 9 out of 10 adults

## What is the impact of fluoridation?

Fluoride added to community drinking water at a concentration of 0.7 to 1.2 parts per million has repeatedly been shown to be a safe, inexpensive, and extremely effective method of preventing tooth decay.<sup>2</sup> Because community water fluoridation benefits everyone in the community, regardless of age and socioeconomic status, fluoridation provides protection against tooth decay in populations with limited access to prevention services. In fact, for every dollar spent on community water fluoridation, up to \$42 is saved in treatment costs for tooth decay.<sup>4</sup> The Task Force on Community Preventive Services, a national independent, nonfederal, multidisciplinary task force appointed by the director of the Centers for Disease Control and Prevention (CDC), recently conducted a systematic review of studies of community water fluoridation. They found that, in communities that initiated fluoridation, the decrease in childhood decay was almost 30 percent over 3–12 years of follow-up.<sup>3</sup>

## How is Rhode Island doing?

In the 2010-2011 school years, almost 50 percent of Rhode Island's third-graders had experienced tooth decay.<sup>9</sup> In 2008, 18 percent of Rhode Island's 65+ population had lost all of their permanent teeth.<sup>8</sup> In 2013, 85 percent of the population in Rhode Island on public water systems received fluoridated water. This translates into 84.8% percent of Rhode Island's total population receiving fluoridated water.<sup>7</sup>

## Related U.S. Healthy People 2010 Objectives<sup>5</sup>

- ✓ Increase percentage of persons on public water receiving fluoridated water to 75%
  - In RI, 85% of the population on public water receives fluoridated water.<sup>9</sup>
- ✓ Reduce adults 65+ who have lost all their teeth to 20%.
  - In RI, 18% of adults 65+ have lost all of their teeth.<sup>8</sup>
- ✓ Reduce tooth decay experience in children under 9 to 42%.
  - In RI, 50% of children ages 7-9 have experienced tooth decay.<sup>7</sup>

## What is Rhode Island doing?

The Rhode Island Oral Health Program is working on a public education campaign to encourage residents to know the current fluoridation status in their community and communicate the benefits of community water fluoridation.

- The Rhode Island Department of Health participates in the Water Fluoridation Reporting System (WFRS) by uploading monthly public water system data. Rhode Island residents are able to access to My Water's Fluoride website (<http://apps.nccd.cdc.gov/MWF/Index.asp>) and check the fluoride level in the local public water system.

Dental sealants also provide protection against tooth decay by sealing the pits and fissures on the chewing surfaces of molar (back) teeth – tooth surfaces especially vulnerable to decay. The combination of dental sealants and water fluoridation has the potential to prevent virtually all tooth decay.

### Strategies for Rhode Island's Future

- ✓ Educate and empower the public regarding the benefits of fluoridation.
- ✓ Encourage fluoride supplements for those at increased risk for decay who are not receiving fluoridated drinking water.
- ✓ Develop and use data from well-water testing programs.
- ✓ Continue support of and funding for Rhode Island's Oral Health Program.

## References

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