






# PEDIATRIC VITAL SIGNS

Vital Sign	Normal Range	How To Take It	Abnormal Findings
 <p><b>Systolic Blood Pressure</b></p>	<p><b>Preterm:</b> 50-70 mmHg <b>Newborn - 3 mo.:</b> 60-70 mmHg <b>1 year:</b> 70-80 mmHg <b>3 year:</b> 76-90 mmHg <b>6 year:</b> 80-100 mmHg <b>8 year:</b> 80-110 mmHg <b>10+ year:</b> 90-120 mmHg</p>	<p>It can be difficult to obtain a blood pressure on a child because having a cuff around their arm that is squeezing it is scary and very few children will sit still for it. If a child does sit still for it, that may be a clue that they are truly very sick. You measure the blood pressure cuff by wrapping it around the child's arm and making sure it wraps within the range given on the cuff. (<a href="https://youtu.be/Zmdy7W7GSAc">https://youtu.be/Zmdy7W7GSAc</a>)</p> <p>Refer to the Adult Vital Signs Cheatsheet for technique instructions.</p>	<p>Hypertension in children younger than 10 years is generally from a medical cause in nature such as hormonal disorders (adrenals, thyroid, etc.), kidney disorders, heart defects, etc. In older children it can be from the same ailments as an adult (fear, pain, obesity, etc.).</p> <p>Hypotension in children can be (most commonly) caused by hypovolemia, hypothyroidism, tachycardia, etc.</p>
 <p><b>Heart Rate</b></p>	<p>Preterm - 1 year: 120-160 bpm 3 year: 90-140 bpm 6 - 8 years: 80-120 bpm 10+ year: 60-100 bpm</p>	<p>Children can have their heart rate taken apically by placing the stethoscope apically over the heart. This is approximately the 5th intercostal space, midclavicular line. Count the beats for one full minute.</p> <p>Alternatively you can palpate a brachial pulse in a younger child or a radial pulse in an older child by counting for 30 seconds and multiplying by two.</p>	<p>Acute tachycardia can be (most commonly) caused by fear, pain, cardiac arrhythmia, hypovolemia, fever, activity/exertion, etc.</p> <p>Acute bradycardia can be (most commonly) caused by cardiac arrhythmia, infection, electrolyte imbalance, etc.</p>
 <p><b>Respirations</b></p>	<p><b>Preterm - 1 year:</b> 30-60 bpm <b>3 year:</b> 25-40 bpm <b>6 year:</b> 22-34 bpm <b>8 year:</b> 16-24 bpm <b>10 year:</b> 16-20 bpm <b>12 year:</b> 14-20 bpm <b>14+ years:</b> 12-20 bpm</p>	<p>The younger children tend to be belly breathers and you can count their respirations by watching their belly, other children will have their respirations counted by watching the chest rise and fall. No matter the age you need to count the respirations for a full minute.</p>	<p>Acute Tachypnea can be caused by fear, pain, asthma, throat swelling, pneumonia, fever, brain stem injury, etc. Bradypnea can be caused by brain stem injury, neurologic injury, etc.</p>

# PEDIATRIC VITAL SIGNS

Vital Sign	Normal Range	How To Take It	Abnormal Findings
 <p>Temperature</p>	<p>97.8° - 99.1° Fahrenheit</p>	<p>Most children 2 years or younger will have a rectal temperature. From that age on, it is dependent on the child as to how you obtain the temperature. Generally speaking you will take an axillary temperature until they are about 4 or 5 years old, and orally after. If a child cannot take an oral temperature and they are febrile or you need the most accurate temperature, then the child will get their temperature taken rectally.</p>	<p>Hyperthermia can be caused by a viral infection, bacterial infection, or any other infection, neurological injury, etc.</p> <p>Hypothermia can be caused by prolonged exposure to the cold environment, neurological damage, etc.</p>
 <p>Pain</p>	<p>0-10</p>	<p>Using the Faces, Legs, Activity, Cry, Consolability (FLACC) scale, you assess the child's level of pain.</p> <p>Using Wong-Baker FACES rating scale, you can have them point to the face that indicates how they feel.</p> <p>For older children, you could use a numeric scale. This is a subjective question that you ask the child. "Rate your pain on a scale of 0 - 10, zero being no pain at all and ten being the worst pain imaginable."</p>	<p>Pain can be acute or chronic, depending on the cause. There are many, many possible reasons for pain. No amount of pain is considered normal - it is an indication that something is wrong.</p> <p>Remember to also gather PQRST or OLDCARTS details with your pain assessment. There's more to it than just the pain score.</p>