## Thermometer Comparison & Analysis

<table>
<thead>
<tr>
<th>Thermometer</th>
<th>Cost</th>
<th>Accuracy</th>
<th>FDA Approved</th>
<th>Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tympanic Thermometer (checks temp of tympanic membrane)</td>
<td>$30.00-$45.00</td>
<td>0.2 to 0.4 degrees off rectal &lt;br&gt;Ear wax or small ear canal may interfere with accuracy</td>
<td>Yes for most all brands</td>
<td>Quick - Temp in 1-3 seconds  &lt;br&gt;Easy to clean</td>
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<tr>
<td>Digital Thermometer (oral)</td>
<td>$8.00-$15.00</td>
<td>Within 0.1 degree of rectal</td>
<td>Yes for most – check brand</td>
<td>Accurate &lt;br&gt;Requires more time</td>
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<tr>
<td>Temporal Artery Thermometer (checks temp of temporal artery)</td>
<td>$40.00 - $90.00</td>
<td>0.5 to 1.0 degree lower than oral &lt;br&gt;Most are approved – check brand</td>
<td>Accurate – closest to rectal if done appropriately</td>
<td></td>
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<tr>
<td>No Touch Thermometers (Infrared - forehead)</td>
<td>$60.00 - $90.00</td>
<td>May not be as accurate as it takes skin temp</td>
<td>Check brand &lt;br&gt;Less expensive brands lack accuracy</td>
<td>Only check skin temp &lt;br&gt;Quick but can be inaccurate with poor technique &lt;br&gt;Need good training for more accuracy</td>
</tr>
</tbody>
</table>

https://www.mayoclinic.org/diseases-conditions/fever/in-depth/thermometers/art-20046737  
https://www.ncbi.nlm.nih.gov/books/NBK263242/  
https://conductscience.com/thermometers-a-complete-guide/