

# Guideline for the use of fissure sealants including management of the stained fissure in first permanent molars

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A fissure sealant is a material that is placed in the pits and fissures of teeth in order to prevent the development of dental caries. Its prime use is in the occlusal fissures of first permanent molars. This guideline considers the decision-making process for individuals based on their relative risk of developing caries or the consequences of caries development. It also makes recommendations where the status of the fissure itself is unclear.

Molars should be sealed with a resin fissure sealant in children with medical, physical, or intellectual impairment, in those that already have caries affecting their primary or permanent dentition and in those teeth that have increased caries risk because of deep fissures or hypoplastic or hypomineralised areas. Caries risk of an individual should be checked regularly and the need for sealants adjusted in accordance with the risk identified.

Sealants should be placed as early as possible, teeth not sufficiently erupted should be treated with fluoride varnish or have glass ionomer cement applied to the accessible part of the fissure until such time that a resin sealant can be placed.

Where the caries status is unsure, the tooth should be examined dry and additional caries diagnostic tests applied to clarify the diagnosis. Where it is established that there is caries into dentine this caries must be removed and a preventive resin restoration placed.

Other teeth with stained fissures should be sealed with a resin sealant. A bonding agent should be applied to the tooth prior to the resin sealant. It is essential that all children that receive sealants also receive additional preventive advice and that the integrity of the sealant is checked regularly and if found to be deficient that the tooth is resealed.

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