

Fever

Fever is a rise in body temperature above the normal temperature, usually caused by infection. Normal body temperature is around 37°C (give or take a degree, depending on individual differences). There may also be minor fluctuations over the course of the day and night. Contrary to popular belief, the severity of fever isn't necessarily related to the seriousness of the illness – for example, life-threatening meningitis might only cause a small temperature rise.

The fever triggered by a viral or bacterial infection is caused by chemicals produced by the immune system, which reset the body's thermostat to a higher level. Most cases of mild fever resolve by themselves within a couple of days. A mild fever (up to 39°C) can actually help the immune system to get rid of an infection. In children between the ages of six months and six years, fever can trigger convulsions. A fever of 42.4°C or higher, particularly in the elderly, can permanently damage the brain.

Symptoms of fever

The symptoms of fever can include:

- Feeling unwell
- Feeling hot and sweaty
- Shivering
- Chattering teeth
- Flushed face.

Infection is usually the cause of fever

The cause of fever is usually an infection of some kind. This could include:

- **Viruses** – such as colds or upper respiratory tract infections.
- **Bacteria** – such as tonsillitis, pneumonia or urinary tract infections.
- **Some chronic illnesses** – such as rheumatoid arthritis and ulcerative colitis that can cause fevers that last longer than two weeks.
- **Some tropical diseases** – such as malaria, which can cause bouts of recurring fever or typhoid fever.
- **Heat stroke** – which includes fever (without sweating) as one of its symptoms.
- **Drugs** – some people may be susceptible to fever as a side effect of particular drugs.
- **Malignant tumours.**

Self-treatment suggestions for fever

Suggestions to treat fever include:

- Take paracetamol or ibuprofen in appropriate doses to help bring your temperature down.
- Drink plenty of fluids, particularly water.
- Avoid alcohol, tea and coffee as these drinks can cause slight dehydration.
- Sponge exposed skin with tepid water. To boost the cooling effect of evaporation, you could try standing in front of a fan.
- Avoid taking cold baths or showers. Skin reacts to the cold by constricting its blood vessels, which will trap body heat. The cold may also cause shivering, which can generate more heat.
- Make sure you have plenty of rest, including bed rest.

When to see your doctor for fever symptoms

You should always consult with your doctor in the following cases:

- You are still feverish after three days, despite home treatment.
- Your temperature is over 40°C.
- You are shivering and shaking involuntarily, or your teeth are chattering.
- You are hot, but not sweating.
- You seem to be getting sicker as time goes by.
- You have unusual symptoms such as hallucinations, vomiting, neck stiffness, skin rash, rapid heart rate, chills or muscle spasms.
- You feel confused and drowsy.
- You have a severe headache that doesn't respond to painkillers.
- You have recently travelled overseas.

When to seek immediate urgent medical attention

You should seek immediate medical attention if you or someone else has the following symptoms:

- Fever with headache and a stiff neck
- Rash that does not blanch to skin pressure (indicates bleeding into the skin) This can indicate a life threatening illness

Diagnosis methods

Since fever is a symptom and not an illness, the underlying cause must be found before specific treatment can begin. Some tests may be necessary if the cause of the fever is not clear after your doctor has taken a medical history and performed an examination. These tests may include:

- Blood tests
- Urine examination and culture
- Throat swabs or mucus sample examination and culture
- Stool examination and culture
- X-rays.

Treatment options

Treatment depends on the cause – for example, chronic tonsillitis may require surgery to remove the tonsils (tonsillectomy). Fevers caused by viral illnesses shouldn't be treated with antibiotics, since these drugs have no effect against viruses. In cases of mild bacterial infection, it is usually best to allow your immune system to handle the problem, rather than take antibiotics.

Fever in children

On average, a child has up to 10 infections per year. Body temperature isn't a reliable indicator of illness for babies and young children – a child may have a mild temperature according to the thermometer (slightly over 37°C), but seem happy and healthy. Trust your own instincts, but seek medical help if your child:

- Is aged six months or less
- Has a rash
- Has a fever of 40°C or more
- Is still feverish after a day or so, despite four-hourly doses of baby paracetamol
- Vomits or has persistent diarrhoea
- Refuses food or drink
- Cries inconsolably
- Seems listless, floppy or just looks ill
- Convulses or twitches
- Has trouble breathing
- Is in pain
- If you feel at all worried or concerned at any stage, consult with your doctor.

Where to get help

- Your doctor
- The Maternal and Child Health Line is available 24 hours a day Tel. 13 22 29.
- Nurse-on-Call Tel. 1300 60 60 24 – for expert health information and advice (24 hours, 7 days)

Things to remember

- Fever is a rise in body temperature, usually caused by infection.
- Fevers caused by viral illnesses shouldn't be treated with antibiotics, since these drugs have no effect against viruses.
- High fever (about 41.5°C or more) is extremely dangerous and could trigger convulsions.

This page has been produced in consultation with, and approved by:

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