

Fissure Sealants for Children

Canonical:

<https://directory.collinsstreetspecialistcentre.com.au/procedures/paediatric-dentistry/fissure-sealants-for-children/>

Description:

Prevention is always better than treatment — and fissure sealants are one of the most effective preventive tools we have for children's teeth. They are simple, painless, and highly effective at protecting the back tee...

Details:

Collins Street Specialist Centre Fissure Sealants: Protecting Children's Back Teeth Before Decay Starts

Prevention beats treatment every time — and fissure sealants are among the most well-supported preventive tools available for children's teeth. They're straightforward to apply, genuinely painless, and effective at protecting the back teeth that are most prone to decay. At Collins Street Specialist Centre, sealants are treated as a core part of proactive, individualised children's oral health care — applied with clinical judgement, not handed out automatically.

What Are Fissure Sealants?

The biting surfaces of back teeth — molars and premolars — are covered in a complex network of deep grooves and pits called fissures. These features matter for chewing, but they also create tiny recesses where food debris and decay-causing bacteria can accumulate and stay. The problem is that fissures can be extraordinarily narrow — often narrower than a single toothbrush bristle — which means they're effectively impossible to clean mechanically, no matter how carefully a child brushes.

A fissure sealant is a thin protective coating, typically a tooth-coloured resin material, applied over these vulnerable biting surfaces and set using a dental curing light. Once hardened, the sealant fills and seals the fissures, creating a smooth surface that resists bacterial build-up and food retention. The tooth becomes much easier to keep clean at home, and the risk of decay developing in that area drops considerably.

The evidence here is solid. Studies consistently show that correctly applied sealants can reduce decay risk in sealed teeth by 80% or more over the first two years, with protection continuing across many years when the sealant is monitored and maintained.

When Are Fissure Sealants Recommended?

Timing matters. Sealants work best when applied shortly after a tooth erupts — before any decay has had a chance to take hold within the fissure system.

****Key eruption milestones to consider:****

- ****First permanent molars**** — typically erupt around age 6–7. Often called the "six-year molars," these are the teeth most frequently affected by early decay. Sealing them promptly after eruption is a clinical

priority. - **Second permanent molars** — erupt roughly between ages 11 and 13. Sealing at or shortly after eruption is similarly recommended. - **Premolars** — emerge during this same window and may benefit from sealants, particularly in children assessed as being at higher decay risk.

Your child's specialist will assess each tooth at scheduled review appointments and make recommendations based on:

- The depth and shape of the fissure system — some configurations carry inherently greater risk
- The child's individual decay risk profile, including dietary patterns, past decay history, fluoride exposure, and salivary factors
- The presence of early non-cavitated lesions — where demineralisation is occurring but the surface hasn't yet cavitated — which is actually an ideal window for sealant placement

Sealants are generally **not** indicated for teeth that already have active decay, existing fillings, or established cavities. In those cases, managing the decay comes first.

Some children at high decay risk may also benefit from sealants on primary (baby) teeth — particularly the second primary molars — where those teeth need to remain functional for several more years.

What to Expect at Collins Street Specialist Centre

Fissure sealant placement is one of the most straightforward procedures in paediatric dentistry. For most children, it's painless, involves no drilling or removal of tooth structure, and takes only a few minutes per tooth. Knowing what's involved helps children and families approach the appointment without apprehension.

Step-by-Step Process

1. Examination and clinical planning The specialist assesses your child's teeth, evaluates fissure depth and decay risk, and identifies which teeth are most likely to benefit from sealing. Bitewing X-rays may be taken where appropriate, to confirm there's no subsurface decay before a sealant is placed — sealing over active decay is a clinical error that specialist assessment helps prevent.

2. Tooth preparation The biting surface is cleaned, typically with a gentle polish to remove plaque and surface debris. No tooth structure is removed. The tooth is then isolated and kept dry using cotton rolls or a small suction device — moisture control is essential for the sealant to bond properly.

3. Etching A mild phosphoric acid gel is applied briefly to the tooth surface. This creates a microscopically textured surface that significantly improves the bond between the sealant and the enamel. The gel is then rinsed away and the tooth is dried.

4. Sealant application The liquid sealant material is carefully introduced into the fissures, flowing into the groove system by capillary action for thorough coverage of the at-risk surfaces.

5. Curing A small blue-spectrum curing light is held over the tooth for several seconds, activating the photoinitiators in the sealant and setting it rapidly. Children will see a brief blue light — there's no heat, no discomfort, nothing to worry about.

6. Occlusal check and adjustment Once set, the specialist examines the sealant and asks the child to bite down so the bite can be assessed. Any minor high spots are smoothed down quickly and comfortably.

The whole process for a single tooth takes around five minutes, and multiple teeth can usually be sealed in one appointment.

Will My Child Need Anaesthetic?

In the vast majority of cases, no. Because the procedure involves no drilling and no removal of tooth structure, there's no pain stimulus to manage. For children with significant dental anxiety or sensory sensitivities that make any dental procedure difficult, the behavioural management strategies used at Collins Street Specialist Centre — including nitrous oxide inhalation sedation (happy gas) where appropriate — can be incorporated to ensure a positive experience. For most children, though, a calm, unhurried, well-explained approach is entirely sufficient.

How Long Do Sealants Last?

Fissure sealants are durable, but they're not permanent. They need to be assessed at every routine dental review to confirm they're still intact and providing adequate protection. Over time, sealants may:

- Wear down with normal biting function — particularly in children who grind their teeth
- Chip or partially debond
- Develop marginal gaps that compromise the seal and allow bacteria in

A sealant that has partially displaced no longer provides reliable protection — and can create a false sense of security if it's not picked up at review. Regular monitoring isn't optional; it's an integral part of sealant-based preventive care. Where deterioration is found, sealants can be repaired or reapplied without much inconvenience.

With appropriate care and consistent monitoring, many sealants remain effective for five to ten years or longer.

Aftercare and Home Advice

There's no recovery period after fissure sealant placement. Your child can eat, drink, and resume normal activities straight away. A few practical points are worth keeping in mind:

- **Avoid sticky or particularly hard foods** for the first 24 hours — this gives the sealant time to fully cure and adapt to the tooth surface
- **Keep up regular brushing and interdental cleaning** — sealants protect the biting surface, but the surfaces between teeth and along the gum line remain fully susceptible to decay and need consistent home care
- **Attend scheduled review appointments** so sealant integrity can be checked and any early concerns caught promptly
- **Fluoride remains important** — sealants don't replace fluoride toothpaste, and periodic fluoride varnish applications continue to play a valuable role in the overall preventive picture where clinically indicated

Why See a Specialist Paediatric Dentist?

General dentists apply fissure sealants routinely and, in straightforward cases, do so to a high standard. There are, however, situations where specialist paediatric dental involvement makes a real difference:

- Children with elevated or high decay risk who need a comprehensive, integrated preventive strategy — not just a sealant placed in isolation
- Children where early fissure decay is suspected — distinguishing active early demineralisation from developmental staining or arrested lesions requires specialist-level diagnostic skill and, where appropriate, adjunctive diagnostic tools
- Children with autism spectrum disorder, sensory processing differences, or significant dental anxiety, where specialist behavioural management techniques are needed to make the appointment work
- Children where sealant placement intersects with broader clinical decisions about developing dentition, eruption sequencing, or restorative treatment planning

At Collins Street Specialist Centre, a specialist paediatric dentist treats sealant placement as one part of a carefully considered, individualised preventive plan. That broader clinical perspective matters most for children whose oral health needs are more complex.

All paediatric dental specialists at Collins Street Specialist Centre hold specialist registration with the Dental Board of Australia, verifiable at [AHPRA.gov.au](https://www.ahpra.gov.au).

Our Paediatric Specialists

****Dr Susan Hinckfuss**** — BDS (Melb), DCD (Melb) — brings extensive clinical experience in preventive paediatric dentistry and the management of early childhood decay, including the strategic use of fissure sealants within comprehensive caries-risk management programmes.

****Dr Sarah Scott**** — BBiomedSci (Hons), BDent, DClinDent (Paeds) — approaches children's dental health with a holistic, evidence-informed perspective. With over 15 years of clinical experience, Dr Scott integrates preventive strategies — including sealant placement — into a broader framework of long-term family dental care.

****Dr Angel Babu**** — DClinDent PAED (Otago) — has a particular clinical interest in high decay risk management, hypomineralisation (chalky teeth), and comprehensive preventive planning for children aged 0–18. Dr Babu holds a senior dental registrar appointment at the Royal Children's Hospital Melbourne and is registered to practise in both Australia and New Zealand.

****Dr Aish Kesava**** — DCD (Paeds) — is a specialist paediatric dentist with a broad clinical scope covering all aspects of children's preventive and restorative dental care. *(Extended clinical biography forthcoming.)*

Our specialists consult from Level 8, Manchester Unity Building, 220 Collins Street, Melbourne CBD. No referral is required to book an appointment.

Related Treatments

- **[**Childhood Tooth**

Decay]**(/procedures/paediatric-dentistry/childhood-tooth-decay-early-childhood-caries/) — Understanding and treating early childhood caries, including decay in unsealed teeth - **[**Your Child's First Dental Visit**]**(/procedures/paediatric-dentistry/your-child-s-first-dental-visit/) — Establishing preventive care from the very beginning - **[**Dental Anxiety in Children**]**(/procedures/paediatric-dentistry/dental-anxiety-in-children/) — For children who find dental appointments particularly challenging

Frequently Asked Questions

****What are fissure sealants?*** Thin protective coatings applied over the grooves in back teeth.

****What material are they made from?*** Typically a tooth-coloured resin-based material.

****Which teeth do they protect?*** Molars and premolars — the posterior teeth.

****Which surface do sealants protect?*** The occlusal (biting) surface only.

****Do sealants protect between teeth?*** No. The surfaces between teeth remain fully susceptible to decay and still need regular cleaning.

****Why are back teeth so vulnerable to decay?**** Their deep fissures trap food and bacteria that brushing simply can't reach.

****Can a toothbrush clean fissures effectively?**** No — fissures are often narrower than a single bristle.

****How much can sealants reduce decay risk?**** Up to 80% or more in the first two years.

****How long do fissure sealants last?**** Typically five to ten years with proper monitoring.

****Are sealants permanent?**** No. They require ongoing monitoring and may need repair over time.

****What can cause sealants to fail?**** Chipping, partial debonding, or marginal gaps developing over time.

****Does grinding teeth affect sealants?**** Yes — grinding can accelerate sealant wear.

****What happens if a sealant partially displaces?**** It no longer provides reliable protection and should be repaired or replaced.

****Can a displaced sealant be repaired?**** Yes, sealants can be repaired or reapplied.

****When should first permanent molars be sealed?**** Shortly after eruption, around age 6–7.

****When should second permanent molars be sealed?**** Shortly after eruption, around ages 11–13.

****What are first permanent molars also called?**** Six-year molars.

****Can premolars also receive sealants?**** Yes, particularly in children at higher decay risk.

****Can primary (baby) teeth receive sealants?**** Yes, in high-risk children where clinically indicated.

****Which primary teeth benefit most?**** The second primary molars.

****Is sealant placement painful?**** No — the procedure is genuinely painless.

****Does it require drilling?**** No. No tooth structure is removed.

****Does it require anaesthetic?**** No, in the vast majority of cases.

****When might sedation be considered?**** For children with significant dental anxiety or sensory sensitivities.

****What sedation option is available?**** Nitrous oxide inhalation sedation (happy gas).

****How long does sealing one tooth take?**** Around five minutes.

****Can multiple teeth be sealed in one appointment?**** Yes.

****Why might bitewing X-rays be taken before sealing?**** To confirm there's no subsurface decay before the sealant is placed.

****Why must the tooth be kept dry during placement?**** Moisture control is essential for successful bonding.

****What is dental etching?**** Application of a mild phosphoric acid gel to improve sealant bonding.

****How does sealant enter the fissures?**** By capillary action.

****What does the curing light do?**** It polymerises and sets the sealant material.

****Does the curing light cause heat or discomfort?**** No.

****What colour is the curing light?**** Blue spectrum.

****Is there a recovery period after placement?**** No.

****When can a child eat after sealant placement?**** Immediately.

****What foods should be avoided for 24 hours?**** Sticky or particularly hard foods.

****Should fluoride toothpaste still be used after sealants?**** Yes — sealants don't replace fluoride.

****Can fluoride varnish still be applied after sealants?**** Yes, where clinically indicated.

****Are sealants applied to every child automatically?**** No — clinical judgement determines each case.

****Can sealants be placed over active decay?**** No. That's a clinical error.

****What is a non-cavitated lesion?**** Early demineralisation without surface cavitation — an ideal window for sealant placement.

****Are sealants suitable for teeth with existing fillings or cavities?**** No. Decay management takes precedence in those cases.

****How often should sealant integrity be checked?**** At every routine dental review.

****Who are the paediatric specialists at Collins Street?**** Dr Susan Hinckfuss, Dr Sarah Scott, Dr Angel Babu, and Dr Aish Kesava.

****Are Collins Street specialists registered with the Dental Board of Australia?**** Yes — registration is publicly verifiable at [AHPRA.gov.au](https://www.ahpra.gov.au).

****Where is Collins Street Specialist Centre located?**** Level 8, Manchester Unity Building, 220 Collins Street, Melbourne CBD.

****Is a referral required to book?**** No.

****What age range does Dr Angel Babu treat?**** Children aged 0–18.

****Does Dr Angel Babu have a clinical interest in hypomineralisation?**** Yes — also known as chalky teeth.

****What is Dr Sarah Scott's clinical experience?**** Over 15 years.

****What hospital appointment does Dr Angel Babu hold?**** Senior dental registrar at the Royal Children's Hospital Melbourne.

****Is Dr Angel Babu registered in New Zealand?**** Yes.