PAEDIATRIC REFERENCE RANGES

**Normal - vital signs**

**AGE (years) HEART RATE (bpm) RESPIRATORY RATE (per min) SYSTOLIC BP (mmHg)**

**<1 110 to 160 30 to 40 70 to 90**

**1 to 2 100 to 150 25 to 35 80 to 95**

**2 to 5 95 to 140 25 to 30 80 to 100**

**5 to 12 80 to 120 20 to 25 90 to 110**

**>12 60 to 100 15 to 20 100 to 120**

*Reference:*

Adapted by Starship with slight modifications from the Advanced Life Support Group (ALSG) – Advanced Paediatric Life Support, 5th Edition

**Moderate illness – vital signs**

**AGE (years) HEART RATE (bpm) RESPIRATORY RATE (per min)**

**<1 150 to 159 50 to 59**

**1 to 2 140 to 149 40 to 49**

**3 to 4 130 to 139 35 to 39**

**5 120 to 129 27 to 28**

**6 to 7 110 to 119 24 to 26**

**8 to 11 105 to 114 22 to 24**

**≥12 91 to 130 21 to 24**

Reference:

Sourced from: National Institute for Health and Care Excellence – [Sepsis: Recognition, Diagnosis and Early Management](https://www.nice.org.uk/guidance/ng51)

**Severe illness – vital signs**

**AGE (years) HEART RATE (bpm) RESPIRATORY RATE (per min)**

**<1 ≥160 ≥60**

**1 to 2 ≥150 ≥50**

**3 to 4 ≥140 ≥40**

**5 ≥130 ≥29**

**6 to 7 ≥120 ≥27**

**8 to 11 ≥115 ≥25**

**≥12 ≥130 ≥25**

Reference:

Sourced from: National Institute for Health and Care Excellence – [Sepsis: Recognition, Diagnosis and Early Management](https://www.nice.org.uk/guidance/ng51)

**Weight estimates**

**AGE (years) ESTIMATED WEIGHT (kilograms)**

**1 to 12 months (0.5 x age in months) + 4**

**1 to 5 years (2 x age in years) + 8**

**6 to 12 years (3 x age in years) + 7**

*Reference:*

Emcare: Principles of Advanced Care Life Support – Course supplementary pre-reading