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

Normal Heart Rate by Age (beats/minute)
Reference: PALS Guidelines, 2015

Age	Awake Rate	Sleeping Rate
Neonate (<28 d)	100-205	90-160
Infant (1 mo-1 y)	100-190	90-160
Toddler (1-2 y)	98-140	80-120
Preschool (3-5 y)	80-120	65-100
School-age (6-11 y)	75-118	58-90
Adolescent (12-15 y)	60-100	50-90

Respiratory Rate

Normal Respiratory Rate by Age (breaths/minute)
Reference: PALS Guidelines, 2015

Age	Normal Respiratory Rate
Infants (<1 y)	30-53
Toddler (1-2 y)	22-37
Preschool (3-5 y)	20-28
School-age (6-11 y)	18-25
Adolescent (12-15 y)	12-20

Blood Pressure

Normal Blood Pressure by Age (mm Hg)
Reference: PALS Guidelines, 2015

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 NHBPEP Reference tables: http://www.nhlbi.nih.gov/health-pro/guidelines/current/hypertension-pediatric-jnc-4/blood-pressure-tables.

Temperature

Normal Temperature Range by Method
Reference: CPS Position Statement on Temperature Measurement in Pediatrics, 2015

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).

Oxygen Saturation

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.

Developed by Chris Novak and Peter Gill for PedsCases.com.
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