Illinois Department of Public Health
Thermometers and Fever

Fevers
Your child may be sick, but not have a fever. Although temperature is important, your child’s appearance and behavior are also important signs of the severity of an illness. Any sudden change in your child’s eating or sleeping habits is important, along with any irritability. If you are worried about your child being sick, please call your doctor.

Choosing a thermometer

Digital thermometers
- Can be used in the mouth, rectum, or armpit
- Can be used for people of any age
- Are quick, easy to use and read

Ear thermometers (infrared thermometers)
- Small ear probe inserted gently into the ear canal
- Can be used for people 6 months of age or older

Fever strips / pacifier thermometers / forehead thermometers
- Not as accurate as other types of thermometers

Glass thermometers containing mercury
- Do not use because mercury is toxic and can be released if the thermometer breaks.
- Do not throw it in the trash. Call your local government for disposal instructions.

Tips for taking temperature
- Always stay with your child when a thermometer is in place.
- Keep separate, marked thermometers for rectal, oral and armpit readings. Never use a thermometer to take an oral temperature after it has been used to take a rectal temperature – even if it has been cleaned.
- Read all directions before using the thermometer, and always follow the manufacturer’s instructions exactly.
- It may be helpful to practice on healthy family members to be sure you’re using the thermometer correctly.
- Choose thermometers that are easy for you to use.
- Use a new disposable cover for each use; do not reuse disposable covers. If you don’t have a cover, clean the thermometer after each use as advised by the manufacturer.
- Do not take an oral temperature if the person has a stuffy nose. Use the rectum or armpit.
- Do not smoke or eat/drink anything hot or cold for 10 minutes before taking an oral temperature.
- When you call the doctor, report the actual reading on the thermometer, and say where the temperature was taken. Be sure to read decimal places correctly—104°F is not the same as 100.4°F.

How to take a temperature

Oral temperature
Recommended for anyone older than 4 years of age who can cooperate and understand directions.
- Make sure the child’s mouth is clear of gum, candy and food. Use a disposable cover. Place the thermometer under the tongue, to one side of the center, and close the lips tightly around it.
- Follow thermometer instructions for how long to leave it in the mouth
- Remove and read thermometer
- Throw disposable cover in the trash; clean thermometer. Clean your hands.

Rectal temperature
Recommended for children younger than 4 years of age, anyone who cannot hold a thermometer safely in their mouths or anyone who has a stuffy nose. Do not leave the child alone when taking a rectal temperature. Rectal perforation can occur if
the thermometer is not used properly. Check with your doctor’s office before checking a rectal temperature as some doctors prefer that parents use other methods.

- Use a disposable cover. Apply a lubricant or petroleum jelly (e.g. Vaseline®) on the end of the thermometer so it can be inserted easily into the rectum.
- Turn babies or small children face down on your lap or on a flat, covered surface, such as a bed.
- Spread the buttocks with one hand and gently insert the thermometer end about 1 inch into the rectum with your other hand.
- Do not force the thermometer into the rectum. Hold it in place with two fingers close to the rectum (not near the end of the thermometer) at all times.
- Press the buttocks together to help keep the thermometer in place.
- Follow thermometer instructions for how long to leave it in the rectum.
- Remove and read the thermometer.
- Throw disposable cover in the trash; clean thermometer. Clean your hands.

**Ear temperature**

Requires a special thermometer, that should only be used for checking ear temperatures

- Not reliable before 6 months of age
- On a cold day, your child should be indoors for at least 15 minutes before taking an ear temperature.
- If probe is not clean, wipe gently with a dry cloth. Do not put in water.
- Use a disposable cover. Place probe in ear canal and turn thermometer on.

**Children older than 1 year of age and adults:**

- *Gently pull the earlobe up and back.*
- *Center the probe tip in the ear and push gently toward the eardrum.*
- Press button. Follow thermometer instructions for how long to leave it in the ear.
- Remove and read the thermometer.
- Throw disposable cover in the trash. Wipe the probe with a dry cloth and put away.
- Clean your hands.

**Armpit (axillary) temperature**

- Make sure the armpit is dry.
- Place the tip of the thermometer in the center of the armpit and make sure skin surfaces are touching the thermometer.
- Press the arm against the body.
- Follow thermometer instructions for how long to leave it in the armpit.
- Remove and read the thermometer.
- Throw away the disposable cover, if used, or clean and dry the thermometer right away.

**Infants 6 months to 1 year of age:**

- *Gently pull the earlobe down and back.*
- *Center the probe tip in the ear and push gently inward toward the eardrum.*

Normal body temperatures vary from person to person. Average body temperature is:

- **Oral:** 98.6F (37C)
- **Rectal:** 99.6F (37.5C)
- **Ear:** 99.6F (37.5C)
- **Axillary:** 97.6F (36C)

Body temperature is usually lowest in the morning and highest later in the day.