

Improving Oral Health: School-Based Dental Sealant Delivery Programs

Summary of Community Preventive Services Task Force Recommendation

The Community Preventive Services Task Force (CPSTF) recommends school-based programs to deliver dental sealants and prevent dental caries (tooth decay) among children.

Major Findings

Programs that delivered sealants within school settings increased the proportion of students who received sealants and decreased occurrence of tooth decay.



- Implementing a sealant delivery program led to a 26 percentage point increase in the number of students who
 received sealants. Greater increases were seen among students from low-income families.
- Students who received dental sealants had a median of 50% fewer cavities up to four years later compared with students who did not receive sealants.

A review of the economic evidence showed the benefits of school sealant programs exceeded the costs when they were implemented in schools with large numbers of students at high risk for cavities.

What are School-Based Dental Sealant Delivery Programs?

Dental sealants are clear or opaque plastic materials applied to the chewing surfaces of the back teeth to prevent dental caries. In this review, dental sealants reduced dental caries by a median of 81% at two year follow-up.

School-based programs provide dental sealants to students onsite at schools using portable dental equipment, or offsite in dental clinics. Programs may target entire schools in low income neighborhoods or individuals within a school, based on their risk for tooth decay.

Facts about Dental Caries, or Cavities

Dental caries or cavities, more commonly known as tooth decay, are caused by a breakdown of the tooth enamel. This breakdown is the result of bacteria on teeth that break down foods and produce acid that destroys tooth enamel and results in tooth decay.

- Tooth decay is one of the most common chronic conditions among children in the United States.¹
- About 20% of children between 5 to 11 years of age have at least one untreated decayed tooth.²
- The percentage of children and adolescents with untreated tooth decay is twice as high for those from low-income families (25%) compared with children from higher-income households (11%).²

Learn More

Summary of Evidence and Task Force Finding and Full-text Publications

www.thecommunityguide.org/findings/dental-caries-cavities-school-based-dental-sealant-delivery-programs

CDC, Oral Health

www.cdc.gov/oralhealth

CDC, School-Based Dental Sealant Programs

www.cdc.gov/oralhealth/dental_sealant_program/ index.htm

Established in 1996 by the U.S. Department of Health and Human Services, the Community Preventive Services Task Force (CPSTF) is an independent, nonfederal panel of public health and prevention experts whose members are appointed by the director of CDC. The CPSTF provides information for a wide range of decision makers on programs, services, and other interventions aimed at improving population health. Although CDC provides administrative, scientific, and technical support for the CPSTF, the recommendations developed are those of the CPSTF and do not undergo review or approval by CDC. Find more information at www.thecommunityguide.org.



¹Centers for Disease Control and Prevention (2016). Children's Oral Health. Retrieved from https://www.cdc.gov/oralhealth/basics/childrens-oral-health/index.html.

² Dye BA, Xianfen L, Beltrán-Aguilar ED. Selected Oral Health Indicators in the United States 2005–2008. NCHS Data Brief, no. 96. Hyattsville, MD: National Center for Health Statistics, Centers for Disease Control and Prevention; 2012.