

Taking your Child's Temperature: a Guide for Carers

If your child feels warm or looks unwell, you should take his or her temperature. Just feeling the forehead is not accurate enough to say that your child has a fever. Whilst you often can tell if your child feels warmer to the touch, only a thermometer can tell you how high the temperature really is.

The types of thermometers available include mercury, digital, chemical and infrared.

Sites used to measure temperature include rectal (in the bottom), oral (in the mouth), axillary (under the arm), the ear and forehead.

Mercury thermometers should no longer be used in babies or children because of the risks of breakage and mercury spillage.

Regular digital thermometers use electronic heat sensors to record body temperature, often in 30 seconds or less. The temperature is displayed on a digital readout. Regular digital thermometers can be used in the mouth, armpit or rectum and are the most commonly used and recommended type.

Digital ear thermometers, also called tympanic thermometers, use an infrared ray to measure the temperature inside the ear canal. They are even quicker than regular digital thermometers, often measuring body temperature in just a few seconds but their results may be less consistent than those obtained using regular digital thermometers. Also they need to be placed correctly in your child's ear to be accurate. Too much earwax can cause the reading to be incorrect.

Forehead chemical thermometers are unreliable and inaccurate so, for a more accurate temperature measurement, a digital thermometer is preferable.

How to use a digital thermometer

The following describes how to take a **rectal** temperature:

- Clean the end of the thermometer with alcohol or soap and water. Rinse it with cool water only, never with hot water.
- Put a small amount of lubricant, such as petroleum jelly (e.g. Vaseline), on the end.
- Place your child belly down across your lap or on a firm surface. Hold him by placing your palm against his lower back, just above his bottom. Or place your child face up and bend his legs to his chest. Rest your free hand against the back of the thighs.
- With the other hand, turn the thermometer on and insert it 1/2 inch to 1 inch into the anal opening. Do not insert it too far. Hold the thermometer in place loosely with 2 fingers, keeping your hand cupped around your child's bottom. Keep it there for about 1 minute until you hear the "beep". Then remove and check the digital reading.
- Be sure to label the rectal thermometer so it's not accidentally used in the mouth.

The following describes how to take an **oral** temperature:

- Clean the thermometer with lukewarm soapy water or alcohol. Rinse with cool water.
- Turn the thermometer on and place the tip under the tongue. Hold in place for about 1 minute until you hear the "beep". Make sure the mouth is closed. Check the digital reading.
- For a correct reading, wait at least 15-20 minutes after your child has had a hot or cold drink before putting the thermometer in his mouth.

The following describes how to take an **axillary** temperature:

- Place the tip of a digital thermometer in your child's armpit.
- Make sure it touches skin not clothing
- Hold his arm tightly against his chest for about 1 minute until you hear the "beep".

- Check the digital reading.

When using a pacifier thermometer it must be kept in the mouth for about 3 minutes. These thermometers are probably not very reliable and should not be used in infants less than 3 months of age.

Where to take the Temperature

The best place to take the temperature, as well as the best type of thermometer to use, depends on the age of the child:

Birth to 3 months: In infants under the age of 4 weeks, body temperature should be measured with a digital thermometer in the armpit. For infants over 1 month, use a digital thermometer to take an axillary or rectal temperature.

3 months to 4 year: For older infants and toddlers use a regular digital thermometer to take an axillary or rectal temperature. You can also use a digital ear thermometer or a digital pacifier thermometer.

4 years and older: By age 4, most children can hold a digital thermometer under the tongue for the short time it takes to get a temperature reading. If the child is too congested to breathe through his or her nose, you may need to take an armpit or rectal temperature — or use a digital ear thermometer.

Accuracy

Rectal temperatures are the most accurate, especially for young children, followed by oral, ear and lastly armpit readings.

Whatever the method, make sure you know exactly how to use your thermometer. Read the instructions that came with your thermometer. After each use, clean the thermometer with alcohol or soap and lukewarm water. For safety — and to make sure the thermometer stays in place — never leave your child unattended while you're taking the temperature.

When to seek medical advice

Fever is a common sign of illness and, in fact, fever may play an important role in helping to fight infections. Furthermore, many illnesses that are associated with a fever are not serious and if your child is drinking plenty of fluids and continuing to play despite a fever, there is generally no need for undue concern.

If you want to give your child medication to control the fever, it is best to use paracetamol and ibuprofen. Ibuprofen may only be used in children over 6 months of age.

A child should be considered to have a fever if the **rectal temperature is over 38°C (100.4°F)** or the **underarm, oral or ear temperature is over 37.5°C (99.5°F)**.

Always inform the doctor if a child below the age of 3 months has a fever and looks unwell.

When reporting a temperature to your child's doctor, give the actual reading and say how the temperature was taken. *Don't add or subtract numbers depending on where the thermometer was placed.*

References:

1. [American Academy of Pediatrics](#)
2. [Medline Plus](#)
3. [Mayoclinic](#)
4. Thermometry in paediatric practice ADC 2006;91; 351-356