



### ***What is a fever?***

A fever is a temperature of 100.4 degrees F and higher.

The body has several ways to maintain normal body temperature. The organs involved in helping with temperature regulation include the brain, skin, muscle, and blood vessels. The body responds to changes in temperature by:

- Increasing or decreasing sweat production.
- Moving blood away from, or closer to, the surface of the skin.
- Getting rid of, or holding on to, water in the body.
- Naturally wanting to seek a cooler or warmer environment.

When your child has a fever, the body works the same way to control the temperature, but it resets its thermostat at a higher temperature. The temperature increases for a number of reasons.

- Chemicals, called cytokines and mediators, are produced in the body in response to an invasion from a microorganism, malignancy, or other intruder.
- The body is making more macrophages, which are cells that go to combat when intruders are present in the body. These cells actually “eat up” the invading organisms.
- The body is busily trying to produce natural antibodies, which fight infection. These antibodies will recognize the infection next time it tries to invade.
- Many bacteria are enclosed in an overcoat-like membrane. When this membrane is disrupted or broken, the contents that escape can be toxic to the body and stimulate the brain to raise the temperature.

### **What conditions can cause a fever?**

The following conditions can cause a fever:

- Infectious diseases
- Certain medications
- Heat stroke
- Blood transfusion
- Disorders in the brain

### **What are the benefits of a fever?**

A fever actually helps the body destroy its microbial invader. It also stimulates an inflammatory response, which sends all kinds of substances to the area of infection to protect the area, prevent the spread of the invader, and start the healing process.

### **What are the symptoms that my child may have a fever?**

Children with fevers may become more uncomfortable as the temperature rises. The following are the most common symptoms of a fever. However, each child may experience symptoms differently. In addition to body temperature greater than 100.4 degrees F, symptoms may include:

- Your child may not be as active or talkative as usual.
- He/she may seem fussier, less hungry, and thirstier.
- Your child may feel warm or hot. Remember that even if your child feels like he/she is “burning up,” the actual rectal or oral temperature may not be that high.
- Your child is unable to swallow anything and is drooling saliva.
- Your child looks or acts very sick (if possible, check your child’s appearance one hour after your child has taken an appropriate dose of acetaminophen)

Call your child’s physician within 24 hours if your child is 6 months or older and any of the following conditions are present:

- The fever is 102 degrees F or higher (call the doctor immediately for a temperature of 103 degrees F or higher, especially if your child is younger than 2 years old)
- Burning or pain occurs with urination.
- Your child has had a fever for more than 24 hours without an obvious cause or location of infection.

Call your child’s physician during office hours if any of the following conditions are present:

- Your child has had a fever for more than 72 hours
- The fever went away for more than 24 hours and then returned
- Your child has a history of febrile seizures
- You have other concerns or questions