Pediatric Emergencies Pocket Reference Card

The Barbara Bush Children's Hospital
At Maine Medical Center

Normal Vital Signs	HR	RR	Systolic BP	Diastolic BP
Infants	100-180	24-50	60-105	50-65
Toddlers	90-150	22-30	70-110	50-70
Preschoolers	65-140	20-24	80-110	60-70
School-aged child	60-130	18-24	80-120	70-80
Adolescents	60-110	14-22	90-140	75-85
			Minimum SBP (>1y) = 70 + (2 x Age)	

Estimated Weight for Age

Estimated Weight: weight(kg) = 10 + 2(age)

Age	Weight (kg)	Age	Weight(kg)
Premie	<3	4-6 yr	17-20
Newborn	3-4	6-8 yr	20-25
1-6 mo	4-6	8-10 yr	25-30
6-12 mo	6-10	10-12 yr	30-40
1-2 yr	10-13	12-14 yr	40-50
2-4 yr	13-17	>14 yr	> 50

Fluids

For Shock: 10-20ml/kg bolus of Isotonic Solution; repeat PRN

Maintenance: 4+2+1 rule (cc/kg/hr) or 100+50+20 rule (cc/kg/day)

Parkland Formula for burns: 4ml/kg/%BSA, ½ over first 8 hours, remainder over the next 16 hours (plus maintenance IVF)

Intubation

ETT Size (child) = (age/4) + 4
ETT Size (premie) = WGA/10
ETT Insertion Depth = 3 x ETT Size
Suction cather size = 2 x ETT Size

Age	Blade	ETT	Depth
< 1000gm	Miller 0	2.5	6-7 cm
1000-2000gm		3.0	7-8 cm
2000-3000gm		3.5	8-9 cm
>3000 gm	Miller 1	4.0	9-10 cm
1 yr	Mac 2 (or Miller 2)	4.0	12 cm
2yr		4.5	13.5 cm
4yr		5.0	15 cm
6yr		5.5	16.5 cm
8yr		6.0	18 cm
10yr	Mac 3 (or Miller 3)	6.5	19.5 cm
12yr		7.0	21 cm
14yr		7.0	22.5 cm

Hypoglycemia

(0.5 mg/kg, Rule of 50's)

Adults: Use **D50** : 1 ml/kg (50x1=50)
>1 year: Use **D25** : 2 ml/kg (25x2=50)
<1 year: Use **D10** : 5 ml/kg (10x5=50)
Neonate: Use **D10** : 2 ml/kg (breaks the rule)

Blood Products

- ✓ All ages, all products: *leukoreduced*
- ✓ Immunocompromised: *CMV-/irradiated*
- ✓ Infants: *CMV-/irradiated/directed donor*
- **pRBCs**: 10-15 ml/kg will raise Hgb 1-3%
- **platelets**: 10-15 ml/kg will raise Plt ~50K
- **FFP** = all clotting factors (for bleeding with PT/PTT ≥1.5x normal): 10-20 ml/kg raises factors >30%
- **Cryo** = fibrinogen + factors (bleeding with low fibrinogen): 1-2 U/10 kg

Adapted from multiple sources by Dawn Kendrick, MD and David Crowley, MD. Approved by Sandra Bagwell, MD, MMC Pediatric Critical Care. Some clinical problems may not be adequately addressed in this pocket guide. As always, clinicians are urged to document management strategies. This document is valid for 2 years after last revision. Revised 3/21/2021.

Common Medications

	Medication	Typical Pediatric Dose (IV)	Typical Adult Dose
Intubation	Ativan/Lorazepam	0.1 mg/kg	0.5-2 mg
	Atropine	0.02 mg/kg (min. dose 0.1mg) (<6 yrs)	(Not given for intubation)
	Etomidate	0.3 mg/kg	0.3 mg/kg
	Fentanyl	1-2 mcg/kg	25 mcg
	Lidocaine	1 mg/kg	1-1.5 mg/kg
	Midazolam/Versed	0.1 mg/kg (repeat prn, max 3 doses)	1 mg
	Succinylcholine	1-2 mg/kg/dose	150 mg
	Vecuronium	0.1 mg/kg (max 1 mcg/kg/min)	0.1 mg/kg
Status Epilepticus	Ativan/Lorazepam	0.1 mg/kg (repeat prn, max 3 doses)	4 mg
	Fosphenytoin	20 mg/kg	20 mg/kg
	Phenobarbital	10-20 mg/kg (may need to intubate)	20 mg/kg
Analgesia	Acetaminophen	10-15 mg/kg q4-6h	650-1000 mg
	Ibuprofen	5-10mg/kg q6-8h	400 mg
	Fentanyl	1-2 mcg/kg	25-50 mcg
	Morphine	0.1 mg/kg	1-5 mg
Conscious Sedation	Choral Hydrate	25-50 mg/kg PO (max 1-2 grams)	0.5-1 gram
	Etomidate	0.3 mg/kg	0.3 mg/kg
	Ketamine	0.5-1mg/kg (IV) and 2-4mg/kg (IM)	2 mg/kg
	Midazolam/Versed	0.1 mg/kg (repeat prn, max 3 doses)	1 mg
	Propofol	1-2 mg/kg	50-150 mg
Reversal	Flumazenil	0.01 mg/kg (max 5 doses)	0.2 mg
	Narcan/Naloxone	0.1 mg/kg q2-3min prn	0.6 mg standard
Misc	Activated Charcoal	1-2 grams/kg q4h prn	30-100 grams
	Epinephrine (anaphylaxis)	0.01 ml/kg SQ of 1:1000 =0.01 mg/kg	1 mg/dose standard (0.2 mg/kg max)
	Mannitol	0.25-1 grams/kg q4h prn	2 grams/kg
Cardiac	Adenosine (SVT)	0.1 mg/kg; double dose prn (max 12mg)	6mg x1, then 12 mg x2
	Lidocaine	1 mg/kg then 20-50 mcg/kg/min	50 mcg/kg/min
	Prostaglandins	0.05 – 0.1 mcg/kg/min to effect (watch for apnea)	N/A
	Epinephrine drip	Start at 0.1 mcg/kg/min	2-10 mcg/min
	Dopamine drip	2-20 mcg/kg/min	2-20 mcg/kg/min
	Dobutamine drip	2-20 mcg/kg/min	2-20 mcg/kg/min
Shocking	Defibrillation	2-4 J/kg (monophasic) 1-2 J/kg (biphasic)	100, 200, 300, 360 (half that if biphasic)
	Cardioversion (sync)	1-2 J/kg (monophasic) 0.5-1 J/kg (biphasic)	200, 300, 360 (half that if biphasic)

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