

# Pediatric Emergency Measures

(Frequently used drugs are outlined on back cover)

- Albuterol (Ventolin, Proventil)** (0.5% soln): 0.01-0.03 ml (0.05-0.15 mg)/kg/dose (max: 0.5 ml/dose) inhalation. May repeat.
- Atropine** (0.1, 0.4, 1.0 mg/ml): 0.01-0.03 mg/kg/dose (min: 0.1 mg/dose) (adult: 0.6-1.0 mg/dose; max: 2 mg) q 2-5 min prn IV (or ET)
- Bicarbonate, sodium (NaHCO<sub>3</sub>)** (44, 50 mEq/50 ml): 1-2 mEq/kg/dose q 10 min prn (per ABG) IV (diluted 1:1 with D5W)
- Calcium chloride** (10%: 100 mg/ml-1.36 mEq Ca<sup>++</sup>/ml): 20-30 mg/kg/dose (max: 500 mg/dose) q 10 min prn IV slowly
- Crystalloid** (D5WLR, D5W 0.9%NS, LR, 0.9%NS): 20 ml/kg over 20-30 min IV
- Defibrillation**: 1-2 joules/kg/dose (adult: 200 joules/dose); synchronized: 0.5-1 joules/kg/dose
- Dexamethasone (Decadron)** (4, 24 mg/ml): 0.25 mg/kg/dose IV, IM
- Dextrose** (D50W: 25 g/50 ml often diluted to D25W): 0.5-1.0 g (2-4 ml D25W)/kg/dose IV
- Diazepam (Valium)** (5 mg/ml): 0.1-0.3 mg/kg/dose q 2-5 min prn IV slowly (max total dose: child, 10 mg; adult, 30 mg)
- Diazoxide (Hyperstat)** (15 mg/ml): 1-3 mg/kg/dose (max: 150 mg/dose) q 4-24 hr IV rapidly
- Digoxin** (see p. 112)
- Dopamine** (40, 80, 160 mg/ml): 5-20 µg/kg/min IV drip (6 mg x wt (kg) in 100 ml D5W; 1 ml/hr = 1 µg/kg/min)
- Dobutamine (Dobutrex)** (250 mg/vial): 1-15 µg/kg/min IV drip (6 mg x wt (kg) in 100 ml D5W; 1 ml/hr = 1 µg/kg/min)
- Epinephrine**: *Asystole* (1:10,000): 0.1 ml/kg/dose (max: 5 ml) q 3-5 min prn IV or ET; *Asthma* (1:1000): 0.01 ml/kg/dose (max: 0.35 ml/dose) q 20 min prn x3, SQ
- Furosemide (Lasix)** (10 mg/ml): 1 mg (max: 6 mg)/kg/dose q 6-12 hr IV
- Hydralazine (Apresoline)** (20 mg/ml): 0.1-0.2 mg/kg/dose q 4-6 hr prn IV, IM (adult: 10-20 mg/dose)
- Insulin, regular**: DKA: 0.1-0.2 units/kg/hr IV drip
- Isoproterenol** (200 µg/ml): 0.05-1.5 µg/kg/min IV drip (0.6 mg x wt (kg) in 100 ml D5W; 1 ml/hr = 0.1 µg/kg/min)
- Lidocaine** (10, 20 mg/ml): Load: 1 mg/kg/dose q 5-10 min prn IV (or ET) (max total dose: 5 mg/kg); maint: 20-50 µg/kg/min IV drip (adult: 2-4 mg/min)
- Lorazepam (Ativan)** (2, 4 mg/ml): 0.05-0.15 mg/kg/dose IV slowly (max: 5 mg/dose)
- Mannitol** (200, 250 mg/ml): 0.25-0.5 g/kg/dose q 3-4 hr prn IV slowly
- Methylprednisolone (Solu-Medrol)** (40, 125, 500, 1,000 mg/vial): *Asthma*: 1-2 mg/kg/dose q 6 hr IV. *Shock*: 30-50 mg/kg/dose (max: 500 mg) IV
- Morphine** (8, 10, 15 mg/ml): 0.1-0.2 mg/kg/dose (max: 15 mg/dose) q 2-4 hr prn IV, IM
- Naloxone (Narcan)** (0.4, 1 mg/ml): 0.1 mg/kg/dose (max: 0.8 mg) IV; if no response in 10 min give 2 mg IV
- Nitroprusside (Nipride)** (50 mg/vial): 0.5-10 µg (avg: 3 µg)/kg/min IV drip (50 mg in 100 ml D5W = 500 µg/ml)
- Pancuronium (Pavulon)** (2, 2 mg/ml): 0.04-0.1 mg/kg/dose IV; repeat 0.01-0.02 mg/kg/dose q 20-40 min prn IV
- Phenobarbital** (65, 130 mg/ml): Load: 15 mg/kg/dose PO, IM, IV (<25-50 mg/min or <1 mg/kg/min) (adult: 100 mg/dose q 20 min prn x 3); maint: 3-5 mg/kg/24 hr PO, IV
- Phenytoin (Dilantin)** (50 mg/ml): *Seizure*: Load: 15 mg/kg PO, IV (<40 mg/min or <0.5 mg/kg/min) (Max: 1,250 mg); maint: 5 mg/kg/24 hr PO, IV. *Dysrhythmia*: 5 mg/kg/dose q 5-20 min prn IV
- Propranolol (Inderal)** (1 mg/ml): *Dysrhythmia*: 0.01-0.1 mg/kg/dose (max: 1 mg/dose) IV over 10 min. *Tetralogy spell*: 0.1-0.2 mg/kg/dose q 15 min prn IV
- Succinylcholine (Anectine)** (20 mg/ml): 1 mg/kg/dose IV; repeat 0.3-0.6 mg/kg/dose q 5-10 min prn IV
- Terbutaline (Brethine)** (0.1% soln): 0.01 ml/kg/dose SQ q 20 min x 3 (max: 0.25 ml/dose). Inhalation: 0.03 ml/kg/dose in 2 ml saline (max: 0.5 ml/dose)
- Theophylline** (0.85 aminophylline): Load: 6 mg/kg IV slowly; maint: 0.6-0.9 mg/kg/hr IV drip

Age	Weight (kg)	Heart rate (avg/min)	Resp rate (avg/min)	BP (sys) (mm Hg)	ET tube ID (mm)	Laryngoscopy blade	Chest tube (Fr)	NG/Foley (Fr)
Newborn	1	145	<40	42 ± 10	2.5	0 st	8-10	5 (feeding)
Newborn	2-3	125		60 ± 10	3.0	1 st	10-12	5-8 (feeding)
1 month	4	120	24-35	80 ± 16	3.5			
6 months	7	130		89 ± 29	3.5		16-20	8
1 yr	10	125	20-30	96 ± 30	4.0	1 st		
2-3 yr	12-14	115		99 ± 25	4.5		20-24	10
4-5 yr	16-18	100		99 ± 20	5.0-6.0	2	20-28	
6-8 yr	20-26	100	12-25	105 ± 13	6.0-6.5			10-12
10-12 yr	32-42	75		112 ± 19	7.0	2-3	28-32	12
> 14 yr	> 50	70	12-18	120 ± 20	7.5-8.5	3	32-42	> 12

It is advisable to obtain up-to-date information from package inserts for use and dosage approved by the FDA before administering drugs.

Barkin-Rosen: *Emergency Pediatrics*, ed 3 © The C.V. Mosby Company, St. Louis, 1990.

Journal, 90 Em Pod.

**STEROIDS—cont'd**

Hydrocortisone (Solu-Cortef)  
Vial: 100, 250, 500 mg 4-5 mg/kg/dose q 6 hr IV, IM

Methylprednisolone (Solu-Medrol)  
Vial: 40, 125, 500, 1,000 mg 1-2 mg/kg/dose q 6 hr IV, IM

**ANTICONVULSANTS**

Diazepam (Valium)  
Tab: 2, 5, 10 mg  
Vial: 5 mg/ml 0.2-0.3 mg/kg/dose IV (<1 mg/min) q 2-5 min prn  
Adult: 5-10 mg/dose

Lorazepam (Ativan)  
Vial: 2, 4 mg/ml 0.05-0.15 mg/kg/dose IV slowly  
Adult: 2.5 mg-10 mg/dose

Phenobarbital  
Elix: 20 mg/ml  
Tab: 15, 30, 60, 90, 100 mg  
Vial: 65, 130 mg/ml  
Load: 10-15 mg/kg/dose PO, IM, IV (<25-50 mg/min or <1 mg/kg/min)  
Adult: 100 mg/dose IV q 20 min prn x 3  
Maintenance: 3-5 mg/kg/24 hr q 12-24 hr PO  
Adult: 200-300 mg/24 hr

Phenytoin (Dilantin)  
Susp: 30, 125 mg/5 ml  
Tab: (chew): 50 mg  
Cap: 30, 100 mg  
Amp: 50 mg/ml  
Load: 10-20 mg/kg PO, IV (<40 mg/min or <0.5 mg/kg/min)  
Adult: 800-1,200 mg  
Maintenance: 5-10 mg/kg/24 hr q 12-24 hr PO  
Adult: 200-400 mg/24 hr

Carbamazepine (Tegretol)  
Tab: 100 (chew), 200 mg 15-30 mg/kg/24 hr q 8-12 hr PO (maximum: 1,200-1,600 mg/24 hr)

Valproic acid (Depakene)  
Syr: 250 mg/5 ml  
Cap: 250 mg 15-60 mg/kg/24 hr q 8-24 hr PO  
Adult: 250-750 mg/dose tid

Ethosuximide (Zarontin)  
Syr: 250 mg/5 ml  
Cap: 250 mg 20-30 mg/kg/24 hr q 24 hr PO (maximum: 1,000 mg/24 hr)

**ANTIPYRETICS/ANALGESICS**

Aspirin (salicylate, ASA)  
Tab: 81 (chew), 325 mg 10-15 mg/kg/dose q 4-6 hr PO  
Supp: 65, 130, 195, 325 mg Adult: 10 grains (650 mg)/dose

Acetaminophen (Tylenol, Tempra)  
Drop: 80 mg/0.8 ml 10-15 mg/kg/dose q 4-6 hr PO  
Elix: 160 mg/5 ml Adult: 10 grains (650 mg)/dose  
Tab: 80 (chew), 160 junior, 325 mg  
Supp: 120, 325 mg

Codeine  
Elix: 10 mg/5 ml (with antitussive), 12 mg/5 ml (with 120 mg acetaminophen) 0.5 mg/kg/dose q 4-6 hr PO, IM  
Adult: 30-60 mg/dose  
Tab: 15, 30, 60 mg  
Vial: 30, 60 mg

DTP (lytic) cocktail  
Meperidine (Demerol) 1 mg/kg (maximum: 50mg/dose) plus promethazine (Phenergan) 0.25 mg/kg plus chlorpromazine (Thorazine) 0.25 mg/kg (give in one syringe deep IM; may double per kg dose)

Meperidine hydroxyzine  
Meperidine (Demerol) 1 mg/kg/dose IM plus hydroxyzine (Atarax, Vistaril) 0.5 mg/kg/dose IM (give in one syringe)

**POISONING**

Ipecac. syrup  
6-12 mo: 10 ml 1-12 yr: 15 ml >12 yr: 30 ml  
May repeat in children >12 mo if no vomiting after 20 min; give fluids

Magnesium sulfate 250 mg/kg/dose PO  
Adult: 20 g/dose PO

Activated charcoal  
Mix with magnesium sulfate and water (100-200 ml) and flavoring 10-30 g/dose PO  
Adult: 30-100 g/dose PO

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