

|                                       |           |
|---------------------------------------|-----------|
| <b>WEIGHT in kg</b>                   | <b>25</b> |
| <b>Average AGE for weight (YEARS)</b> | <b>8</b>  |

## PEDIATRIC MEDICATIONS DOSE CALCULATOR



| Resuscitation               |            |         |               |         |       |                                                                         |
|-----------------------------|------------|---------|---------------|---------|-------|-------------------------------------------------------------------------|
| DRUG                        | dose/kg    | dose    | concentration | GIVE    | route | additional info                                                         |
| ADENOSINE                   | 0.1 mg/kg  | 2.5 mg  | 3 mg/mL       | 0.8 mL  | IV    | Max 6 mg. If less than 0.2 mL dilute with NaCl. Rapid push              |
| CALCIUM CHLORIDE 10%        | 20 mg/kg   | 500 mg  | 100 mg/mL     | 5 mL    | IV    | Max 1000 mg                                                             |
| CALCIUM GLUCONATE 10%       | 100 mg/kg  | 2500 mg | 100 mg/mL     | 25 mL   | IV    | 60-100 mg/kg/dose. Max 3000 mg                                          |
| DEXTROSE (50% glucose)      | 0.5 g/kg   | 12.5 g  | 0.5 g/mL      | 25 mL   | IV    | Dilute 1:1 with sterile water. Max 50 mL<br>Max 200 mg/kg/min           |
| DEXTROSE (10% glucose)      | 0.5 g/kg   | 12.5 g  | 0.1 g/mL      | 125 mL  | IV    | Max 250 mL. Max 200 mg/kg/min                                           |
| EPINEPHRINE (Resusc)        | 10 mcg/kg  | 250 mcg | 0.1 mg/mL     | 2.5 mL  | IV    | 0.1 mg/mL = 100 mcg/mL; Check strength                                  |
| EPINEPHRINE (low dose push) | 1 mcg/kg   | 25 mcg  | 0.01 mg/mL    | 2.5 mL  | IV    | 0.01 mg/mL = 10 mcg/mL; Not a standard concentration, needs to be mixed |
| 3% SODIUM CHLORIDE          | 5 mL/kg    | 125 mL  | 0.514 mmol/mL | 125 mL  | IV    | Max 300 mL. Give over 10 min                                            |
| MANNITOL (20%)              | 1 g/kg     | 25 g    | 0.2 g/mL      | 125 mL  | IV    | Max 50 g. Filter required. Push over 3-5 min                            |
| NALOXONE                    | 0.1 mg/kg  | 2 mg    | 0.4 mg/mL     | 5 mL    | IV/IM | Max 2 mg/dose. Push over 30 sec. Repeat q 2 min PRN                     |
| Intubation Medications      |            |         |               |         |       |                                                                         |
| DRUG                        | dose/kg    | dose    | concentration | GIVE    | route | additional info                                                         |
| KETAMINE                    | 1 mg/kg    | 25 mg   | 10 mg/mL      | 2.5 mL  | IV    | Push over 1 min                                                         |
| ROCURONIUM                  | 1 mg/kg    | 25 mg   | 10 mg/mL      | 2.5 mL  | IV    | Push over 5 sec                                                         |
| FENTANYL                    | 1 mcg/kg   | 25 mcg  | 50 mcg/mL     | 0.5 mL  | IV    | 1-2 mcg/kg/dose range. Max 50 mcg.<br>Push over 3-5 min                 |
| Analgesia & Sedation        |            |         |               |         |       |                                                                         |
| DRUG                        | dose/kg    | dose    | concentration | GIVE    | route | additional info                                                         |
| KETAMINE                    | 1 mg/kg    | 25 mg   | 10 mg/mL      | 2.5 mL  | IV    | Can repeat dose. Push over 1 min                                        |
| MORPHINE                    | 0.05 mg/kg | 1.25 mg | 10 mg/mL      | 0.13 mL | IV    | Max 5 mg. Push over 5 min                                               |
| MIDAZOLAM                   | 0.05 mg/kg | 1.25 mg | 5 mg/mL       | 0.25 mL | IV    | Max 8 mg. Push over 2 min                                               |
| Anaphylaxis                 |            |         |               |         |       |                                                                         |
| DRUG                        | dose/kg    | dose    | concentration | GIVE    | route | additional info                                                         |
| EPINEPHRINE                 | 0.01 mg/kg | 0.25 mg | 1 mg/mL       | 0.25 mL | IM    | Max 0.5 mg/dose<br>0.01 mg/kg = 10 mcg/kg                               |
| Seizures                    |            |         |               |         |       |                                                                         |
| DRUG                        | dose/kg    | dose    | concentration | GIVE    | route | additional info                                                         |
| LevETIRAcetam               | 60 mg/kg   | 1500 mg | 100 mg/mL     | 15 mL   | IV    | Max 4500 mg. Refer to parenteral manual for administration instructions |
| PHENYTOIN                   | 20 mg/kg   | 500 mg  | 50 mg/mL      | 10 mL   | IV    | Max 1500 mg. Refer to parenteral manual for administration instructions |
| PHENOBARBITAL               | 20 mg/kg   | 500 mg  | 120 mg/mL     | 4.2 mL  | IV    | Max 1000 mg. Refer to parenteral manual for administration instructions |
| LORAZEPAM                   | 0.1 mg/kg  | 2.5 mg  | 4 mg/mL       | 0.6 mL  | IV    | Max 4 mg. Refer to parenteral manual for administration instructions    |

| IV INFUSIONS                   |                      |            |                        |                 |                                                  |
|--------------------------------|----------------------|------------|------------------------|-----------------|--------------------------------------------------|
| Infusions: BP/Cardiac          |                      |            |                        |                 |                                                  |
| DRUG                           | dose range           | weight     | standard concentration | starting rate   | additional info                                  |
| EPINEPHRINE                    | 0.01-0.4 mcg/kg/min  | 2 to 6 kg  | 25 mcg/mL              | 0.05 mcg/kg/min | Central line not required for low dose infusions |
|                                |                      | 6 to 30 kg | 50 mcg/mL              |                 |                                                  |
|                                |                      | > 30 kg    | 100 mcg/mL             |                 |                                                  |
| NORepinephrine                 | 0.01-0.4 mcg/kg/min  | 2 to 6 kg  | 25 mcg/mL              | 0.05 mcg/kg/min | Central line not required for low dose infusions |
|                                |                      | > 6 kg     | 50 mcg/mL              |                 |                                                  |
| ALPROSTADIL<br>(PROSTAGLANDIN) | 0.005-0.1 mcg/kg/min | < 2 kg     | 1 mcg/mL               | 0.01 mcg/kg/min |                                                  |
|                                |                      | 2 to 8 kg  | 5 mcg/mL               |                 |                                                  |

| Infusions: Analgesia & Sedation |                     |            |                        |               |                         |
|---------------------------------|---------------------|------------|------------------------|---------------|-------------------------|
| DRUG                            | dose range          | weight     | standard concentration | starting rate | additional info         |
| MORPHINE                        | 5 to 20 mcg/kg/h    | < 6 kg     | 200 mcg/mL             | 10 mcg/kg/h   | 1000 mcg/mL = 1 mg/mL   |
|                                 |                     | 6 to 30 kg | 400 mcg/mL             |               |                         |
|                                 |                     | > 30 kg    | 1000 mcg/mL            |               |                         |
| MIDAZOLAM                       | 30 to 300 mcg/kg/h  | < 6 kg     | 1 mg/mL                | 60 mcg/kg/h   |                         |
|                                 |                     | >= 6 kg    | 5 mg/mL                |               |                         |
| DexmedeTOMidine                 | 0.2 to 1.2 mcg/kg/h | all        | 4 mcg/mL               | 0.4 mcg/kg/h  |                         |
| KETAMINE                        | 5 to 20 mcg/kg/min  | all        | 10 mg/mL               | 5 mcg/kg/min  | Note rate is per minute |

| INTRANASAL MEDICATIONS |            |          |                 |           |                                                                                                                    |
|------------------------|------------|----------|-----------------|-----------|--------------------------------------------------------------------------------------------------------------------|
| DRUG                   | dose/kg    | dose     | max per nostril | onset     | additional info                                                                                                    |
| DexmedeTOMidine        | 3 mcg/kg   | 75 mcg   | 100 mcg         | 20-45 min | Dose range 1-3 mcg/kg; give half the dose in each nostril. Use dexmedetomidine 200 mcg/2 mL vial. Max 200 mcg/dose |
| MIDAZOLAM              | 0.3 mg/kg  | 7.5 mg   | 5 mg            | 5 min     | Dose range 0.2-0.3 mg/kg, May repeat in 5 min. Max 10 mg/dose. Dose appropriate for seizure rescue or sedation     |
| FENTANYL               | 1.5 mcg/kg | 37.5 mcg | 50 mcg          | 5-10 min  | Max 100 mcg/dose                                                                                                   |