

# How to Take a Temperature

## Children and Adults

There are 4 ways to take (measure) a temperature:

- + Under the armpit (axillary method)
- + In the rectum/bum (rectal method)
- + In the ear (tympanic method)
- + In the mouth (oral method)

### WHAT TYPE OF THERMOMETER SHOULD I USE?

A digital thermometer is best for taking temperatures by the armpit and mouth. Fever strips and pacifier thermometers do not give an accurate temperature. Do not use a mercury thermometer. Mercury is toxic and the thermometer could break.

Speak to a pharmacist if you have any questions when buying a thermometer. A pharmacist can help you select the best type of thermometer for the method you choose to use.

Whichever type of thermometer you use, make sure to clean them (except ear thermometers) with cool, soapy water and rinse off before and after use.

**Always wash your hands before and after taking your child's temperature.**

### HOW SHOULD I TAKE A CHILD'S TEMPERATURE?

From birth to age 5, the most common way to take a temperature is under the armpit. For children older

than 2, temperatures can also be taken by ear or, if the child is able to sit still long enough, by mouth. The most accurate way to take a temperature is in the bum (rectal method). See the section on the rectal method to learn how to safely take a rectal temperature.

Make sure to read and follow the manufacturer's instructions each time you use a different type or brand of thermometer.

#### 1. Axillary method (under the armpit)

The armpit method is usually used to check for fever in newborns and young children.

- + Place the tip of the thermometer in the centre of the skin of the armpit (no clothing).
- + Tuck your child's arm firmly against their body.
- + Leave the thermometer in place for about 1 minute or until you hear the "beep" (if using digital).
- + Remove the thermometer and read the temperature.

#### 2. Rectal method (in the rectum or bum)

The rectal method can be used to check for fevers in newborns and young children. Use a rectal thermometer only if you are comfortable doing so and a health care provider has shown you how to do it safely.

## How to Take a Temperature- *Continued*

- + Generously cover the silver tip with petroleum jelly (such as Vaseline).
- + Place your baby on their back with their knees bent.
- + Gently insert the thermometer in the rectum or bum, about 2.5 cm (1 inch), holding it in place with your fingers.
- + Leave the thermometer in place for about 1 minute or until you hear the “beep”.
- + Remove the thermometer and read the temperature.

For more detailed instructions on how to take a temperature using the rectal method, speak to your health care provider.

After a thermometer has been used to take a rectal temperature, **DO NOT** use it to take an oral temperature. Make sure that the rectal thermometer is clearly marked so that it is not used orally. For example, you could label your rectal thermometer with an “R” and your oral thermometer with an “O”.

### 3. Tympanic method (in the ear)

The ear method is recommended for children older than 2 years old. Though quick to use, the ear method can produce temperature readings that are incorrect, even when the manufacturer’s directions are followed.

- + Use a clean probe tip each time, and follow the manufacturer’s instructions carefully
- + Gently tug on the ear, pulling it back. This will help straighten the ear canal, and make a clear path inside the ear to the ear drum.
- + Gently insert the thermometer until the ear canal is fully sealed off.
- + Squeeze and hold down the button for 1 second.

- + Remove the thermometer and read the temperature.

### 4. Oral method (in the mouth)

The mouth method can be used for children who are older than 5 years of age. It is not recommended for children younger than 5 years of age, because it is hard for them to hold the thermometer under their tongue long enough.

- + Carefully place the tip of the thermometer under your child’s tongue (if using digital).
- + With your child’s mouth closed, leave the thermometer in place for about 1 minute or until you hear the “beep”.
- + Remove and read the temperature.
- + Tell the child not to bite on the thermometer.

## HOW SHOULD I TAKE AN ADULT’S TEMPERATURE?

Take an adult’s temperature by mouth, in the ear or under the armpit. The armpit method is less accurate and is normally only used if the person is extremely drowsy or not clear mentally. Follow the same methods used for taking a child’s temperature.

## WHAT IS A NORMAL TEMPERATURE?

The normal temperature range varies, depending on the method you use:

Method	Normal temperature range
Armpit	36.5°C - 37.5°C (97.8°F - 99.5°F)
Mouth	35.5°C - 37.5°C (95.9°F - 99.5°F)
Ear	35.8°C - 38°C (96.4°F - 100.4°F)
Rectal (bum)	36.6°C - 38°C (97.9°F - 100.4°F)

## How to Take a Temperature- *Continued*

Temperatures may vary throughout the day, rising as much as 1 degree in the morning and reaching a maximum during the late afternoon. Mild increases may be caused by exercising, too much clothing or bedding, taking a hot bath or being outside in hot weather.

When a child is sick with an infection, it is normal to have a fever (temperature) higher than 38°C (100.4°F). A fever is part of the normal process of fighting an infection. Usually, it goes away after 3 days. For more information, see “How to take care of your child with a fever” in Resources section.

Thermometers are not always accurate so it is important to be watching for other signs that your child might be ill. Also, the degree of a fever does not always indicate how serious an illness is, but rather the child’s behaviour, overall appearance and other symptoms such as headache, stiff neck, nausea, and vomiting are generally the most important factors.

### WHAT CAN I DO IF MY CHILD HAS A FEVER?

- + Offer plenty of fluids.
- + Encourage your child to rest.
- + Remove extra blankets or extra clothing as long as the child does not become too cold or shiver. Shivering can cause the body’s temperature to rise.
- + Medicine to reduce a fever is not always needed.
- + Sponge your child with lukewarm water. Alcohol baths or rubs are not recommended.
- + Never leave your child unattended with a thermometer.

### WHEN TO GET HELP

**See your family doctor** if your child:

- + has a fever for more than 3 days.
- + is not eating or drinking well.
- + is lethargic (low energy), excessively fussy or irritable.
- + has a fever and signs of another illness (rash, cough, vomiting, diarrhea).

Babies younger than 3 months of age must be seen by a health care provider when they have a fever. During the first 3 months of life, babies are not always able to fight infections, so they need to be seen sooner than older babies and children with fevers.

For babies 3 to 6 months the parents should speak with their health care provider.

### RELEVANT RESOURCES

For more information about fever and temperature taking, see

- + [www.bcemn.ca/clinical\\_resource/how-to-take-care-of-your-child-with-a-fever/](http://www.bcemn.ca/clinical_resource/how-to-take-care-of-your-child-with-a-fever/)
- + [www.caringforkids.cps.ca/handouts/fever\\_and\\_temperature\\_taking](http://www.caringforkids.cps.ca/handouts/fever_and_temperature_taking).

For more information on hand washing, see

- + <https://www.healthlinkbc.ca/healthlinkbc-files/hand-washing>

For additional information, see

- + <https://www.healthlinkbc.ca/healthlinkbc-files/reye-syndrome>
- + [www.bcemn.ca/clinical\\_resource/febrile-seizures/](http://www.bcemn.ca/clinical_resource/febrile-seizures/)

## How to Take a Temperature- *Continued*

### TO LEARN MORE ASK

- + Your family doctor.
- + HealthLinkBC - call 8-1-1 (7-1-1 for deaf or hard of hearing) or go online to [www.HealthLinkBC.ca](http://www.HealthLinkBC.ca)

### RECOMMENDED FOLLOW UP

- Follow up with your primary care provider in \_\_\_\_ days.

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Find this information sheet on the BC Emergency Medicine Network website:

[www.bcemn.ca/clinical\\_resource/how-to-take-a-temperature/](http://www.bcemn.ca/clinical_resource/how-to-take-a-temperature/)

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[bcemn.ca](http://bcemn.ca)

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