

Sick child assessment

Normal ranges for respiratory and heart rates		
Age range	Respiratory rate (breaths per minute)	Heart rate (beats per minute)
Neonate	30–40	110–160
0–1	30–40	110–160
1–2	25–35	100–150
2–3	25–35	95–140
3–4	25–30	95–140
4–5	25–30	95–140
5–6	20–25	80–120



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Advanced Paediatric Life Support definitions of tachycardia^[2]

Age	Heart rate (bpm)
<12 months	>160
12–24 months	>150
2–5 years	>140

Generally accepted values defining fever

Axillary temperature above 37.2°C

Tympanic membrane temperature above 38°C

Rectal temperature above 38°C

Oral temperature above 37.8°C

Temperature measurement ^[1]	
Age	Method
Infants <4 weeks	Electronic thermometer in the axilla
Children 4 weeks to 5 years	Electronic thermometer in the axilla Chemical dot in the axilla Infra-red tympanic thermometer
Notes Ideally, use the same body site and the same type of thermometer when measuring temperatures. ^[3] Axillary temperatures: readings are lower than measurements from other sites. For an accurate reading, the thermometer must be placed over the axillary artery. ^[3] Chemical dot in the axilla: equally as accurate as electronic temperature measurements. ^[4] Tympanic temperatures: for an accurate measurement the pinna needs to be retracted to straighten the external auditory meatus and the instrument should be directed at the tympanic membrane. ^[3] Do not routinely use oral and rectal routes to measure body temperature of children aged 0–5 years¹¹ (note: the Royal Children's Hospital guidelines state that the under the tongue method may be used as appropriate for older children and for neonates, screen first with axillary temperature then consider performing a rectal temperature if a fever is still suspected^[3,5])	

Do not use forehead chemical thermometers as they are unreliable and inaccurate.

[1,3]

References

1. Advanced Life Support Group. Advanced paediatric life support: the practical approach (4th edn): Wiley-Blackwell; 2004.
2. National Institute for Health and Care Excellence. [Fever in under 5s: assessemnt and initial management](#). Clinical guideline CG160: NICE; 2013.
3. The Royal Children's Hospital Melbourne. [Febrile child](#). Melbourne: RCH; 2011 [updated October 2011].
4. National Guideline C. Best evidence statement (BEST). Axillary temperature taking tools: the evidence for change.
5. Knight A. Triage nurse's assessment of a child with a fever. Aust Nurs Midwifery J. 2015;22(10):28-31.