



Dental and Oral & Maxillofacial Department

## Dental Pain and Infection

Information for parents and carers

### What is the cause of dental pain?

The cause of dental pain and infection is usually from decayed teeth, but can also occur from teeth that have previously been injured.

### What is tooth decay?

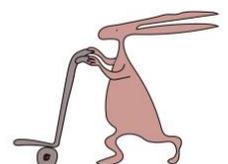
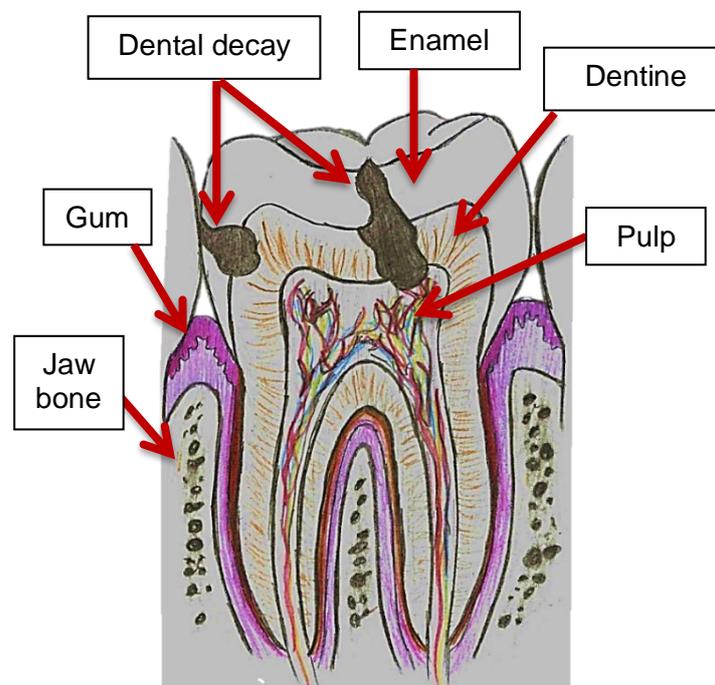
Tooth decay occurs when sugars from food and drinks feed the bacteria in the mouth and produce acid which causes holes in the teeth.

You may be able to see this decay as a dark area or a hole in the tooth. Sometimes the outer layer of the tooth (the enamel) stays hard but the tooth has a large, soft cavity in the dentine underneath. X-rays of your child's teeth are useful to see which teeth are decayed and which are most likely causing the pain and infection.

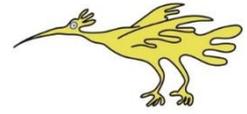
There are different levels of toothache depending on how big and how deep the decay is in the tooth.

Toothache is worst when decay reaches the nerve in the centre of a tooth (the pulp) and causes an inflammation which causes toothache. If this is left untreated, an infection can occur at the roots of the teeth, causing a dental abscess. If this infection spreads, it can result in a swelling that is visible from the outside of the face.

When decay reaches the nerve in the centre (the pulp) of the tooth, the tooth requires a form of pulp treatment (e.g. root canal treatment) or extraction. If decay is removed at an early stage, the tooth can usually be filled.



## Managing dental pain: Pain relief



Sometimes toothache can disturb your child's sleep and how they can eat.

Paracetamol and ibuprofen are most effective at managing toothache (unless your child has been told not to take these medicines). These medicines are available at your local pharmacy or supermarket and you should follow the instructions for dosage for your child's age for that medicine. These medicines can be used in combination by alternating them, provided the total dose is within daily recommended limits. Talk to your GP if you are unsure about doses for your child or whether they can take these medicines.

Toothache tends to "come and go" and prolonged use of pain relief is not advised. To treat their toothache, your child may require a filling to be placed in smaller cavities or may require the tooth to be extracted. If left untreated, toothache may progress to dental infection and swelling.

## Managing dental infection: Visit your general dentist

Unlike other infections in the body, **antibiotics are usually unsuitable** to manage dental infections. The only long-term treatment options for established dental infections are root canal treatment or extraction of the decayed teeth. These treatments can be carried out by your general dentist or by referral to a specialist dentist.

Sometimes, children find it difficult having treatment under local anaesthetic.

There are options for children to have their dental treatment completed with sedation, where they will be awake but more relaxed, or under general anaesthetic where they will be asleep. However, this is often a specialist service and will usually require a referral by your general dentist.

As toothache and dental infections are common in children, there are usually waiting lists associated with these services.

## When do we use antibiotics?

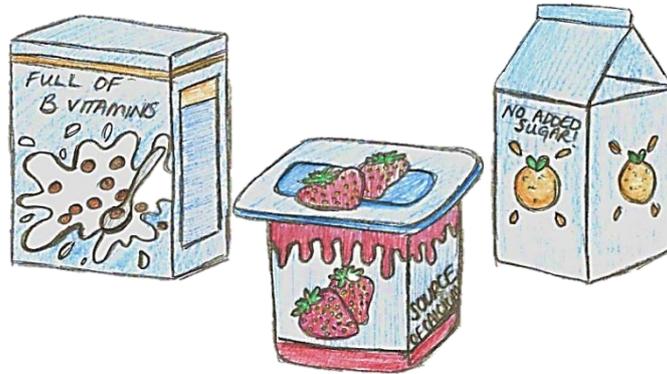
Antibiotics can reduce the spread of dental infection if your child has a facial swelling or if they have become unwell as a result of their dental infection.

However, antibiotics **do not treat toothache** and **do not resolve the infection without dental treatment**. They are a temporary measure to control the infection and you should take your child to see a dentist.

## How to avoid future dental pain and infection

Tooth decay is a preventable condition; you can reduce your child's risk of further tooth decay by following the recommended advice:

- Sugary foods and drinks should be reduced and kept to mealtimes. There are lots of hidden sugars in some foods such as yoghurts, fruit juices, dried fruit and cereals.
- Brushing your child's teeth two times per day, in the morning and before bed, for two minutes with fluoride toothpaste and avoid rinsing after brushing. Star charts and free mobile brushing apps like 'Brush DJ' can make this more fun!
- It is recommended that all children should have their first dental check-up at their general dentist by the age of one and they continue to see the dentist regularly, at least twice a year.



Some foods such as cereals, fruit juices and yoghurts can contain hidden sugars and have confusing or misleading marketing messages. The NHS Change 4 Life website has lots of suggestions of healthy snacks and dinners.

Children participating in activities where dental trauma is common should use a mouthguard to protect their teeth.

### When do I need to come back to the Emergency Department?

If a dental infection is serious and needs urgent treatment, we may admit your child as an inpatient at Alder Hey.

Usually this would be for antibiotic treatment through a drip and for a general anaesthetic to remove the tooth causing the infection and any other decayed teeth.

Signs that you need to return to the Emergency Department include:

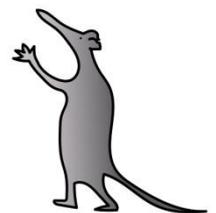
- Swellings visible around the neck or inside the mouth that are causing difficulty breathing or swallowing or making your child drool
- Swellings visible around the neck or inside the mouth that have begun to feel firm rather than soft
- Swellings that are beginning to close your child's eye
- Swellings that are rapidly increasing in size
- If your child's condition is worsening and they have become generally unwell

### References & more information:

British Society of Paediatric Dentistry: A Practical Guide to Children's Teeth  
<https://www.bspd.co.uk/resources>

NHS Change 4 Life <https://www.nhs.uk/change4life>

Action on Sugar <http://www.actiononsugar.org/>



**Who to contact for further details:**

If your child is not registered with a dentist you can find an NHS dentist using the website <https://www.nhs.uk/service-search/find-a-dentist>. If after contacting several dental surgeries you still cannot find a dentist accepting NHS patients, call NHS England's Customer Contact Centre on 0300 311 2233.

This leaflet only gives general information. You must always discuss the individual treatment of your child with the appropriate member of staff. Do not rely on this leaflet alone for information about your child's treatment.

This information can be made available in other languages and formats if requested.

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