Fever in children younger than 5 years

Information for the public
Published: 1 May 2013
nice.org.uk

About this information

NICE clinical guidelines advise the NHS on caring for people with specific conditions or diseases and the treatments they should receive. The information applies to people using the NHS in England and Wales.

This information explains the advice about fever in children that is set out in NICE clinical guideline 160.

All of the treatment and care that NICE recommends is in line with the NHS Constitution (www.gov.uk/government/publications/the-nhs-constitution-for-england). For more information see 'About care in the NHS' on our website (www.nice.org.uk/nhscare).

This is an update of advice on fever in children that NICE produced in 2007.

Does this information apply to my child?

Yes, if your child is younger than 5 years old and has a fever for which the cause has not yet been identified.

It does not cover children who have:

- already been admitted to hospital
• a pre-existing illness (for example, cystic fibrosis, immunosuppression or sickle cell disease) in which fever is covered by the treatment they are receiving from their specialist

• recurring fever (a fever that comes back)

• been diagnosed with a tropical disease (an infection picked up during travel to a tropical country).

Fever in children

A fever is an increase in your child's normal body temperature. Fever in children is common but it can cause anxiety for parents and carers. You may seek support from healthcare services but in most cases you can be reassured that your child is best cared for at home. You may want support and advice to do this confidently.

Almost all children with a fever recover quickly and without problems. In a very small proportion of children the fever may not improve or the child's health may worsen, which can sometimes be a sign of a serious illness or infection, such as pneumonia, a urine infection or meningitis.

If you are concerned about your child's fever, you can seek support from a healthcare professional, for example, your GP.

Your child's healthcare team

The various tests and treatments described may be provided by a range of healthcare professionals. These could include GPs, paediatric specialists (doctors who specialise in caring for children), nurses and healthcare assistants.

A member of your child's healthcare team should discuss your child's fever with you and explain any tests and treatments needed in detail. You should have the opportunity to ask questions – there is a list of questions you might like to ask to help you with this.

Some treatments described may not be suitable for your child, depending on their exact circumstances. If you think that your child's treatment or care does not match this advice, talk to their healthcare team.
Measuring your child's fever

When you report that your child has an increased temperature, your healthcare professional should take this seriously.

Your healthcare professional should measure and record your child's temperature (usually by using a thermometer under the arm or in the ear).

Fever in babies under 3 months is rare and can be a sign of serious illness or infection. If your baby is younger than 3 months and has a fever (38°C or above), or is between 3 and 6 months of age with a temperature of 39°C or above, you should seek advice from a healthcare professional. Sometimes vaccines can cause a fever in children under 3 months, but it is always best to seek advice if you are unsure.

However, if your child is older than 6 months the height of their temperature alone is not the most useful indicator of whether they are seriously ill – healthcare professionals use other signs and symptoms to assess how ill a child is.

Working out the cause of the fever

If you are talking to a healthcare professional on the telephone, they should ask you questions about your child's health and symptoms. This will help them to decide if your child is best cared for at home or if they need to see a healthcare professional face to face. Very occasionally, an ambulance may be called if it is an emergency. This may not mean that your child has a serious illness, but does mean that they need to be seen quickly in case any treatment is needed.

If you see a healthcare professional face to face, they should examine your child to try to find what is causing the fever and to rule out serious illness and infection.

Your healthcare professional should measure and record your child's:

- temperature
- pulse (heart rate)
- breathing (respiratory rate).

They should also check for signs of dehydration, and may measure your child's blood pressure.
Your healthcare professional may also ask for a urine sample because a urinary tract infection is a common cause of fever in children.

Sometimes your healthcare professional will not find a reason for your child's fever, even after a full examination. They should not prescribe oral antibiotics (to take by mouth) if the cause of the fever is not known.

Based on the examination, your healthcare professional will decide how best to care for your child. Most children can be cared for at home (see caring for your child at home). Sometimes your healthcare professional may decide that your child needs a follow-up appointment, or they may need to make sure that you can phone or see a healthcare professional at any time of the day or night if you need to. They should also give you advice (which may include some written information) on symptoms to look out for and how to get further help.

A small proportion of children will need further assessment or tests in hospital (see taking your child to hospital).

**Caring for your child at home**

Most children with fever can be cared for at home. You should be given advice on how to care for your child and when to seek further help.

There are medicines (known as antipyretics) that are commonly used to reduce fever. Paracetamol and ibuprofen are antipyretics (check the label if you're not sure from the brand name which one it contains). These medicines can help to lower your child's temperature and make them feel more comfortable but they do not treat the cause of the fever.

You should not use paracetamol or ibuprofen simply to lower your child's temperature or to try to prevent a febrile convolution (a fit, or seizure, caused by fever) because studies have shown that paracetamol and ibuprofen do not reduce the risk of convulsions. However, it is okay to give your child one of these medicines if they have a fever and they are distressed or unwell.

Paracetamol and ibuprofen should not be given at the same time. If you give your child one of these medicines and they are still distressed before the next dose of this medicine is due, you may want to consider using the other. Only use these medicines for as long as your child feels unwell or distressed, and ask your healthcare professional if you need more information. Always check the instructions on the medicine bottle or packet.
Your healthcare professional should advise you:

- to offer your child regular drinks (if you are breastfeeding then breast milk is best)
- to look for signs that your child may be dehydrated (dry mouth, no tears, sunken eyes, sunken fontanelle – the soft spot on a baby's head)
- to encourage your child to drink more fluids if they are dehydrated, and seek further advice if you are worried
- how to look for and identify a non-blanching rash (a rash that does not disappear with pressure) that could be a sign of meningitis
- to check on your child during the night
- to keep your child away from school or nursery while they have a fever, and notify them of your child's absence.

Fever is a natural and healthy response to infection, so do not try to reduce your child's fever by over or under dressing them, or by sponging them with water.

Seeking further advice

You should seek further advice from a healthcare professional if:

- your child develops a non-blanching rash (a rash that does not disappear with pressure)
- your child has a convulsion (also known as a fit or seizure)
- your child's health gets worse
- the fever lasts consistently for more than 5 days
- you are becoming more worried about your child
- you have concerns about looking after your child at home.

Taking your child to hospital

If you have taken your child directly to the hospital (or you have been referred), your child should be examined by a healthcare professional as described in working out the cause of the fever.
While in hospital, your child may have their blood and urine tested. Your healthcare professional may also want to carry out some additional tests, such as a chest X-ray or lumbar puncture. If so, they should explain these tests to you and the reasons for doing them.

Your healthcare professional may want to keep your child in hospital for a few hours to see if their symptoms get better or worse. They may ask you if they can give paracetamol or ibuprofen to help make your child feel more comfortable or to help get a clearer idea of your child's symptoms. Your child should be re-examined 1–2 hours after this medicine has been given. If your child is very unwell or younger than 3 months, your healthcare professional may ask you if they can give your child an injection of antibiotics while they carry out further tests.

When your healthcare professional is confident that your child is well enough to go home, they should advise you how to look after your child and when to seek further advice (see seeking further advice).

If your child needs to stay in hospital

Your child may need to stay in hospital for more tests or treatment, or for observation, and your healthcare professional should explain the reasons for this to you.

When deciding whether your child should stay in hospital, your healthcare professional should take other factors into account as well as your child's health. These include:

- other illnesses that your child or other family members may have
- your knowledge of your child's health and how worried you are about their condition
- any recent contact that your child has had with people who have a serious infection
- your family's circumstances (for example, your ability to travel to the hospital)
- any recent travel abroad
- your previous experience of fever and feverish illness
- the length of time that your child has had a fever.

Questions you might want to ask about your child's fever

- What can I do to help my child feel comfortable?
• When and how should I seek further help for my child?
• What key symptoms should I be looking for?
• Is there a particular temperature that means my child is seriously ill?
• Is my child at risk of febrile convulsions (also known as fits or seizures)?
• What do you suspect is the reason for my child's fever?
• Please tell me more about the tests my child needs.
• What do these tests involve and how long will it take to get the results?
• Can I stay with my child while we are at the hospital?
• Will a fever have any long-term effects on my child?
• Are my other children at risk?
• How long does my child need to stay in hospital?
• Will any follow-up be needed after my child's treatment?

Sources of advice and support

• Action for Sick Children, 0800 074 4519
  www.actionforsickchildren.org

• Meningitis Research Foundation, 0808 800 3344
  www.meningitis.org

• Meningitis Trust, 0808 801 0388
  www.meningitis-trust.org

For more information you can also go to NHS Choices (www.nhs.uk) or call NHS Direct (www.nhsdirect.nhs.uk) on 0845 4647. Starting in 2013, NHS Direct is being replaced gradually by a new service called NHS 111.

NICE is not responsible for the quality or accuracy of any information or advice provided by these organisations.
Update information

August 2017: Information on fever and vaccines in babies under 3 months old was added.


Accreditation