

## FEVER / HIGH TEMPERATURE IN CHILDREN



### What is fever?

Body temperature varies slightly throughout the day. These changes can be caused by exercise, eating, sleeping and even the time of day. Average body temperature ranges from 36.5–37.5C (97.7F–99.5F). A fever is usually defined as a temperature above 38C (100.4F).

A fever is usually a symptom of an underlying condition, most often an infection.

### How to take a child's temperature?

Three ways to check a child's temperature using a thermometer include:

Under the arm – for all children. This usually reads 0.5C (32.9F) lower than a temperature taken in the mouth. Leave in place for 2–3 minutes

Under the tongue - for older children. Leave in place for 2–3 minutes

Ear (tympanic) - for children of all ages. This may be inaccurate if the technique is incorrect or if there's wax in the ear

### What causes a fever?

High temperature (fever) is caused by release of certain chemicals by your immune system, usually as a result of infection (viral or bacterial) or inflammation. The high temperature makes it more difficult for the bacteria or virus to survive.

Common conditions that can cause a fever include:

- Respiratory tract infections and colds
- Flu (influenza)
- Ear infections
- Throat infections
- Kidney or urinary tract infections
- Infections of the gut (gastroenteritis)
- Common childhood illnesses – eg. chicken-pox, scarlet fever, hand foot and mouth disease, measles, whooping cough, etc.
- If you have been abroad and develop a fever, it is important to see a doctor. Causes of fever caught abroad can include dengue fever, malaria, tuberculosis, hepatitis, etc.
- A child's temperature can also be raised when they are going through the teething period, following vaccinations or because of too much bedding or clothing.

## **Treating a fever**

The following are things you can do to bring your child's fever down and make your child more comfortable:

- Medications – you can give them paracetamol to bring the fever down. The paracetamol does not treat the cause of the fever but it will ease the discomfort from the high temperature. It also eases pains, aches and headaches.
- If the fever is not coming down despite paracetamol, then you can also add in ibuprofen. However, do not give ibuprofen to children who have known to react (have hypersensitivity) to ibuprofen or in children who have a history of asthma and attacks have been triggered off by ibuprofen. If in doubt, please contact your doctor.
- Take extra layers of clothes off your child – this will prevent overheating
- Drink plenty of fluids – this helps to prevent a lack of fluid in the body (dehydration). If the child is irritable and refuse to drink, try to give them a dose of paracetamol first, then try again in half an hour or so when the temperature has back come down. If your child is under 6 months old, you can give extra boiled water, breast-feeds or bottles. Do not worry if they refuse to eat, it is more important that they don't become dehydrated
- Using a fan to cool a child down – make sure the fanned air is not too cool and the fan is not too near the child. A gentle flow of air in a room temperature room may be helpful. You can use a fan on the other side of the room to keep the air in the room circulating.
- Tepid or cool sponging a child is NOT recommended.
- Seek medical advice if the fever is not subsiding despite medications or if the child has others signs of being unwell such as persistent vomiting, drowsiness, floppiness, etc.

## **Febrile convulsions**

If the fever rises quickly, it can occasionally cause a fever-induced seizure called a febrile convulsion. This occurs in young children below the age of 5 but it is not common. During a febrile convulsion, the child's body usually becomes stiff, they lose consciousness and their arms and legs twitch. They are frightening but usually have no lasting effects.

Early use of medications (eg. paracetamol) to bring down the temperature is advised to prevent this.

## **Febrile convulsion management**

Recommendations for the management of febrile convulsions in children include:

- Gently place your child on a soft surface in the recovery position (lay them on their side with the face turned to one side). This will stop them swallowing any vomit and keep their airway clear.
- Loosen clothing around head or neck
- Don't try to prevent the shaking
- Don't put anything in your child's mouth
- Stay with your child and note how long the seizure lasts
- Don't give your child anything to drink until he is fully alert
- Call the doctor immediately

### **When to seek medical help?**

You should contact a doctor if:

- Your baby is aged under 3 months and has a temperature of 38C (100.4F) or above
- Your baby is aged between 3 and 6 months of age and has a temperature of 39C (102.2F) or above
- Your child has a fit following a high fever
- Your child develop a rash that dose not disappear when you press a glass on it (the tumbler test) or any symptoms of stiff neck, shortness of breath, chest pains, headaches or drowsiness
- Your child is becoming more unwell with the fever or you think your child may be dehydrated.
- The fever lasts longer than three days

**When in doubt, always consult your doctor for further advice.**