Dental Sealant Programs

COST-EFFECTIVE CAVITY PREVENTION

Tooth decay is almost entirely preventable, yet it continues to be the most common chronic childhood illness in America. Dental care is also the most prevalent unmet health care need for children with special needs. If not treated, dental caries – the disease that causes tooth decay – can cause pain, infection and lead to premature tooth loss and problems with eating, speaking, and learning.

According to the Minnesota Department of Health Oral Health Program’s 2015 statewide survey of third grade students:

- 2 out of every 10 third graders (16.6%) have untreated tooth decay
- 5 out of every 10 third graders (49.5%) have caries experience (untreated or treated tooth decay)

**Good oral health is not shared equally by all Minnesota children**

Third graders enrolled in rural public schools were **1.3 times more likely** to have caries experience compared to third graders enrolled in urban public schools (56 percent versus 44 percent).

Hispanic third graders in public schools were **1.4 times more likely** to have caries experience (treated or untreated tooth decay) compared to White, non-Hispanic peers (66 percent versus 47 percent).

**Dental sealants are one answer to Minnesota’s tooth decay problem**

Since 2009, the Minnesota Oral Health Program has worked closely with its partners to establish a statewide coordinated school-based dental sealant program. This program can increase access to proven disease-prevention strategies for Minnesota children most in need.

Dental sealants are thin plastic coatings that oral health professionals apply to the chewing surfaces of the back teeth, typically permanent molars. Placing dental sealants takes only a few minutes yet can prevent cavities for many years. Children can get sealants on-site in school-based programs or in traditional dental practice settings. Sealants prevent 80 percent of cavities in molar teeth, where nine in 10 cavities occur.
More than half of Minnesota third graders have dental sealants

Minnesota’s rate of dental sealants on at least one permanent molar tooth was nearly 60 percent in 2015 or six out of every 10 third graders. The United States median (1998 to 2015) was 44 percent or four out of every 10 third graders.

Although Minnesota’s sealant rates (60%) are among the highest in the nation, we have work to do to increase health equity, access to preventive services, and stop tooth decay in underserved population groups.

**Non-White, non-Hispanic** third graders were less likely to have at least one dental sealant (54%) compared to White, non-Hispanic peers (61%), and Hispanic peers (56%)

Kids in schools where family incomes are higher get sealants at 1.25 times the rate of kids in schools where family incomes are lower.

**Minnesota third grade public school students with at least one dental sealant on a permanent molar tooth by free and reduced price lunch eligibility, 2015**

Dental sealants deliver cost savings

The cost of treating dental disease far outweighs the cost of placing preventive dental sealants. A Centers for Disease Control and Prevention systematic review of published U.S. studies/models of school sealant program cost data revealed that the median total cost per
child for four molar sealants was $76.09, with a median cost per tooth of $11.64. This is well below the average fee of $50.81 per tooth reported by dentists nationally. A coordinated school-based system in Minnesota could provide sealants to children for less than the cost of a single filling, eliminate the cost to parents for travel expenses and lost work hours, and reduce the students’ time away from the classroom.

**What Minnesota can do**

Increasing community support and state funding for sealant program start up and/or expansion would save the state of Minnesota money, decrease the prevalence of tooth decay in children, lead to fewer painful toothaches, missed days of school, and better overall health for Minnesota’s children.