

## Taking a Temperature

**Digital thermometers** usually provide the quickest, most accurate readings. Digital thermometers can be used for oral, rectal or axillary readings. They come in many sizes and shapes and are available at most supermarkets and pharmacies.

**Electronic ear thermometers** measure the temperature inside the ear canal. Although they're quick and easy to use in older babies and kids, they aren't as accurate as digital thermometers for infants 6 months or younger because their ear canals are too small. They can also give inaccurate readings if not placed properly in the ear canal or if the child has earwax buildup.

**Temporal artery thermometers**, which are swiped over the forehead to behind the ear, measure the temperature of temporal arteries, which are blood vessels in the forehead. Using this type of thermometer takes practice and good technique to be as accurate as oral or rectal digital thermometers. Sweating can affect their accuracy, so it's important to make sure the child's forehead is dry and to take multiple readings to confirm the temperature.

**Pacifier thermometers** may seem convenient, but again, their readings are less reliable than rectal temperatures and shouldn't be used in infants younger than 3 months.

**Plastic strip thermometers** (small plastic strips that you press against the forehead) might tell you whether your child has a fever, but they don't give an exact measurement, especially in infants and very young children. If you need to know your child's exact temperature, plastic strip thermometers are **not** the way to go.

**Glass mercury thermometers** were once common, but health experts now say they should not be used because of possible exposure to mercury, an environmental toxin. (If you still have a mercury thermometer, do **not** simply throw it in the trash where the mercury can leak out. Talk to your doctor or your local health department about how and where to dispose of a mercury thermometer.)

### Tips for taking temperatures

**For babies younger than 3 months**, you'll get the most reliable reading by using a digital thermometer to take a rectal temperature.

**For babies between 3 months and 6 months old**, a digital rectal thermometer is still the best choice, but you can also use a temporal artery thermometer.

**For kids between 6 months and 4 years old**, you can use a digital thermometer to take a rectal temperature, a temporal artery thermometer, or an electronic ear thermometer.

**For kids 4 years or older**, you can usually use a digital thermometer to take an oral temperature if your child will cooperate. However, kids who are coughing a lot or breathing through their mouths because of stuffy noses might not be able to keep their mouths closed long enough for an accurate oral reading. In these cases, you can use the tympanic method (with an electronic ear thermometer), forehead method (with a temporal artery thermometer), or axillary method (with a digital thermometer).

### To take a rectal temperature:

1. Wash the end of the thermometer with soap and water and rinse with water.
2. Lubricate the tip of the thermometer with petroleum jelly.
3. Place your child:
  - belly-down across your lap or on a firm, flat surface and keep your palm along the lower back
  - or face-up with legs bent toward the chest with your hand against the back of the thighs
4. With your other hand, insert the lubricated thermometer into the anal opening about ½ inch to 1 inch (about 1.25 to 2.5 centimeters), or until the tip of the thermometer is fully in the rectum. Stop if you feel any resistance.
5. Steady the thermometer between your second and third fingers as you cup your hand against your baby's bottom. Soothe your child and speak quietly as you hold the thermometer in place.
5. Wait until you hear the appropriate number of beeps or other signal that the temperature is ready to be read. Write down the number on the screen, noting the time of day that you took the reading.

**To take an oral temperature:** This process is easy in an older, cooperative child.

1. Wait 20 to 30 minutes after your child finishes eating or drinking to take an oral temperature, and make sure there's no gum or candy in his mouth.
2. Place the tip of the thermometer under the tongue and ask him to close his lips around it. Remind him not to bite down or talk, and to relax and breathe normally through the nose.

# Taking a Temperature (continued)

3. Wait until you hear the appropriate number of beeps or other signal that the temperature is ready to be read. Write down the number on the screen, noting the time of day that you took the reading.

**To take an axillary temperature:** Although not as accurate as a rectal or oral temperature, some parents prefer to take an axillary temperature, especially for kids who can't hold a thermometer in their mouths.

1. Remove your child's shirt and undershirt, and place the thermometer under an armpit (it must be touching skin only, not clothing).
2. Fold your child's arm across the chest to hold the thermometer in place.
3. Wait until you hear the appropriate number of beeps or other signal that the temperature is ready to be read. Write down the number on the screen, noting the time of day that you took the reading.

Whatever method you choose, keep these additional tips in mind:

- Never take a child's temperature right after a bath or if he has been bundled tightly for a while — this can affect the temperature reading.
- Never leave a child unattended while taking a temperature.
- Keep and follow the manufacturer's recommendations for any thermometer.

## When to call the doctor

The exact temperature that should trigger a call to the doctor depends on the age of the child, 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)

Call the doctor if an older child has a fever of less 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 sore throat or earache)
- still has a fever after 24 hours (in kids younger than 2 years) 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, lupus, or sickle cell disease
- has a rash
- has pain while urinating (peeing)