What is the public health issue?

Oral health is integral to general health. Although preventable, tooth decay is a chronic disease affecting all 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. Tooth decay, left untreated, can cause pain and tooth loss. Untreated tooth decay is associated with difficulty in eating and with being underweight. Untreated decay and tooth loss can have negative effects on an individual’s self-esteem and employability.

What is the impact of dental sealants?

Dental sealants are a plastic material placed on the pits and fissures of the chewing surfaces of teeth; sealants cover up to 90 percent of the places where decay occurs in school children’s teeth. Sealants prevent tooth decay by creating a barrier between a tooth and decay-causing bacteria. Sealants also stop cavities from growing and can prevent the need for expensive fillings. Sealants are 100 percent effective if they are fully retained on the tooth. According to the Surgeon General’s 2000 report on oral health, sealants have been shown to reduce decay by more than 70 percent. The combination of sealants and fluoride has the potential to nearly eliminate tooth decay in school age children. Sealants are most cost-effective when provided to children who are at highest risk for tooth decay.

In the United States, tooth decay affects:

- 18% of children ages 2–4 years
- 55% of children ages 6–8 years
- 61% of teenagers age 15 years

Related U.S. Healthy People 2010 Objectives

- Increase the percent of 8 and 14-year-old children with dental sealants on their molar teeth to 50 percent.
- Reduce decay experience in children under 9 years of age to 42 percent.

Healthiest Wisconsin 2010 Objectives

- Increase the number of patients served in preventive programs by 25%.
- Increase the number of preventive dental programs in operation by 2010.

Why are school-based dental sealant programs recommended?

In 2002, the Task Force on Community Preventive Services strongly recommended school sealant programs as an effective strategy to prevent tooth decay. The Task Force is a national, independent, nonfederal, multidisciplinary task force appointed by the director of the Centers for Disease Control and Prevention (CDC). CDC estimates that if 50 percent of children at high risk participated in school sealant programs, over half of their tooth decay would be prevented and money would be saved on their treatment costs. School-based sealant programs reduce oral health disparities in children.
How is Wisconsin doing?
A 2008 survey revealed that:
✓ 47 percent of Wisconsin third-graders (age 8 years) had at least one dental sealant.
✓ 60 percent of third graders had experienced tooth decay.
✓ 31 percent of third graders had untreated tooth decay.

What is Wisconsin doing?
✓ In 2008-09, the Wisconsin Seal a Smile program funded 26 agencies for school-based or school-linked dental sealant programs.
✓ In Wisconsin, 90 percent of the population on public water supplies receives fluoridated water.
✓ Limited funding is available to agencies for dietary fluoride supplement and school fluoride mouthrinising programs.
✓ The Wisconsin Medical Assistance program reimburses for fluoride varnish applications by primary care providers.
✓ The Wisconsin Division of Public Health, Oral Health Program and the Division of Health Care Access and Accountability provides Early Childhood Caries prevention training (including the use of fluoride varnishes) to health professionals.
✓ Since 2001 Wisconsin Seal-A-Smile program grantees have placed over 115,000 dental sealants on nearly 30,000 children

Strategies for Wisconsin’s Future
✓ Continue to promote and fund school-based dental sealants and other population-based programs such as water fluoridation.
✓ Increase public awareness of effectiveness of dental sealants to increase demand for sealants.

References

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