



Emerging Issues in Oral Health



Dental Sealants and bisphenol-A (BPA)

Key Facts about Dental Sealants:

1. Dental sealants **interrupt the disease process** that causes tooth decay by providing a barrier to bacteria and can be applied with appropriate materials that limit the potential for exposure to BPA to the initial application.
2. Tooth decay remains the most prevalent chronic disease in children. Among permanent teeth, the biting surfaces of permanent molars are the most common and often most consequential subset of cavities. Dental sealants **prevent initial and continuing decay** and are critical to assuring the overall health of children into adulthood.
3. Dental sealants **reduce associated dental treatment costs**, especially among high-risk children, for whom application of sealants to permanent molars have been shown to avert tooth decay over an average of 5-7 years.

School-based/linked dental sealant programs are a public health success:

- Recommendations that address the **efficacy and cost-effectiveness** of school-based/linked dental sealant programs are **evidence based and well documented**.

- **Delivery models** are tested and best practices are available.
- Programs **reduce racial and income disparity in sealant prevalence**.

Healthy People 2010 – Objective 21- 8:
Increase the proportion of children who have received dental sealants on their molar teeth.

Areas for further research:

Researchers are turning their attention to sealant and composite compositions, market share of various products, analysis of published literature, and clinical recommendations in an effort to further quantify the relative exposure of dental sealants.

For more information, link to:

- » http://www.cdc.gov/OralHealth/publications/factsheets/sealants_faq.htm
- » <http://www.cdc.gov/MMWR/preview/mmwrhtml/ss5403a1.htm>
- » <http://www.healthypeople.gov/document/html/objectives/21-08.htm>
- » <http://www.mchoralhealth.org/>
- » <http://www.nidcr.nih.gov/>
- » <http://www.cdhp.org/CDHPPubs/IssuePolicyBriefs.asp>
- » <http://www.ada.org/prof/resources/positions/statements/bisphenola.aspMCHB>
- » <http://jada.ada.org/cgi/content/full/137/9/1210>

Dental sealants are important, valuable, effective, and the answer to years of failed efforts to prevent cavities in the biting surfaces of susceptible permanent teeth. Concern about the chemical bisphenol-A (BPA) in some sealant products is small (compared, for example, to frequent use of a plastic water bottle) and can be mitigated by attention to materials selection and placement that includes wiping the sealant after setting and rinsing the mouth after treatment.