All kids get a fever from time to time. Most usually don't indicate anything serious. Fever itself causes no harm and can actually be a good thing — it's often the body's way of fighting infections.

But when your child wakes in the middle of the night flushed, hot, and sweaty, it's easy to be unsure of what to do next. Should you get out the thermometer? Call the doctor?

Here's more about fevers, including when to contact your doctor.

#### What Is a Fever?

Fever happens when the body's internal "thermostat" raises the body temperature above its normal level. This thermostat is found in a part of the brain called the hypothalamus. The hypothalamus knows what temperature your body should be (usually around 98.6°F/37°C) and will send messages to your body to keep it that way.

Most people's body temperatures even change a little bit during the course of the day: It's usually a little lower in the morning and a little higher in the evening and can vary as kids run around, play, and exercise.

Sometimes, though, the hypothalamus will "reset" the body to a higher temperature in response to an infection, illness, or some other cause. Why? Researchers believe that turning up the heat is a way for the body to fight the <u>germs</u> that cause infections, making it a less comfortable place for them.

### What Causes Fevers?

It's important to remember that fever by itself is not an illness — it's usually a *symptom* of another problem.

Fevers can be caused by a few things, including:

**Infection:** Most fevers are caused by infection or other illness. A fever helps the body fight infections by stimulating natural defense mechanisms.

**Overdressing:** Infants, especially newborns, may get fevers if they're overbundled or in a hot environment because they don't regulate their body temperature as well as older kids. But because fevers in newborns can indicate a serious infection, even infants who are overdressed must be checked by a doctor if they have a fever.

**Immunizations:** Babies and kids sometimes get a low-grade fever after getting vaccinated.

Although <u>teething</u> may cause a slight rise in body temperature, it's probably not the cause if a child's temperature is higher than 100°F (37.8°C).

# When Is a Fever a Sign of Something Serious?

In healthy kids, not all fevers need to be treated. High fever, though, can make a child uncomfortable and make problems (such as <u>dehydration</u>) worse.

Doctors decide on whether to treat a fever by considering both the temperature **and** a child's overall condition.

Kids whose temperatures are lower than 102°F (38.9°C) often don't need medicine unless they're uncomfortable. There's one important exception: If an infant 3 months or younger has a rectal temperature of 100.4°F (38°C) or higher, call your doctor or go to the emergency department immediately. Even a slight fever can be a sign of a potentially serious infection in very young babies.

If your child is between 3 months and 3 years old and has a fever of 102.2°F (39°C) or higher, call to see if your doctor needs to see your child. For older kids, take behavior and activity level into account. Watching how your child behaves will give you a pretty good idea of whether a minor illness is the cause or if your child should be seen by a doctor.

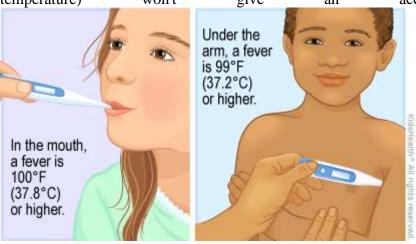
The illness is probably not serious if your child:

- is still interested in playing
- is eating and drinking well
- is alert and smiling at you
- has a normal skin color
- looks well when his or her temperature comes down

And don't worry too much about a child with a fever who doesn't want to eat. This is very common with infections that cause fever. For kids who still drink and urinate (pee) normally, not eating as much as usual is OK.

## Is it a Fever?

A gentle kiss on the forehead or a hand placed lightly on the skin is often enough to give you a hint that your child has a fever. However, this method of <u>taking a temperature</u> (called tactile temperature) won't give an accurate measurement.



Use a reliable **digital thermometer** to confirm a fever. It's a fever when a child's temperature is at or above one of these levels:

- measured **orally** (in the mouth): 100°F (37.8°C)
- measured **rectally** (in the bottom): 100.4°F (38°C)

• measured in an **axillary** position (under the arm): 99°F (37.2°C)

But how high a fever is doesn't tell you much about how sick your child is. A simple cold or other viral infection can sometimes cause a rather high fever (in the  $102^{\circ}-104^{\circ}F/38.9^{\circ}-40^{\circ}C$  range), but this doesn't usually mean there's a serious problem. In fact, a serious infection, especially in infants, might cause no fever or even a low body temperature (below 97°F or  $36.1^{\circ}C$ ).

Because fevers can rise and fall, a child might have chills as the body's temperature begins to rise. The child may sweat to release extra heat as the temperature starts to drop.

Sometimes kids with a fever breathe faster than usual and may have a faster heart rate. Call the doctor if your child has trouble breathing, is breathing faster than normal, or is still breathing fast after the fever comes down.

# **How Can I Help My Child Feel Better?**

Again, not all fevers need to be treated. In most cases, a fever should be treated only if it's causing a child discomfort.

Here are ways to ease symptoms that often accompany a fever:

#### **Medicines**

If your child is fussy or uncomfortable, you can give <u>acetaminophen</u> or <u>ibuprofen</u> based on the package recommendations for age or weight. (Unless instructed by a doctor, never give aspirin to a child due to its association with Reye syndrome, a rare but potentially fatal disease.) If you don't know the recommended dose or your child is younger than 2 years old, call the doctor to find out how much to give.

Infants younger than 2 months old should not be given any medicine for fever without being checked by a doctor. If your child has any medical problems, check with the doctor to see which medicine is best to use. Remember that fever medicine can temporarily bring a temperature down, but usually won't return it to normal — and it won't treat the underlying reason for the fever.

### **Home Comfort Measures**

Dress your child in lightweight clothing and cover with a light sheet or blanket. Overdressing and overbundling can prevent body heat from escaping and can cause the temperature to rise.

Make sure your child's bedroom is a comfortable temperature — not too hot or too cold.

While some parents use lukewarm sponge baths to lower fever, this method only helps temporarily, if at all. In fact, sponge baths can make kids uncomfortable. Never use rubbing alcohol (it can cause poisoning when absorbed through the skin) or ice packs/cold baths (they can cause chills that can raise body temperature).

#### **Food and Drinks**

Offer plenty of fluids to avoid <u>dehydration</u> because fevers make kids lose fluids more rapidly than usual. Water, soup, ice pops, and flavored gelatin are all good choices. Avoid drinks with caffeine, including colas and tea, because they can make dehydration worse by increasing urination (peeing).

If your child also is vomiting and/or has diarrhea, ask the doctor if you should give an electrolyte (rehydration) solution made especially for kids. You can find these at drugstores and supermarkets. Don't offer sports drinks — they're not made for younger children and the added sugars can make diarrhea worse. Also, limit your child's intake of fruits and apple juice.

In general, let kids eat what they want (in reasonable amounts), but don't force it if they don't feel like it.

## **Taking it Easy**

Make sure your child gets plenty of rest. Staying in bed all day isn't necessary, but a sick child should take it easy.

It's best to keep a child with a fever home from school or childcare. Most doctors feel that it's safe to return when the temperature has been normal for 24 hours.

### When Should I Call the Doctor?

The exact temperature that should trigger a call to the doctor depends on a child's age, the illness, and whether there are other symptoms with the fever.

Call your doctor if you have an:

- infant younger than 3 months old with a rectal temperature of 100.4°F (38°C) or higher
- older child with a temperature of higher than 102.2°F (39°C)

Also call if an older child has a fever of lower than 102.2°F (39°C) but also:

- refuses fluids or seems too ill to drink adequately
- has lasting diarrhea or repeated vomiting
- has any signs of dehydration (peeing less than usual, not having tears when crying, less alert and less active than usual)
- has a specific complaint (like a <u>sore throat</u> or earache)
- still has a fever after 24 hours (in kids younger than 2 years old) or 72 hours (in kids 2 years or older)
- is getting fevers a lot, even if they only last a few hours each night
- has a chronic medical problem, such as heart disease, cancer, <u>lupus</u>, or <u>sickle cell</u> disease
- has a rash
- has pain while peeing

Get emergency care if your child shows any of these signs:

- crying that won't stop
- extreme irritability or fussiness
- sluggishness and trouble waking up
- a rash or purple spots that look like bruises on the skin (that were not there before your child got sick)
- blue lips, tongue, or nails
- infant's soft spot on the head seems to be bulging out or sunken in
- stiff neck
- severe headache
- limpness or refusal to move
- trouble breathing that doesn't get better when the nose is cleared
- leaning forward and drooling
- seizure
- abdominal (belly) pain

Also, ask if your doctor has specific guidelines on when to call about a fever.

## What Else Should I Know?

All kids get fevers, and in most cases they're completely back to normal within a few days. For older babies and kids, the way they act can be more important than the reading on your thermometer. Everyone gets a little cranky when they have a fever. This is normal and should be expected.

But if you're ever in doubt about what to do or what a fever might mean, or if your child is acting ill in a way that concerns you even if there's no fever, always call your doctor for advice.