Fevers and how to read thermometers

All kids get a fever from time to time. Most usually don’t indicate anything serious. Fever itself causes no harm and can actually be a good thing—it’s often the body’s way of fighting infections.

But when your child wakes in the middle of the night flushed, hot, and sweaty, it’s easy to be unsure of what to do next. The first step is to get out a thermometer and check your child. If your child feels sick, it’s important to take their temperature with a thermometer. The temperature reading on a thermometer can tell you if your child has a fever.

Many thermometers have two temperature scales. One says “F,” which stands for Fahrenheit (FAIR-en-hite). The other says “C,” which stands for Celsius (SELL-see-us). These two systems are equally good. The temperatures you hear in weather forecasts are in Fahrenheit. However, healthcare workers often use Celsius.

What is a normal temperature for a child?

A normal temperature measured in the mouth is 98.6°F (37°C) and can be between 97°F and 99°F (36.1°C to 37.2°C). Different people have slightly different normal body temperatures. Your child’s normal temperature may be slightly higher at night than in the morning.

<table>
<thead>
<tr>
<th>Thermometer</th>
<th>Normal temperature</th>
<th>Fever</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oral (by mouth)</td>
<td>95.9°F – 99.5°F (35.5°C – 37.5°C)</td>
<td>99.6°F (37.6°C) and higher</td>
</tr>
<tr>
<td>Rectal</td>
<td>97.9°F – 100.4°F (36.6°C – 38°C)</td>
<td>100.5°F (38.1°C) and higher</td>
</tr>
<tr>
<td>Temporal (forehead)</td>
<td>96.4°F – 100.4°F (35.8°C – 38°C)</td>
<td>100.5°F (38.1°C) and higher</td>
</tr>
<tr>
<td>Tympanic (ear)</td>
<td>96.4°F – 100.4°F (35.8°C – 38°C)</td>
<td>100.5°F (38.1°C) and higher</td>
</tr>
<tr>
<td>Axillary (underarm)</td>
<td>94.5°F – 99.1°F (34.7°C – 37.3°C)</td>
<td>99.2°F (37.4°C) and higher</td>
</tr>
</tbody>
</table>

When should I take my child’s temperature?

Fevers can cause changes in your child’s appearance. Take your child’s temperature if your child has any of the following:

- Sweating
- Flushed face
- Unusually sleepy
- Poor appetite
- Dry and hot skin
- Unusual breathing
- Cold symptoms
- Feels warm to the touch
How do I take my child’s temperature?
When taking your child’s temperature there are many different methods. Depending on which method works for you and your child, it is important to know how to use it. The best way to do this is preparing your supplies before you take a reading. After you have taken your child’s temperature, wash your hands and the thermometer tip with rubbing alcohol after using and store it safely.

Before you take your child’s temperature you should:
• Wash your hands with soap and warm water, or use hand sanitizer
• Check the box to ensure you use the thermometer correctly
• Stay with your child until you can get a reading from the thermometer

Depending on which thermometer you use, the temperature reading will either use a electronic heat sensors or an infrared scanner.

<table>
<thead>
<tr>
<th>Thermometer type</th>
<th>Best for</th>
<th>How to use it</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oral</td>
<td>4 years old and older (who will not bite the thermometer)</td>
<td>Put the thermometer tip under your child’s tongue. Close their lips carefully around the thermometer.</td>
</tr>
<tr>
<td>Temporal</td>
<td>Children of any age (Oral and rectal thermometers are most reliable for older children)</td>
<td>Turn on the thermometer and swipe it across your child’s forehead. Then read the number.</td>
</tr>
<tr>
<td>Tympanic</td>
<td>6 months old and older</td>
<td>Turn on the thermometer and put it in your child’s ear. Check the directions to make sure you insert it far enough into the ear canal. Hold it in place until the thermometer beeps and remove it.</td>
</tr>
</tbody>
</table>
| Rectal           | 0–4 years old | Coat the tip of the thermometer with a lubricant, like petroleum jelly.
Put your child on their stomach. Spread their buttocks until you can see the anal opening.
Carefully insert the thermometer into the anus, no more than a half-inch.
After the thermometer beeps, remove it. |
| Axillary         | 3 months old and older (Axillary is the least accurate temperature reading) | Put the thermometer in your child’s bare, dry armpit. Have them hold their arm tightly against their body. |

Digital thermometers have replaced mercury thermometers, because mercury is dangerous. The American Academy of Pediatrics recommends using digital thermometers instead of mercury thermometers.

If a mercury thermometer breaks, do not touch the mercury; it is very poisonous. Use gloves and a disposable towel to clean it up. Then call the health department for help disposing of mercury thermometers. Mercury is hazardous waste and cannot be put in household trash.
What should I do if my child’s temperature is not normal?

- If your child’s temperature is higher or lower than expected, take their temperature again. Use the thermometer the way the manufacturer recommends.
- If you still think their temperature is not accurate, try again using a different method or use a different thermometer. If the temperature is still not normal, call your child’s healthcare provider.
- Call your child’s healthcare provider if your child’s temperature is higher than the normal temperature listed above.
- Call your child’s healthcare provider if your child is 3 months or younger and their temperature is
  – more than 100.4°F (38°C)
  – less than 97.5°F (36.5°C)

Notes