

PEDIATRIC PARAMETERS

VITAL SIGNS					BLOOD VOL (mL / Kg)	LARYNG BLADE	ET TUBE	ET SIZE	CHEST TUBE	NG TUBE
AGE	HR/MIN	RR/MIN	BP (SYS)	BP (DIA)						
Neonate	80—180	40—60	60—90	20—60	85—90	0—1	2.5—3.5 mm	Age in yrs + 16 divided by 4 = ET or visualize Pt 5 th digit	10—12 Fr	5—8 Fr
Infant (6mo)	75—160	30—60	87—105	53—66	75—80	1	4.0 mm		14—16 Fr	8 Fr
Toddler	60—110	24—40	95—105	53—66	70—75	2	4.5 mm		18—24 Fr	10—12 Fr
Preschooler	60—110	22—34	95—110	55—70	70—75	2	5.0 mm		20—24 Fr	10—12 Fr
School Age	60—110	18—30	97—112	57—71	70—75	2	5.5 mm		24—32 Fr	10—12 Fr
Adolescent	50—90	12—16	112—128	66—80	65—70	3	6.0 mm		28—40 Fr	14—18 Fr
BP Quick Method 70 + (2 x age in yrs)						ETT Placement 3 x ETT size @ the lip				
Maintenance Fluid			Dehydration	RENAL	BLOOD	BLOOD PRODUCTS				
First	1—10 kg = 100 mL / Kg		1% - 10 mL / Kg	UOP = 1—2 mL / Kg / Hr	Recording blood out may be required in certain circumstances	10 mL / Kg PRBC will raise Hct 5%				
Then ADD	11—20 kg = 50 mL / Kg		10% = 100 mL/Kg	BLADDER CAPACITY		0.1 u / Kg PLT will raise count 25,000				
PLUS	> 20 kg = 20 mL /Kg		BSA Formula Wt (Kg) x Ht (Cm) 3600 times Sq Root	Age in yrs + 2 x 30		1 u / Kg Factor VIII will raise level 2%				
Total = 24 hrs (Divide for hourly rate) For neonate less than 29 days = 80-100 mL/kg/day				BLADDER PRESSURE 0 - 20 mm / Hg Use 1 mL/Kg sterile water		10 mL / Kg Fresh Frozen Plasma				
NEURO		HEMODYNAMICS			DEFINITIONS					
ICP = 4—15 mm/Hg		Cardiac Output	3.5—4.5 L/min		CO = SV x HR / Amount of blood discharged from L or R Ventricle per minute					
MAP - ICP = CPP		Cardiac Index	3—4.5 L/min		CI = CO / BSA					
MAP = Systolic + (2 x diastolic) Divided by 3		CVP (RA pressure)	0—5 mm/Hg		The pressure from the superior vena cava					
CPP		PAP	30/10 mm/Hg		Systolic pressure by RV					
Peds minimum = 40—60		PAWP	8 mm/Hg		Pressure measured in the pulmonary artery at its capillary end					
Adult = 80—100		RV	30/3 mm/Hg		RA End Diastolic Pressure					
Circulating CSF		SV	1.5 ml/Kg		Effect by preload, afterload, contractility					
Infant = 44—248 mL (Mean 81)										
>6 mos = 40—60 mL (Mean 50)										
IV DRIPS										
mL / Hr	mcg desired x kg x 60 min divided by concentration of drip (mcg / mL)									
mcg / min	mL / Hr x concentration of drip (mcg / mL) divided by 60 min									
mcg / Kg / min	mL / Hr x concentration of drip (mcg / mL) divided by 60 min x Kg									
milliunits / hr	milliunits desired x kg divided by milliunits available (1000 milliunits = one unit)									

Reference: Hazinski MF. *Manual of Pediatric Critical Care*. St. Louis, Mo: Mosby; 1999: Cover pages, 7-9, 99, 111-112, 383, 398, 572.

Slota MC. *Core Curriculum for Pediatric Critical Care Nursing*. Philadelphia: Saunders; 1998: Pg 153.

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