

### Pediatric Vital Signs Reference Chart

This table, along with our detailed references can be found online at <http://www.pedscases.com/pediatric-vital-signs-reference-chart>. For a more detailed approach to this topic, see our podcast on “Pediatric Vital Signs.”

Heart Rate			Respiratory Rate	
<b>Normal Heart Rate by Age (beats/minute)</b> <b>Reference: PALS Guidelines, 2015</b>			<b>Normal Respiratory Rate by Age (breaths/minute)</b> <b>Reference: PALS Guidelines, 2015</b>	
Age	Awake Rate	Sleeping Rate	Age	Normal Respiratory Rate
Neonate (<28 d)	100-205	90-160	Infants (<1 y)	30-53
Infant (1 mo-1 y)	100-190	90-160	Toddler (1-2 y)	22-37
Toddler (1-2 y)	98-140	80-120	Preschool (3-5 y)	20-28
Preschool (3-5 y)	80-120	65-100	School-age (6-11 y)	18-25
School-age (6-11 y)	75-118	58-90	Adolescent (12-15 y)	12-20
Adolescent (12-15 y)	60-100	50-90		
Blood Pressure				
<b>Normal Blood Pressure by Age (mm Hg)</b> <b>Reference: PALS Guidelines, 2015</b>				
Age	Systolic Pressure	Diastolic Pressure	Systolic Hypotension	
Birth (12 h, <1000 g)	39-59	16-36	<40-50	
Birth (12 h, 3 kg)	60-76	31-45	<50	
Neonate (96 h)	67-84	35-53	<60	
Infant (1-12 mo)	72-104	37-56	<70	
Toddler (1-2 y)	86-106	42-63	<70 + (age in years x 2)	
Preschooler (3-5 y)	89-112	46-72	<70 + (age in years x 2)	
School-age (6-9 y)	97-115	57-76	<70 + (age in years x 2)	
Preadolescent (10-11 y)	102-120	61-80	<90	
Adolescent (12-15 y)	110-131	64-83	<90	
For diagnosis of hypertension refer to the 2017 AAP guidelines Table 4 and 5: <a href="http://pediatrics.aappublications.org/content/early/2017/08/21/peds.2017-1904">http://pediatrics.aappublications.org/content/early/2017/08/21/peds.2017-1904</a> .				
Temperature			Oxygen Saturation	
<b>Normal Temperature Range by Method</b> <b>Reference: CPS Position Statement on Temperature Measurement in Pediatrics, 2015</b>			Normal pediatric pulse oximetry (SPO2) values have not yet been firmly established. SPO2 is lower in the immediate newborn period. Beyond this period, a SPO2 of <92% should be a cause of concern and may suggest a respiratory disease or cyanotic heart disease.	
Method	Temperature (°C)			
Rectal	36.6-38			
Ear	35.8-38			
Oral	35.5-37.5			
Axillary	36.5-37.5			
Temperature ranges do not vary with age. Axillary, tympanic and temporal temps for screening (less accurate). Rectal and oral temps for definitive measurement (unless contraindication).				