

SEALANTS

Why Sealants?

Decay on back teeth, premolars, and molars usually begins in the grooves and fissures that normally exist on the biting surfaces of the back teeth. Dental sealants, available since the 1960s, are clear plastic coatings that can be placed on the biting and grinding surfaces of posterior teeth. These sealants prevent the formation of decay on the treated surfaces. Sealants can even be placed on teeth with small areas of decay known as *incipient carious lesions*. The sealants will stop the customary progress of tooth destruction. It can remain on the tooth from 3 to more than 20 years, depending on the tooth, type of sealant used, and the eating habits of the patient. It can only be placed on teeth that have not been previously restored.

The sealant is placed on the tooth through a chemical/mechanical bonding procedure. There is no drilling or local anesthesia required for the sealant application procedure. It is entirely painless.

We, at this office, are dedicated to the prevention of oral disease. It is clear that if the initial decay is prevented from beginning or is small enough to use a sealant, there is a great savings in time, money, discomfort, and tooth structure. Decayed teeth must have the decay removed by drilling, and then they must be filled. This drill and fill may have to be done several times over the patient's lifetime as the filling ages and needs replaced. We strongly suggest that patients who have teeth that can be successfully protected with a sealant material consider having this procedure performed as soon as possible.

Sealants and Prevention

We especially advise that children have the sealant applied to their teeth as soon as the teeth break through the gum and the biting surfaces of the teeth are no longer covered with gum tissue. If the teeth cannot be totally isolated from the moisture in the mouth during the bonding process, it is likely that the sealant will not remain on the tooth for as long a period of time as expected. The sealant is most often applied to permanent teeth, but sometimes a situation arises in which it would be beneficial to have the sealant applied to a primary tooth.

A study completed in 1991 found that one application of sealant reduced biting surface decay 52% over a 15 year period. Another study, completed in 1990, showed that decay on biting surfaces could be reduced 95% over 10 years if 2% to 4% of the sealants were routinely repaired each year. We expect sealants to last many years. Replacing or repairing sealants, as needed, on an ongoing basis will give the best protection.

A sealant is not meant as a substitute for proper brushing and flossing habits. The effectiveness of the sealant is reduced if oral self-care is neglected. Also, cavities can still form on untreated surfaces. Therefore, a topical fluoride treatment remains an essential and necessary preventive aid.

In both 1984 and 1994 sealants have been recommended by the US Public Health Service and the Surgeon General of the United States, among others. We know that sealants are one of the most important treatments available for prevention of dental decay.

If you have any questions about sealants, please feel free to ask us.