

# Fever (Age 6-21)

## Definition

- Your child has a fever if:
- Ear or Forehead temperature: 100.4° F (38.0° C) or higher
- Oral or Mouth temperature: 100° F (37.8° C) or higher
- Under the arm (Armpit) temperature: 99° F (37.2° C) or higher

## Health Information

### Causes

- Main cause: colds and other viral infections.
- Fever may be the only symptom for the first 24 hours. This often occurs with a viral illness. The start of symptoms (runny nose, cough, loose stools) is often delayed.
- Most often, you won't know the cause of the fever until other symptoms develop. This may take 24 hours.
- Bacterial infections (as with a Strep throat, a kidney infection, or a sinus infection) also cause fever.

### Normal Temperature Range

- **Forehead or Ear.** A reading of 98.6° F (37° C) is just the average forehead or ear temp. A normal low can be 96.8° F (36° C) in the morning. It can change to a high of 100.3° F (37.9° C) late in the day. This is a normal range.
- **By Mouth.** A reading of 97.6° F (36.5° C) is just the average mouth temp. A normal low can be 95.8° F (35.5° C) in the morning. It can change to a high of 99.9° F (37.7° C) late in the day. This is a normal range.

## Care Advice

### 1. Overview:

- Having a fever means your child has a new infection.
- It's most likely caused by a virus.
- You may not know the cause of the fever until other symptoms develop. This may take 24 hours.
- For sick children, most fevers are good. They help the body fight infection.
- Use the ranges below to help put your child's level of fever into perspective:
- 100°-102°F (37.8°- 39°C) Low grade fevers: Good fevers. Helpful. Don't treat. Needed to fight the infection.
- 102°-104°F (39°- 40°C) Moderate fevers: Still helpful. Treat if causes discomfort. Fluids alone will often bring it down below 102 F.
- 104°-105°F (40°- 40.6°C) High fevers: Always treat. Some patients need to be seen based on their symptoms. Many do not.
- Over 105°F (40.6°C) Less than 1% of fevers go this high. All these patients need to be examined. Always treat the fever.

## 2. **Fever Medicine:**

- For fevers 100°-102°F (37.8°- 39° C), fever medicine is not needed. Reason: Fevers in this range help the body fight the infection. Fevers turn on the body's immune system. Fevers do not cause any discomfort.
- Fever medicine is mainly needed for fevers over 102°F (39° C). The goal of fever therapy is to keep the fever at a helpful level.
- Give acetaminophen (such as Tylenol) or ibuprofen (such as Advil). See the Dose Tables.
- Most often, the fever meds lower the fever by 2° to 3°F (1° - 1.5°C). They do not bring it down to normal. It takes 1 to 2 hours to see the effect.
- Do not use aspirin. Reason: Risk of Reye syndrome, a rare but serious brain disease.
- Children do not need to take both acetaminophen and ibuprofen together.
- Pain: Fever does not cause pain. If your child also has pain, it's from the infection. It may be a sore throat or muscle pain. Treat the pain, if it's more than mild.

## 3. **Treatment for All Fevers - Extra Fluids:**

- Fluids alone can lower the fever. Reason: Being well hydrated helps the body give off heat through the skin.
- Offer your child extra water or other fluids by mouth. Cold fluids are better.
- For all children, dress in 1 layer of light weight clothing, unless shivering. Reason: Also helps heat loss from the skin.
- For shivering (or the chills), give your child a blanket. Make them comfortable.

## 4. **Warm Clothes for Shivering:**

- Shivering means your child's temperature is trying to go up.
- It will continue until the fever levels off, usually at 104 F or lower.
- Wrap your child in a blanket until he stops shivering.

## 5. **What to Expect:**

- Most fevers with viral illnesses range between 101° and 104° F (38.4° and 40° C).
- They may last for 2 or 3 days.
- Again, fevers at this level are not harmful.

## 6. **Return to School:**

- Your child can return to school after the fever is gone.
- Your child should feel well enough to join in normal activities.

## **Call Your Doctor If**

- Your child looks or acts very sick
- Any serious symptoms occur, such as trouble breathing
- Fever goes above 104° F (40° C)
- Fever lasts more than 3 days (72 hours)
- You think your child needs to be seen
- Your child becomes worse

## **Pediatric Care Advice**

**Author:** Barton Schmitt MD, FAAP

**Copyright 2000-2022** Schmitt Pediatric Guidelines LLC

**Disclaimer:** This health information is for educational purposes only. You the reader assume full responsibility for how you choose to use it.