What is the Public Health issue?

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

What is the impact of fluoridation?

Fluoridation of community drinking water at a concentration of 0.7 parts per million has been shown to be safe, inexpensive, and extremely effective method of preventing tooth decay. 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 $38 is saved in treatment costs for tooth decay.

The Task Force on Community Preventive Services, a national independent, non-federal, 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.

In the United States, tooth decay affects:

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

Related U.S. Healthy People 2020 Objectives

- Increase percentage of persons on public water receiving fluoridated water to 79.6%
- In Mississippi, about 61% of the population on public water receives fluoridated water.
- Reduce adults 65+ who have lost all their teeth to 21.6%
- In Mississippi, 22.5% of adults ages 65-74 have lost all their teeth, compared to 24% nationally.
- Reduce tooth decay experience in children aged 6 to 9 years to 49%.
- In Mississippi, about 63% of children under the age of 9 have experienced tooth decay.
How is Mississippi doing?
In 2010, 63% of children under the age of 9 had experienced tooth decay. In 2014, 22.5% of Mississippi adults ages 65-74 had lost all their permanent teeth. In 2015, 33% of the population on public water systems received fluoridated water. This translates into 61% of Mississippi’s total population receiving fluoridated water.

What is Mississippi doing?
The Office of Oral Health in Mississippi State Department of Health endorses and provides education and awareness on community water fluoridation. The office regularly monitors scientific research regarding safety and efficacy in the use of community water fluoridation. In collaboration with the Department of Environmental Health, we provide support and technical assistance to local community water fluoridation programs and monitor water systems for quality control purposes.

Strategies for Mississippi’s future
- Encourage fluoride supplements or school-based fluoride programs for those at increased risk for decay who are not receiving fluoridated drinking water
- Encourage fluoride varnishes for those at increased risk for decay
- Develop and use data from water quality testing programs
- Continue supporting and funding Mississippi’s oral health program
- Educate and empower the public regarding the benefits of fluoridation

References

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