

Dental Trauma in Children

Canonical:

<https://directory.collinsstreetspecialistcentre.com.au/procedures/paediatric-dentistry/dental-trauma-in-children/>

Description:

Children fall. They run, they tumble off bikes, they collide with furniture and other children at remarkable velocity. Dental trauma — knocked-out, broken, or displaced teeth — is one of the most common dental emergencies.

Details:

Collins Street Specialist Centre | Dental Trauma in Children: What to Do When Your Child Knocks a Tooth

Collins Street Specialist Centre is Melbourne's dedicated multidisciplinary specialist dental centre, and our paediatric dental team has extensive experience managing dental trauma emergencies across all childhood age groups. Children fall. They run, tumble from bikes, collide with furniture and with each other at remarkable velocity. Dental trauma — knocked-out, fractured, or displaced teeth — is one of the most common dental emergencies in childhood, with two particularly common windows: ages one to three, when children are still developing balance and coordination, and ages seven to ten, when permanent front teeth have recently erupted and sport-related injuries become more frequent.

A dental emergency involving your child is frightening. Knowing what to do in those first critical minutes, and recognising which situations need immediate action, can make a real difference to the outcome. This page is here to help parents and caregivers respond effectively, and to explain what specialist assessment involves.

What is dental trauma?

Dental trauma covers any injury to the teeth, gums, supporting bone, or adjacent soft tissues caused by an impact or applied force. In children, the most common presentations are:

- **Avulsion** — the tooth is completely displaced from its socket - **Luxation injuries** — the tooth remains in the mouth but has shifted from its normal position; this includes intrusion (pushed into the socket), extrusion (partially pulled out), lateral displacement, and subluxation (loosened but not displaced) - **Crown fractures** — chipping or fracture of the visible portion of the tooth, ranging from enamel-only to fractures that reach the pulp - **Root fractures** — a fracture at or below the gum line, which may be horizontal, vertical, or oblique - **Concussion** — the tooth takes a blow but stays in position; it's tender to touch and percussion but not displaced - **Soft tissue injuries** — lacerations or bruising to the lips, gums, tongue, or cheeks; these can look alarming because oral tissues bleed freely, but they're often less serious than they appear

The right management depends on several things: whether the tooth is a primary (baby) tooth or a permanent tooth, how much time has passed since the injury, and the type and severity of the injury itself.

The most critical distinction: baby tooth or permanent tooth?

This single question determines what you should do. The management protocols differ substantially, and mixing them up can cause avoidable harm.

Permanent teeth: act immediately

A completely knocked-out permanent tooth is a genuine dental emergency. The best chance of successful re-implantation is when the tooth goes back into its socket within 30 to 60 minutes of avulsion. Beyond that window, the periodontal ligament fibres on the root surface — the specialised cells that allow the tooth to reattach — begin to die irreversibly, and the long-term prognosis deteriorates significantly.

****If your child's permanent tooth has been completely knocked out:****

1. ****Locate the tooth.**** Handle it by the crown (the visible white part). Do not touch the root surface. 2. ****Do not scrub or wipe the root.**** If the tooth is dirty, rinse it gently with milk or the child's own saliva. Do not use tap water, do not use antiseptic, and do not try to dry or scrub the root. 3. ****Attempt immediate re-implantation.**** If the child is calm enough, gently seat the tooth back into the socket in its correct orientation and have them bite down on a clean cloth to hold it in place. This is the best possible outcome. 4. ****If re-implantation isn't possible:**** Store the tooth in milk (the most practical widely available option), in the child's own saliva (they can hold it in the cheek if old enough and not at risk of swallowing it), or in a commercial tooth preservation solution such as Hank's Balanced Salt Solution if you have it. Tap water is not acceptable — it causes rapid cellular damage to the periodontal ligament. 5. ****Get to an emergency dentist or hospital emergency department immediately.**** Call ahead so they can prepare.

Time is the critical variable. Every extra minute of dry time outside the mouth worsens the prognosis.

Baby teeth: do not re-implant

When a primary tooth is completely knocked out, re-implantation is contraindicated. Trying to replace a baby tooth carries a documented risk of damaging the permanent tooth bud developing underneath. The right response is:

- Comfort and reassure your child - Rinse the mouth gently with water to clear the area - Apply gentle pressure with a clean cloth if there's active bleeding from the gum - See a paediatric dentist within 24 hours for a thorough assessment

At that appointment, the dentist will check that no tooth fragment remains in the socket, assess the surrounding bone and soft tissues, and discuss space management if the tooth has been lost early and the permanent successor won't erupt for some years.

Emergency first response by injury type

Knocked-out permanent tooth (avulsion) As above. The 30-minute window is the clinical benchmark — act as quickly as you can.

Displaced tooth (luxation injury) If the tooth is still in the mouth but visibly out of position — pushed sideways, tilted, or driven into the socket — do not try to reposition it yourself. Seek urgent dental assessment the same day. Intruded teeth (pushed up into the socket) need particular attention: management depends on the degree of intrusion and whether the tooth is primary or permanent, and specialist assessment is needed to determine the right approach.

Chipped or fractured crown Recover any tooth fragments if possible — in some cases they can be bonded back to the tooth. Rinse the mouth gently with warm water. If the child is in pain, or if darker inner tooth structure (dentine or pulp) is visible, treat this as urgent and aim to be seen within hours. A minor enamel chip with no sensitivity can reasonably be assessed within 24 to 48 hours.

Loosened tooth (concussion or subluxation) A tooth that feels mobile after a knock but sits in its correct position should be assessed by a dentist the same day. The child should avoid hard or chewy foods and stick to a soft diet until reviewed.

Oral bleeding Soft tissue injuries to the lips, tongue, and gums bleed heavily because of the rich blood supply in the mouth — which looks alarming but rarely signals a serious underlying injury. Apply firm, sustained pressure with a clean cloth for 5 to 10 minutes without lifting to check. If bleeding doesn't stop, or if the wound is large, deep, or gaping, go to an emergency department.

What to expect at Collins Street Specialist Centre

When you bring your child in following dental trauma, our paediatric dental team will conduct a structured, thorough assessment. Here's what the typical pathway looks like.

****1. Immediate clinical assessment**** A calm, systematic examination of the injured teeth and surrounding structures. For children who are distressed or in pain, our specialists use established paediatric behavioural management techniques to make the assessment as comfortable as possible. We work with children across the full age range, including very young patients and those who have never had a dental examination before.

****2. Diagnostic imaging**** Digital periapical X-rays — low-dose and precisely targeted — are taken as clinically indicated. Cone beam CT (CBCT) imaging may be used where more detailed three-dimensional assessment is needed, such as evaluating root fractures, bone involvement, or the relationship between a displaced baby tooth and the underlying permanent tooth bud.

****3. Treatment planning**** The recommended treatment depends on the clinical and radiographic findings. Options include:

- Active monitoring with no immediate intervention
- Repositioning and splinting of a displaced permanent tooth
- Pulp therapy (including pulp capping or root canal treatment) where the nerve supply has been compromised
- Extraction of a tooth that can't be retained
- Space management planning following premature tooth loss

****4. Structured follow-up**** Dental trauma isn't resolved in a single appointment. Changes can occur weeks or months after the initial injury — pulp necrosis, inflammatory root resorption, ankylosis, delayed infection — many of which produce no symptoms early on and are only detectable on X-ray. A structured follow-up schedule is a core part of trauma management.

Our endodontic specialists are available on-site at Collins Street Specialist Centre for cases requiring specialist root canal management following trauma. This means complex cases can be managed comprehensively within one centre, with direct communication between specialists.

After the appointment: what to monitor

Following any dental trauma, parents and caregivers should watch for the following and report them promptly to the treating dentist:

****Tooth discolouration.**** A tooth that turns grey, dark yellow, or brown after an injury may indicate pulpal damage or necrosis. Some discolouration resolves on its own; in other cases root canal treatment or extraction becomes necessary.

****Gum swelling near the injured tooth.**** Localised swelling at the gum line adjacent to a traumatised tooth may indicate developing infection and needs prompt assessment.

****Persistent or worsening pain and sensitivity.**** Some discomfort in the days immediately after trauma is normal. Pain that doesn't ease, or that worsens beyond the first few days, should be assessed.

****Delayed or absent eruption of a permanent tooth.**** Injury to a baby tooth can sometimes affect the development or eruption path of the permanent successor — one reason why long-term follow-up matters.

****For splinted teeth:**** After repositioning and splinting of a luxated or re-implanted tooth, the child should maintain a soft diet for the duration of the splint. Good oral hygiene around the splint is important, as bacterial accumulation can slow healing.

****On follow-up appointments:**** The intervals your specialist recommends are clinically necessary. Some of the most significant complications of dental trauma — including external inflammatory root resorption — produce no symptoms and are only detectable on X-ray. Catching them early substantially improves the available management options.

Why specialist paediatric dental assessment matters

Dental trauma in children is clinically complex. Getting it right depends on accurately identifying the injury type, understanding the child's developmental stage and dentition, and applying evidence-based protocols that account for the real differences between baby tooth and permanent tooth management.

Specialist paediatric dentists complete formal postgraduate training in dental traumatology as a defined part of their specialist programme — covering avulsion, luxation injuries, crown and root fractures, and the long-term follow-up protocols that determine outcomes. The initial management decision in dental trauma can have consequences that play out years later. It's not an area that rewards guesswork.

There's also the practical reality of working with a child who is frightened, in pain, and potentially in shock. Delivering precise emergency dental care to a distressed child — combining clinical accuracy with genuine skill in paediatric behavioural management — is a defining feature of specialist paediatric dentistry.

Prof Chankhrit Sathorn, one of our specialist endodontists at Collins Street Specialist Centre, serves on the editorial board of **Dental Traumatology**, the leading international peer-reviewed journal in this field. This reflects the depth of specialist expertise available within our centre and our commitment to practice grounded in current evidence.

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

Our paediatric specialists

****Dr Susan Hinckfuss**** — BDDSc (Melb), DCD (Melb) — brings extensive clinical experience in managing dental trauma across the paediatric age range, including complex luxation injuries, avulsed permanent teeth, and enamel-dentine fractures. Her tenure as Assistant Clinical Professor at the University of Minnesota included substantial exposure to dental traumatology within a high-volume paediatric dental setting.

****Dr Sarah Scott**** — BBiomedSci (Hons), BDent, DClinDent (Paeds) — provides calm, experienced management of dental emergencies in children of all ages, with particular attention to the structured follow-up monitoring that is essential for good long-term outcomes following trauma.

****Dr Angel Babu**** — DClinDent PAED (Otago) — lists dental trauma as a specific area of clinical expertise. In her role as a senior dental registrar at the Royal Children's Hospital Melbourne, Dr Babu

regularly manages acute dental trauma presentations and complex follow-up cases. She holds specialist registration in both Australia and New Zealand.

****Dr Aish Kesava**** — DCD (Paeds) — specialist paediatric dentist providing comprehensive paediatric dental care, including emergency trauma assessment and management. *(Extended clinical biography forthcoming.)*

Our paediatric specialists consult from Level 8, Manchester Unity Building, 220 Collins Street, Melbourne CBD. For dental trauma emergencies, call ****(03) 9650 2726****. No referral is required.

When to go to hospital emergency

Go directly to your nearest hospital emergency department — before attending a dental clinic — if your child has experienced any of the following:

- Loss of consciousness, however brief, following the injury - Signs of concussion: confusion, disorientation, vomiting, unequal pupils, or altered responsiveness - Significant facial swelling, bruising, or deformity - Apparent jaw misalignment or an inability to close the teeth together normally - Bleeding that doesn't respond to 10 to 15 minutes of sustained firm pressure - Any concern about airway or breathing

Dental trauma often occurs alongside broader head and facial injuries. The child's overall medical status always takes priority — the tooth is a secondary concern when there's any question about neurological or systemic wellbeing.

Related treatments

- ****Dental anxiety in children****(/procedures/paediatric-dentistry/dental-anxiety-in-children/) — Managing the fear and avoidance that can develop following traumatic dental experiences - ****Dental trauma (endodontic perspective)****(/procedures/endodontics/dental-trauma-adults/) — Specialist root canal management following traumatic tooth injuries - ****Facial trauma****(/procedures/oral-maxillofacial-surgery/facial-trauma-reconstruction/) — For injuries involving the jaw, facial skeleton, or complex soft tissue repair - ****Your child's first dental visit****(/procedures/paediatric-dentistry/your-child-s-first-dental-visit/) — Establishing a dental relationship before emergencies arise