What is a fever?

A fever is when your body temperature rises higher than normal. A fever itself isn't an illness. Rather, it's a symptom of a wide range of health conditions. When your body temperature rises a few degrees above normal, it can be a sign that your <u>immune system</u> has been activated, often to fight an infection. It can also be a side effect of some medications and vaccinations.

What is considered a fever?

Common knowledge states that a "normal" body temperature is 98.6 degrees Fahrenheit (37 degrees Celsius). But your baseline body temperature may vary by a degree or more. It also fluctuates. It's typically lower in the morning and higher in the evening. It's higher during certain points of your menstrual cycle and when you're exercising.

Infants and young children normally have slightly higher body temperatures than older children and adults. So infants and younger children have slightly higher fever temperatures.

There are no strict guidelines for what temperature is a fever, because body temperature varies by person, time of day and method of measurement. But healthcare providers most often say a fever temperature is 100.4 degrees F (38 degrees C) when measured orally (by mouth).

Rectal and ear thermometers typically measure temperatures at about 1.0 degrees F (0.6 degrees C) higher than oral thermometers. Skin thermometers (such as forehead thermometers) typically measure temperatures at about 1.0 degrees F (0.6 degrees C) lower than oral thermometers.

What is a low-grade fever?

A <u>low-grade fever</u> means a body temperature slightly above normal. This type of fever can be a sign your immune system has been mildly activated. There's no standard low-grade fever range. But many healthcare providers consider a body temperature between 99.5 degrees F (37.5 degrees C) and 100.3 degrees F (38.3 degrees C) to be a low-grade fever.

What are fever symptoms?

In addition to an elevated temperature, you may experience the following symptoms:

- Chills, feeling cold, shivering and shaking.
- Body aches and headaches.
- Fatique (tiredness).
- On and off or constant sweating.
- Flushed complexion or hot skin.
- Faster heart beats.

Additional fever symptoms in babies and children may include:

- Lack of appetite not eating and drinking well.
- <u>Earache</u> or pulling at their ears.
- High-pitched crying.
- Fussiness.
- Paleness or flushness.
- Excessive thirst.
- Decreased urination.

Possible Causes

What are the most common causes of fever?

A fever has many causes and can be a symptom of almost any illness. Common conditions that cause fever include:

- Bacterial infections.
- Viral infections such as influenza or COVID-19.
- Gastrointestinal (GI) infections.
- <u>Urinary tract infections</u>.
- Skin infections.

You may also develop a fever due to:

- A reaction to certain medications.
- Vaccinations.
- Autoimmune disorders.
- Cancer.

Can allergies cause fever?

Allergies can cause cold-like symptoms such as sneezing, runny nose and watery eyes, but they typically don't cause fever. Despite its name, hay fever (also called <u>allergic rhinitis</u>) doesn't cause fever.

Care and Treatment

What's the best way to measure body temperature?

You can take your temperature in several different parts of your body. The most common site is your mouth (oral temperature). Other sites include your ear (tympanic membrane), forehead (temporal artery) and armpit (axillary). The most accurate site is the rectum, and the least accurate site is the armpit.

The best way to measure your temperature is with a <u>digital thermometer</u>. Glass thermometers contain mercury and providers no longer recommend them.

How can I break a fever at home?

If your fever is mild — less than 101 degrees F (38.3 degrees C) — you usually don't need treatment with medication. Make sure you drink plenty of fluids and get plenty of rest. Taking a lukewarm bath — about 98 degrees F (36.7 degrees C) — may also help bring your body's temperature down. Keep an eye on signs of <u>dehydration</u> and other worsening symptoms.

If you're feeling uncomfortable and your temperature is higher than 101 degrees F (38.3 degrees C), you can try to <u>break the fever</u>. The most common way to get rid of a fever is to use over-the-counter (OTC) medications such as <u>acetaminophen</u> and nonsteroidal anti-inflammatory drugs (NSAIDs), including ibuprofen, naproxen and aspirin.

Don't give aspirin to children under the age of 17. Aspirin in children may cause Reye's syndrome, a sometimes fatal illness.

Does ibuprofen reduce fever?

Yes, you can take <u>nonsteroidal anti-inflammatory drugs</u> such as ibuprofen to try to reduce a fever.

How long does a fever last?

The cause of the fever determines how long it'll last. Typically, if an infection is the cause of your fever, it should pass within three to four days. Call your healthcare provider if the fever lingers longer than that or comes along with breathing changes.

Can fevers be prevented?

You can prevent some fevers by avoiding the illnesses and infections that cause them. Sometimes, children develop fevers after receiving vaccinations. You can prevent these types of fevers by giving your child acetaminophen just before or after the vaccination. But you can't prevent most fevers. They're typically a sign that your body is doing what it's supposed to do.

When To Call the Doctor

When should a fever be treated by a healthcare provider?

In adults, fevers less than 103 degrees F (39.4 degrees C) typically aren't dangerous and aren't a cause for concern. If your fever rises above that level, make a call to your healthcare provider for treatment.

In children, call your child's healthcare provider if:

- Their fever lasts more than five days.
- Their fever is higher than 104 degrees F (40 degrees C).
- Medications such as ibuprofen or acetaminophen don't break the fever.
- You're concerned they aren't behaving normally.
- They have any problems breathing or urinating.

When should I go to the ER?

If you have a fever along with any of the following symptoms, go to your nearest emergency room or call 911. It may be a sign of a serious or life-threatening illness.

- Pain or tenderness in your belly (abdomen).
- Nausea or vomiting.
- Severe headache.
- Stiff neck.
- Light irritates your eyes (photophobia).
- Convulsions or seizures.
- Difficulty breathing.
- Strange behavior and/or altered speech.
- Confusion or irritability.
- Difficulty waking or extreme sleepiness.
- Fever rash (small bleeding spots under your skin).

When should I take my child to the ER?

If your baby has a fever and is under 3 months of age, take them to the ER right away. Your baby's immune system hasn't developed fully yet, and they could have a serious infection.

If your child has a fever along with any of the following symptoms, call 911 or go to the nearest emergency room:

- Extreme sluggishness or drowsiness.
- Lack of appetite.
- Excessive <u>drooling</u> or <u>difficulty swallowing</u>.
- Continuous crying.
- Stiff neck.
- Fever rash.
- Difficulty breathing.
- Severe <u>abdominal pain</u>.
- Redness or swelling.
- Dehydration (not drinking many fluids).
- Decreased urination.

What are the possible complications or risks of not treating a fever?

Untreated fevers above 105.8 degrees F (41 degrees C) can be dangerous. If your body temperature reaches this level, your organs will begin to malfunction and will eventually fail.

Even moderate fevers can be dangerous for adults with lung or heart disorders because fever causes your breathing rate and <u>heart rate</u> to increase. Fever can also worsen the mental state of people with <u>dementia</u>.

Additional Common Questions

What is a recurrent fever?

A <u>recurrent fever</u> is a fever that keeps coming back multiple times over a period of time. Providers call these fevers episodic because they come and go. The fever lasts for a few days and then goes away for a stretch of time. Your child is healthy and acts normally between fevers. Recurrent fevers affect young children under the age of 5 most often. They're one of the main symptoms of a collection of conditions called <u>periodic fever syndromes</u>.

What is a febrile seizure?

Some children have a side effect of fevers called <u>febrile seizures</u>. This happens in 2% to 4% of children under the age of 5. Some seizures cause jerking movements, or it may look like your child has passed out. When this happens, put your child on their side and don't put anything in their mouth. Call 911 if the seizure lasts for more than five minutes and/or your child's lips turn blue.

If the seizure lasts less than five minutes, notify their healthcare provider and get medical attention right away.

What is a fever dream?

Fever dreams are vivid, bizarre or unpleasant dreams you may experience when your body temperature rises higher than normal. Researchers don't know the exact cause of fever dreams. But some scientists think fevers cause your brain to "overheat," affecting your cognitive processing, which results in dreams stranger than your typical dreams. Fevers may also interrupt your REM sleep cycle, which can lead to unusual dreams.

A note from Cleveland Clinic

While a fever can be uncomfortable, it's typically a sign that your body is working properly and your immune system is kicking into action. You don't need to treat low fevers, but you can take over-the-counter pain relievers until they pass. If you or your child has a higher temperature or your fever hasn't passed within a few days, you should make a call to your healthcare provider. While infections most often cause fevers, there could be other underlying conditions you'll want to get checked out.