

# Fever

## What is a fever?

Fever is defined as a body temperature that is 1 or more degrees higher than normal. Normal body temperature varies from person to person, by age, by the time of day, and by the part of the body where it is measured. Other factors such as strenuous exercise, medicines, or even excitement can also affect body temperature.

Your temperature can be measured with a thermometer in the mouth, ear, or rectum, or under the armpit. When the temperature is measured in the mouth (orally):

A temperature between 97 to 99 degrees Fahrenheit (F), or 36.1 to 37.2 degrees Celsius (C), is considered normal.

A temperature of 100 to 102 degrees F (37.8 to 38.9 degrees C) is usually called a low-grade fever.

A temperature of 103 degrees F (39.5 degrees C) or higher is called a high-grade fever.

Generally, oral temperatures of 102 degrees F (38.9 degrees C) or higher are fevers that may be more serious.

Temperatures measured in the ear or rectum are higher than oral temperatures by one half to 1 degree F (about one half degree C), and temperatures measured in the armpit are lower by one half to 1 degree F.

## What causes fever?

A fever is a symptom, not a disease. Fever can be a sign that the body is fighting an infection. Fever may occur with viral or bacterial infections such as ear infections, the flu, severe colds, sore throats, pneumonia, stomach viruses, or urinary tract infections. A fever can also be a symptom of other medical problems such as dehydration, a thyroid disorder, or an autoimmune problem.

## How is it treated?

Not all fevers mean you have a serious illness or need medicine. Children often have high temperatures, even with minor viral infections. On the other hand, older adults may have a serious infection and not have a fever.

For low-grade fevers below 102 degrees F (38.9 degrees C), get plenty of rest and drink lots of fluids, especially water. Dress in light, comfortable clothing. Do not bundle in heavy clothes or blankets. Keep the room cool but not uncomfortable. Bathing or sponging in lukewarm water may also help. Medicines are not needed for

a low-grade fever unless your provider recommends them.

Use nonprescription medicines to reduce fever if the temperature is 102 degrees F (38.9 degrees C) or higher and you are feeling uncomfortable. Adults can use acetaminophen, ibuprofen, naproxen, or aspirin. Children under 18 years of age should not take aspirin or products containing salicylate (such as Pepto-Bismol) because of the risk of Reye's syndrome unless recommended by a healthcare provider. Take the medicine according to the directions on the package or follow your provider's instructions.

Some precautions you should follow are:

Do not take acetaminophen if you have liver or kidney disease.

If you have asthma, ask your healthcare provider if it is OK to take nonsteroidal anti-inflammatory drugs (NSAIDs) such as aspirin, ibuprofen, or naproxen.

Take NSAIDs with food or milk to prevent stomach upset.

Do not give ibuprofen to infants under 6 months of age.

Do not drink alcohol.

Medicines should reduce fever within 1 to 2 hours. Recheck your temperature to see if the medicine is working. You may need to repeat doses according to the directions until the illness runs its course. To keep track of doses, write down the name of the medicine and when each dose is taken, especially if you are taking more than 1 medicine.

### **When should I call my healthcare provider?**

Adults should contact their healthcare provider if they have:

a fever of 103 degrees F (39.5 degrees C) or higher  
a fever of 101 degrees F (38.3 degrees C) or higher that lasts longer than 2 days  
fever and any of the following symptoms:

- shortness of breath
- severe headache or a headache that does not go away
- a very stiff neck and pain when bending the head forward
- sensitivity to bright lights
- confusion or drowsiness
- seizure or convulsion
- moderate to severe pain
- redness, swelling, tenderness, or other signs of infection on their skin.

If you are pregnant, call your provider if you have:

a fever of 100.5 degrees F (38 degrees C) or higher, or  
a temperature of 100 degrees F (37.8 C) for 3 days.

Also call your provider if a fever is getting worse or not getting better after 2 to 3 days of treatment.

---