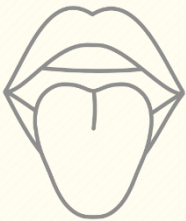


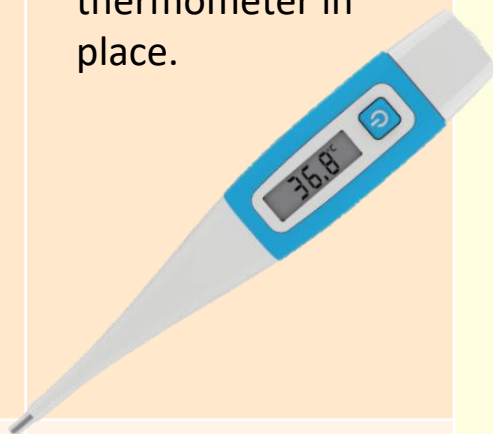


# DIGITAL PENCIL THERMOMETER

	ORAL	RECTAL	UNDERARM
MECHANISM	Uses <b>electronic heat sensors</b> to measure <b>oral, rectal and axillar</b> (underarm) temperature		
			
HOW TO USE	<ol style="list-style-type: none"><li>1. Place the thermometer under the <b>root of the tongue.</b></li><li>2. Support the thermometer with your hand to prevent it from sliding in the mouth.</li><li>3. Keep lips closed around the thermometer.</li></ol>	<ol style="list-style-type: none"><li>1. Apply a small amount of lubricant on the tip of the thermometer.</li><li>2. Gently insert the thermometer <b>into the anus.</b> The tip must be completely inside the rectum.</li><li>3. Hold the thermometer in place.</li></ol>	<ol style="list-style-type: none"><li>1. Place the tip <b>under the arm.</b></li><li>2. Press the arm against the chest to keep the thermometer in place.</li></ol>
NOTES	<ul style="list-style-type: none"><li>• <b>Avoid eating or drinking anything around 20 minutes before</b> measuring the temperature to avoid inaccurate reading.</li><li>• <b>Avoid breathing through the mouth</b> when measuring.</li></ul>	<ul style="list-style-type: none"><li>• <b>Do not use the same thermometer for both oral and rectal temperature.</b></li><li>• <b>Do not force it further into</b> the rectum if you feel resistance when inserting.</li></ul>	<ul style="list-style-type: none"><li>• Make sure the under arm is <b>dry.</b></li><li>• The tip of the thermometer should <b>touch the skin only,</b> not clothing.</li><li>• May take a <b>longer time</b> when taking temperature.</li></ul>



# EAR THERMOMETER

## MECHANISM

Uses **infrared ray** to measure the tympanic membrane (**eardrum**) temperature



## HOW TO USE

1. **Straighten the ear canal** before inserting the thermometer.  
In adults: pull the earlobe up and back.  
In children: pull the ear down and back.
2. Gently **put the tip of the thermometer in the ear** and take the temperature as indicated by the instructions that come with the device.

## NOTES

- **Excessive ear wax** may cause **inaccurate** readings.
- **Not recommended for new-borns**
- **Not suitable for use in public places.** Although thermometer does not contact with area (ear drum) being measured, thermometer still contact with the ear when measuring tympanic membrane temperature
- **Use disposable probe covers** to prevent cross contamination and prevent sensor from being soiled by dirt

# FOREHEAD THERMOMETER

## MECHANISM

Uses **infrared scanner** to measure the temporal artery (**forehead**) temperature



## HOW TO USE

1. **Point the sensor head at the centre of the forehead** no further than indicated by the instructions that come with the device.
2. Press the **start** button to measure the temperature.

## NOTES

- **Wipe away any moisture** on the forehead after showering or physical activities before taking temperature.
- **Allow the skin to acclimatize** to room temperature before measuring.
- Measure the temperature of a child in a **calm condition** as crying may increase facial temperature.
- **Suitable for use in public places** as this non-contact thermometer reduces the risk of cross contamination.

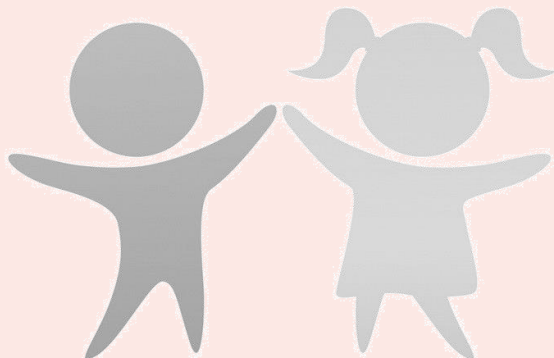
# Mercury Glass Thermometer

- **No longer recommended**
- **Difficult to read** the temperature and may give inaccurate reading.
- **Mercury is toxic** if inhaled or touches the skin and can pose serious health issues



## Special population: Children temperature

- **Most accurate way: rectal** temperature using **digital pencil thermometer**
- **Oral** temperature is also **reliable in children at least 4 years old**
- Armpit, ear and forehead temperatures are not as accurate as rectal or oral





## Additional Notes

- Public should be advised that household thermometers **should not be used to diagnose** any disease or substitute for medical consultation.
- Refer to the **product manual** for instruction and steps to obtain an accurate temperature
- **Different body parts will have different temperatures.** Rectal temperature usually has higher temperature.
- Some of the thermometers use algorithms to convert the temperature measured to “oral-equivalent value” temperature. Some adjust the range of elevated temperature based on age.
- Refer to the product manual for the range of normal temperature and elevated temperature at specific sites.
- The height of the temperature is less important than how sick you feel. **Seek medical attention** if you are feeling unwell.

## References

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