



Cavities

If these teeth had been sealed they would not have rotted. They had to be dug out by an oral surgeon at a great expense to the taxpayers through Medicaid. But, the greatest expense was to this child who will never have these permanent molars again.

The Facts

- Although dental decay is largely preventable, it is the most common chronic disease of children - 5 times more than asthma.
- Forty-two percent (42%) of children aged 6-19 years and 68% of youth aged 16-19 have cavities.
- Dental decay is at its highest level in over twenty years for all age groups.
- Ninety percent (90%) of all decay happens in the biting surfaces of back teeth.
- Dental disease is the second costliest disease to treat. Only heart disease costs more each year. It is more costly than cancer, diabetes, trauma-related injuries, etc. every year.



Dental Sealants

Does your child have sealants?

Does your school have a sealant program?

If not, ask why?

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"promoting health with a smile"

DENTAL SEALANTS

The US Centers for Disease Control and Prevention recommend that all communities adopt school-based sealant programs.



PREVENTION \$AVE\$

Cavities Can Be Prevented



What is a sealant?

Sealants are thin plastic coatings that are painted in the grooves on the biting surfaces of permanent back molar teeth to prevent and stop cavities.

Repairing the smallest cavity is three times more costly than a sealant.

Dental sealants can prevent and stop ninety percent (90%).

- Sealants have been found to work well and have a low failure rate. (1)
- Sealants have been shown to last as long as 20 years at a rate as high as 87%. (2)
- Studies show that teeth with only part of a sealant remaining are much less likely to get cavities than unsealed teeth. (3)
- It has been proven that when teeth with obvious cavities are sealed, the cavity growth is stopped and may in fact get smaller under intact sealants. (4, 5, 6, & 7)
- Additionally, even with part of the sealant lost, there is no x-ray evidence of the cavity growing after two years. (8 & 9)
- Fluoride has greatly lowered the number of cavities over the past forty years, but it doesn't work well to prevent cavities in the biting surfaces of back teeth -- where 90% of cavities occur. (10)
- A tooth with a cavity is always better sealed than left alone. (11)

Sealants can save many children from needless pain and suffering and save South Carolina millions of dollars in dental costs.

1. WendtLK, Koch G. Fissure sealant in permanent first molars after ten years. Swed Dent J 1988;12:181-5.
2. Wendt LK, Koch G, Birkhed D. On the retention and effectiveness of fissure sealant in permanent molars after 15-20 years: a cohort study. Community Dent Oral Epidemiol 2001; 29:302-7.
3. Horowitz, HS, Heifetz SB, Poulsen S. Retention and effectiveness of a single application of an adhesive sealant in preventing occlusal caries: final report after five years of a study in Kalispell, Montana. JADA 1977; 95:1133-9.
4. Handleman, S.L.; Washburn, F.; and Wopperer, P. Two year report of sealant effect on bacteria in dental caries. JADA 93 (5):967-970, 1976.
5. Handleman, S.L. Effect of sealant placement on occlusal caries progression. Clin Prevent Dent 4(5):11-16, 1982.
6. Mertz-Fairhurst EJ, Schuster GS, Williams, JE, et al. Arresting caries by sealants: results of a clinical study. JADA 1986; 112(2):194-7.
7. Mertz-Fairhurst EJ, Adair SM, Sams DR, et al. Cariostatic and ultraconservative sealed restorations: nine-year results among children and adults. ASDC J Dent Child 1995; 62(2): 97-106.
8. Handleman SL, Leverett DH, Espeland MA, Curzon JA. Clinical radiographic evaluation of sealed carious and sound tooth surfaces. JADA 1986; 113:751-4.
9. Messer LB, Calache H, Morgan MV. The retention of pit and fissure sealants in primary school children by Dental health services, Victoria. Aust Dent J 1997; 42:233-9.
10. Guide to community preventive services, systemic reviews and evidence based recommendations, CDC, December 26, 2002.
11. Susan O. Griffin, PhD – CDC, National Oral Health Conference, May 2006, PowerPoint presentation.