# **Fever**

#### What is a fever?

A fever means the body temperature is above normal. Your child has a fever if his:

- Rectal temperature is over 100.4°F (38.0°C).
- Oral temperature is over 99.5°F (37.5°C)

Tactile (touch) fever is the impression that your child has a fever because he feels hot to the touch. Checking a fever this way is more accurate than we used to think. But if you're going to call the doctor, use a thermometer to measure the fever.

The body's average temperature when it is measured orally is 97.6°F (36.5°C). Oral temperature normally can change from a low of 95.8°F (35.5°C) in the morning to a high of 99.4°F (37.5°C) in the afternoon. Mildly increased temperature (100.4 to 101.3°F, or 38 to 38.5°C) can be caused by exercise, heavy clothing, a hot bath, or hot weather. Warm food or drink can also raise the oral temperature. If you suspect such an effect on the temperature of your child, take his temperature again in a half hour.

# What is the cause?

Fever is a symptom, not a disease. It is the body's normal response to infections. Fever helps fight infections by turning on the body's immune system. The usual fevers (100 to 104°F, or 37.8 to 40°C), which all children get, are not harmful. Most are caused by viral illnesses such as colds or the flu. Some are caused by bacterial illnesses such as Strep throat or bladder infections. Teething does not cause fever.

#### How long will it last?

Most fevers with viral illnesses range from 101°F to 104°F (38.3°C to 40°C) and last for 2 to 3 days. In general, the height of the fever doesn't relate to the seriousness of the illness. How sick your child acts is what counts. Fever does not cause permanent harm. Brain damage occurs only if the body temperature is over 108°F (42°C). Fortunately, the brain's thermostat keeps untreated fevers well below this level.

While all children get fevers, only 4% develop a brief convulsion from the fever. This type of seizure is generally harmless. If your child has had high fevers without seizures, your child is probably safe.

## How can I take care of my child?

- Extra fluids and less clothing Encourage your child to drink extra fluids, but do not force him to drink. Popsicles and iced drinks are helpful. Body fluids are lost during fevers because of sweating. Bundling can be dangerous. Clothing should be kept to a minimum because most heat is lost through the skin. Do not bundle up your child; it will cause a higher fever. During the time your child feels cold or is shivering (the chills), give him a light blanket. If the fever is less than 102°F this is the only treatment needed. Fever medicines are not necessary.
- Medicines to reduce fever (See Medication dosage sheet for dosages) Motrin or Tylenol Remember that fever is helping your child fight the infection. Use drugs only if the fever is over 102°F (39°C) and preferably only if your child is also uncomfortable. These medicines start working in about 30 minutes, and 2 hours after they are given, these drugs will reduce the fever 2°F to 3°F (1°C to 2°C). Medicines do not bring the temperature down to normal unless the temperature was not very high before the medicine was given. Repeated dosages of the drugs will be necessary because the fever will go up and down until the illness runs its course. If your child is sleeping, don't awaken him for medicines. Avoid aspirin
- **Sponging** Sponging is usually not necessary to reduce fever. If you do sponge your child, sponge him in lukewarm water (85 to 90°F, or 29 to 32°C). Sponging works much faster than immersion, so sit your child in 2 inches of water and keep wetting the skin surface. Cooling comes from evaporation of water. If your child shivers, raise the water temperature or stop sponging until the acetaminophen or ibuprofen takes effect. Don't expect to get the temperature down below 101°F (38.3°C). Don't add rubbing alcohol to the water; it can be breathed in and cause a coma.

### When should I call my child's health care provider?

# Call IMMEDIATELY if:

- Your child is less than 3 months old.
- The fever is over 105°F (40.6°C).
- Your child looks or acts very sick.

#### Call within 24 hours if:

- Your child is 3 to 6 months old (unless the fever is due to a DTaP shot).
- The fever is between 104°F and 105°F (40°C and 40.6°C).
- Your child has had a fever more than 24 hours without an obvious cause or location of infection AND your child is less than 2 years old.
- Your child has had a fever for more than 3 days.
- The fever went away for over 24 hours and then returned.
- You have other concerns or questions.

Pediatric Advisor 2006.4; Copyright © 2006 McKesson Corporation and/or one of its subsidiaries. All Rights Reserved. Written by B.D. Schmitt, M.D., author of "Your Child's Health," Bantam Books. This content is reviewed periodically and is subject to change as new health information becomes available. The information is intended to inform and educate and is not a replacement for medical