

Community Water Fluoridation



"...one of the 10 great public health achievements of the twentieth century."¹



Oral Health in Arkansas: A Fact Sheet

What is the public health issue?

Oral health is integral to general health.² Although preventable, tooth decay is a chronic disease affecting all age groups. In fact, it is the most common chronic disease of childhood.² 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.³ 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 decay³ 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.² 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, \$38 is saved in treatment costs for tooth decay.⁴ 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.³

How is Arkansas doing?

In 2005, almost 60 percent of Arkansas' third-graders had experienced tooth decay and almost 30 percent of Arkansans over age 65 had lost all of their permanent teeth.⁴ In 2008, only 64.5 percent of the population in Arkansas on public water systems receive fluoridated water.

Related U.S. *Healthy People 2010* Objectives⁵

- ✓ Increase percentage of persons on public water receiving fluoridated water to 75%
 - In Arkansas, only 65% of the population on public water receives fluoridated water.
- ✓ Reduce percentage of adults 65+ who have lost all their teeth to 20%.
 - In Arkansas, 29.2% of adults 65+ have lost all of their teeth.
- ✓ Reduce tooth decay experience in children under 9 to 42%.
 - In Arkansas, 61% of children under the age of 9 have already experienced tooth decay.

What is Arkansas doing?

Since 1999, the percentage of the Arkansas population enjoying the benefits of community water fluoridation has grown from 49% to 65%. Under the leadership of the Arkansas Department of Health (ADH) Office of Oral Health, two or three communities each year initiate water fluoridation for their residents. The ADH public awareness campaign on fluoridation has reached more than a million Arkansans with brochures and radio advertisements – heralding the slogan “got teeth? get fluoride!”

Each year, every dentist, dental hygienist, pediatrician and family practice physician in Arkansas receives information about current fluoridation status in their communities and guidelines on proper fluoride supplementation for children in fluoride-deficient areas. In addition, ADH provides a free service for dentists and physicians to have patients’ private water sources – wells and springs – tested for fluoride background levels in their drinking water.

All drinking water contains some fluoride. Fluoridation is the intentional upward adjustment of the background level to that amount known to be safe and effective in preventing tooth decay. To promote the fact that all water contains fluoride, ADH also promotes fluoridation through the “**Fluoride: The Natural State of Water**” campaign.

The dental sealants also provides protection against tooth decay by sealing the pits and fissures on the chewing surfaces of 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 Arkansas’ Future

- ✓ Encourage fluoride supplements for those at increased risk for decay who can not receive fluoridated drinking water.
- ✓ Maintain the private well-water testing program.
- ✓ Continue supporting and funding the Arkansas Office of Oral Health .
- ✓ Educate and empower the public regarding the benefits of fluoridation.

References

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