

FEVER

Overview

A fever is a temporary rise in body temperature. It's one part of an overall response from the body's immune system. A fever is usually caused by an infection.

For most children and adults, a fever may be uncomfortable. But it usually isn't a cause for concern. For infants, however, even a low fever may mean there's a serious infection.

Fevers generally go away within a few days. A number of over-the-counter medications lower a fever. But you don't necessarily need to treat a fever if it's not causing discomfort.

SYMPTOMS: Body temperatures vary slightly from person to person and at different times of day. The average temperature has traditionally been defined as 98.6 F (37 C). A temperature taken using a mouth thermometer (oral temperature) that's 100 F (37.8 C) or higher is generally considered to be a fever.

Depending on what's causing a fever, other fever signs and symptoms may include:

- Sweating
- Chills and shivering
- Headache
- Muscle aches
- Loss of appetite
- Irritability
- Dehydration
- General weakness

Taking a temperature

To take a temperature, you can choose from several types of thermometers, including oral, rectal, ear (tympanic) and forehead (temporal artery) thermometers.

Oral and rectal thermometers generally provide the most accurate measurement of core body temperature. Ear or forehead thermometers, although convenient, provide less accurate temperature measurements.

In infants, a rectal temperature, if doable, is somewhat more accurate. When reporting a temperature to your health care provider, give both the reading and the type of thermometer used.

CAUSES: Typical body temperature is a balance of heat production and heat loss. An area in the brain called the hypothalamus (hi-poe-THAL-uh-muhs) — also known as your body's "thermostat" — monitors this balance. Even when you're healthy, your body temperature varies slightly throughout the day. It can be lower in the morning and higher in the late afternoon and evening.

When your immune system responds to disease, the hypothalamus can set your body temperature higher. This prompts complex processes that produce more heat and restrict heat loss. The shivering

you might experience is one way the body produces heat. When you wrap up in a blanket because you feel chilled, you are helping your body retain heat.

Fevers below 104 F (40 C) associated with common viral infections, such as the flu, may help the immune system fight disease and are generally not harmful.

Fever or elevated body temperature might be caused by:

- A viral infection
- A bacterial infection
- Heat exhaustion
- Certain inflammatory conditions such as rheumatoid arthritis — inflammation of the lining of your joints (synovium)
- A cancerous (malignant) tumor
- Some medications, such as antibiotics and drugs used to treat high blood pressure or seizures
- Some immunizations, such as the diphtheria, tetanus and acellular pertussis (DTaP), pneumococcal or COVID vaccine

Complications

Children between the ages of 6 months and 5 years are at increased risk of a seizure that occurs during a fever (febrile seizure). About a third of the children who have one febrile seizure will have another one, most commonly within the next 12 months.

A febrile seizure may involve loss of consciousness, shaking of limbs on both sides of the body, eyes rolling back or body stiffness. Although alarming for parents, the vast majority of febrile seizures cause no lasting effects.

If a seizure occurs:

- Lay your child on the side or stomach on the floor or ground
- Remove any sharp objects that are near your child
- Loosen tight clothing
- Hold your child to prevent injury
- Don't place anything in your child's mouth or try to stop the seizure
- Call 911 or your local emergency number if a seizure lasts more than five minutes or your child doesn't appear to recover well after the seizure
- Get emergency room or urgent care services if it's your child's first febrile seizure.

If your child doesn't need emergency care, see your child's health care provider as soon as possible for further evaluation.

Prevention

You may be able to prevent fevers by reducing exposure to infectious diseases. Here are some tips that can help:

- **Get vaccinated** as recommended for infectious diseases, such as influenza and COVID-19.
- **Follow public health guidelines** for wearing masks and social distancing.
- **Wash your hands often and teach your children to do the same**, especially before eating, after using the toilet, after spending time in a crowd or around someone who's sick, after petting animals, and during travel on public transportation.
- **Show your children how to wash their hands thoroughly**, covering both the front and back of each hand with soap and rinsing completely under running water.
- **Carry hand sanitizer with you** for times when you don't have access to soap and water.
- **Try to avoid touching your nose, mouth or eyes**, as these are the main ways that viruses and bacteria can enter your body and cause infection.
- **Cover your mouth when you cough and your nose when you sneeze**, and teach your children to do the same. Whenever possible, turn away from others and cough or sneeze into your elbow to avoid passing germs along to them.
- **Avoid sharing cups, water bottles and utensils** with your child or children.

When to see a doctor

Fevers by themselves may not be a cause for alarm — or a reason to call a doctor. Yet there are some circumstances when you should seek medical advice for your baby, your child or yourself.

Infants and toddlers

A fever is a particular cause for concern in infants and toddlers. Call your baby's health care provider if your child is:

- **Younger than 3 months old** and has a rectal temperature of 100.4 F (38 C) or higher.
- **Between 3 and 6 months old** and has a rectal temperature higher than 102 F (38.9 C) or has a lower temperature but seems unusually irritable, sluggish or uncomfortable.
- **Between 7 and 24 months old** and has a rectal temperature higher than 102 F (38.9 C) that lasts longer than one day but shows no other symptoms. If your child also has other signs and symptoms, such as a runny nose, cough or diarrhea, you can call sooner.

Children

There's probably no cause for alarm if your child has a fever but is responsive. This means your child makes eye contact with you and responds to your facial expressions and to your voice. Your child may also be drinking fluids and playing.

Call your child's health care provider if your child:

- **Is listless, confused or has poor eye contact** with you.
- **Is irritable, vomits repeatedly**, has a severe headache, sore throat, stomachache or other symptoms causing a lot of discomfort.

- **Has a fever after being left in a hot car.** Seek medical care immediately.
- **Has a fever that lasts longer** than three days.
- **Has a seizure** associated with the fever. Call 911 if the seizure lasts more than five minutes or your child doesn't recover quickly.

Ask your child's health care provider for guidance in special circumstances, such as a child with immune system problems or with a preexisting illness.

Adults

Call your health care provider if your temperature is 103 F (39.4 C) or higher. Seek immediate medical attention if any of these signs or symptoms accompanies a fever:

- Severe headache
- Rash
- Unusual sensitivity to bright light
- Stiff neck and pain when you bend your head forward
- Mental confusion, strange behavior or altered speech
- Persistent vomiting
- Difficulty breathing or chest pain
- Abdominal pain
- Pain when urinating
- Convulsions or seizures

Home Remedies For A Fever

Flushed cheeks, chills and feeling downright worn-out can be telltale signs of a fever. Many conditions can cause a fever, which is defined as a body temperature above 100.4 degrees F or higher.

Autoimmune issues, inflammation or cancer can drive your body temperature into fever zones. But an infection is the most common reason why your forehead may feel hot to the touch.

“[Bacteria, viruses](#) and other germs live in certain body temperatures, and when they cause an infection, the body raises its temperature to destroy them. Fever is the body’s defense system to kill these invaders.”

How To Manage A Fever At Home

That effort of fighting off an infection is why a fever can make you feel weak, achy, nauseous and generally uncomfortable. Research suggests that most [fever-causing infections](#) will clear up without treatment. Dr. Li offers some tips for making yourself more comfortable [at home while you recover](#).

Get plenty of rest

Staying home from work or school due to sickness may seem like an opportunity to catch up on your personal to-do list. But letting your body rest and relax helps you get rid of your fever and start feeling better. If you need permission to binge watch a new show, here it is.

Drink more fluids

Your risk of [dehydration](#) increases if a fever causes sweating, vomiting or diarrhea. Dr. Li suggests drinking lots of water, decaffeinated tea with honey, juice or broth. “Chicken and beef broth contain salt and protein, which helps keep you [hydrated](#) with electrolytes and nutrients,” she adds. For kids who struggle to drink enough fluids, offer hydrating, easy-to-eat foods and drinks such as popsicles, [fruit smoothies](#) or Pedialyte.

Take lukewarm baths

An elevated body temperature can make you feel cold enough to shiver. Still, warming up with a hot bath or shower isn’t the answer. “Hot baths or showers could make your fever worse,” says Dr. Li. Try a lukewarm water bath for better fever management.

Primary Care At Henry Ford

Request an appointment with a primary care specialist today.

Keep clothing light

It may feel natural to dress in layers or crawl under a heavy blanket when you have fever chills, but this can increase body temperature and cause overheating. Stick to a single layer of light clothing and avoid heavy blankets.

Try foods and herbal remedies

While a fever might leave you with no appetite, Dr. Li recommends finding ways to eat ginger and garlic. Ginger is known for helping [lower inflammation](#), which is a body response [associated with fever](#). Some [studies](#) report that garlic has anti-viral benefits.

Add garlic to a soup or pour hot water over a slice of fresh ginger root to make a drink. Dr. Li also suggests trying moringa tea, an herbal beverage that may help break fevers.

Consider over-the-counter medications

It’s normal to want fast relief from aches and other fever symptoms. If you’re still feeling lousy after rest and fluids, Dr. Li recommends trying acetaminophen or ibuprofen every six hours as needed. “But be careful not to take these at the start of a fever because they could mask the underlying issue,” she says.

[OTC medications](#) can also be helpful for kids older than 2 years old who are restless or have pain with fever, as long as you follow dosing instructions. Call your child’s pediatrician if they are under 2 years old and have a fever.

When To See A Doctor For A Fever

While most fevers can be managed at home, some warrant a trip to the doctor. “Generally, if your temperature is persistently higher than 103 degrees F and you’re in pain, you should seek medical

advice,” Dr. Li says. “Anyone 65 and older and immunocompromised people should seek advice early.”

For adults with fevers, she adds that experiencing headache, nausea, abdominal pain and mental status changes like confusion are signs that it’s time to see a doctor.

For children with fevers, the American Academy of Pediatrics suggests calling a doctor if:

- The fever is high (over 103 degrees F)
- Your child has experienced a [seizure](#)
- Your child is 2 or younger and feverish for more than 24 hours
- Your child is older than 2 and feverish for more than 72 hours
- The fever accompanies symptoms such as severe [ear pain](#), stiff neck, abdominal pain, or recurring vomiting or diarrhea

Food Items to Eat During Fever

Loss of appetite is common during fever, but one should have nutritious food to give the body the required nutrients and minerals. Food items that are easy to digest can speed up the healing process. Some of the food items are:

- **Vegetables:** Vegetables are one of the best sources of nutrients needed by the body. A thoroughly cooked vegetable dish helps in providing the required vitamins and minerals to the body. You should eat vegetables like carrots, spinach, and pumpkin.
- **Fruits:** Citrus fruits like lemons, oranges, and grapes have vitamin C and flavonoids, which help boost immunity and fight a fever. Also, fruits like berries, kiwi, and apples help.
- **Yogurt.** Consumption of yogurt increases the immunity of the person by the good bacteria (Lactobacillus) in it.
- **Coconut water:** Hydration plays a vital role during fever. Coconut water is full of essential fluids and electrolytes which the body requires. It is an excellent source of hydration.
- **Herbal tea:** Tea leaves boost immunity as they are rich in polyphenol, flavonoid, and catechin. These plant compounds found in tea helps to protect against viruses and bacteria.
- **Chicken soup:** Having a hot bowl of chicken soup during fever is very beneficial. It not only increases the fluid intake in the body but also regulates the body temperature. Also, chicken being a rich protein source, provides the vital nutrients to fight off fever easily.

Prevention

Some health tips to prevent fever due to infections are:

- Inculcate a habit of washing hands often.
- Carry your hand sanitizer.
- Reduce touching the nose, mouth, and eyes often.
- Cover your mouth and nose during coughing and sneezing.
- Avoid sharing utensils and water bottles without washing.

- Maintain distance from a person with a contagious disease like [nausea](#), cough, etc.