

WEIGHT in kg	3
Average AGE for weight (MONTHS)	newborn

PEDIATRIC MEDICATIONS DOSE CALCULATOR



Resuscitation						
DRUG	dose/kg	dose	concentration	GIVE	route	additional info
ADENOSINE	0.1 mg/kg	0.3 mg	3 mg/mL	0.1 mL	IV	Max 6 mg. If less than 0.2 mL dilute with NaCl. Rapid push
CALCIUM CHLORIDE 10%	20 mg/kg	60 mg	100 mg/mL	0.6 mL	IV	Max 1000 mg
CALCIUM GLUCONATE 10%	100 mg/kg	300 mg	100 mg/mL	3 mL	IV	60-100 mg/kg/dose. Max 3000 mg
DEXTROSE (50% glucose)	0.5 g/kg	1.5 g	0.5 g/mL	3 mL	IV	Dilute 1:1 with sterile water. Max 50 mL Max 200 mg/kg/min
DEXTROSE (10% glucose)	0.5 g/kg	1.5 g	0.1 g/mL	15 mL	IV	Max 250 mL. Max 200 mg/kg/min
EPINEPHRINE (Resusc)	10 mcg/kg	30 mcg	0.1 mg/mL	0.3 mL	IV	0.1 mg/mL = 100 mcg/mL; Check strength
EPINEPHRINE (low dose push)	1 mcg/kg	3 mcg	0.01 mg/mL	0.3 mL	IV	0.01 mg/mL = 10 mcg/mL; Not a standard concentration, needs to be mixed
3% SODIUM CHLORIDE	5 mL/kg	15 mL	0.514 mmol/mL	15 mL	IV	Max 300 mL. Give over 10 min
MANNITOL (20%)	1 g/kg	3 g	0.2 g/mL	15 mL	IV	Max 50 g. Filter required. Push over 3-5 min
NALOXONE	0.1 mg/kg	0.3 mg	0.4 mg/mL	0.75 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	3 mg	10 mg/mL	0.3 mL	IV	Push over 1 min
ROCURONIUM	1 mg/kg	3 mg	10 mg/mL	0.3 mL	IV	Push over 5 sec
FENTANYL	1 mcg/kg	3 mcg	50 mcg/mL	0.06 mL	IV	1-2 mcg/kg/dose range. Max 50 mcg. Push over 3-5 min
Analgesia & Sedation						
DRUG	dose/kg	dose	concentration	GIVE	route	additional info
KETAMINE	1 mg/kg	3 mg	10 mg/mL	0.3 mL	IV	Can repeat dose. Push over 1 min
MORPHINE	0.05 mg/kg	0.15 mg	10 mg/mL	0.015 mL	IV	Max 5 mg. Push over 5 min
MIDAZOLAM	0.05 mg/kg	0.15 mg	5 mg/mL	0.03 mL	IV	Max 8 mg. Push over 2 min
Anaphylaxis						
DRUG	dose/kg	dose	concentration	GIVE	route	additional info
EPINEPHRINE	0.01 mg/kg	0.03 mg	1 mg/mL	0.03 mL	IM	Max 0.5 mg/dose 0.01 mg/kg = 10 mcg/kg
Seizures						
DRUG	dose/kg	dose	concentration	GIVE	route	additional info
LevETIRAcetam	60 mg/kg	180 mg	100 mg/mL	1.8 mL	IV	Max 4500 mg. Refer to parenteral manual for administration instructions
PHENYTOIN	20 mg/kg	60 mg	50 mg/mL	1.2 mL	IV	Max 1500 mg. Refer to parenteral manual for administration instructions
PHENOBARBITAL	20 mg/kg	60 mg	120 mg/mL	0.5 mL	IV	Max 1000 mg. Refer to parenteral manual for administration instructions
LORAZEPAM	0.1 mg/kg	0.3 mg	4 mg/mL	0.075 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 (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	9 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	0.9 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	4.5 mcg	50 mcg	5-10 min	Max 100 mcg/dose