

Normal Vital Signs

10-11 years

***Weight (KG):** 30-36kg

Weight (Lbs): 66.1-79.3

Heart Rate (Beats per minute): 60-110

Respiratory Rate (Breaths per minute): 15-29

Blood Pressure (Systolic Range/ Diastolic Range): 100-121/ 60-80

MAP (mmHg): 72-94

Broselow color: Green

*Weight based on Broselow tape

** Vital approximations based on BC PEWS

Airway Equipment

12 Years, 40 kg (88.2 lbs)

	Values	Formula
Tidal Volume	240 mL	4-8 mL/kg
Laryngoscope	Mac 3	-
Un-cuffed ETT	6.5 mm	$(\text{Age}/4)+4$
Cuffed ETT	6 mm	$(\text{Age}/4)+3$
ETT Depth	19.5 cm	-
i-Gel SGA	Size 3 (yellow)	30-60 kg
NPA	28-30 Fr	-
OPA	80 mm (green)	-
Suction Cath	12-14 Fr	-

Airway Induction Doses

12 Years, 40 kg (88.2 lbs)

Drug	Route	Weight Based Dose	Calculated Dose
Normal Saline Bolus	IV	10 mL/kg	400 mL
ketamine (stable)	IV/IO	1 - 2 mg/kg	40 - 80 mg
ketamine (unstable)	IV/IO	0.5 - 1 mg/kg	20 - 40 mg
epinephrine	Slow IV Push/IO	0.01 mg/kg	0.4 mg
midazolam	IV/IO	0.05 mg/kg PRN	2 mg

Maintenance doses on [PR18: Anesthesia Induction](#) Page

Respiratory & Allergic Reaction

12 Years, 40 kg (88.2 lbs)

Drug	Route	Weight Based Dose	Calculated Dose
<u>Dexamethasone</u>	PO/IM/IV	0.5mg/kg (max 16mg)	16 mg dose
<u>DiphenhydrAMINE</u>	IM/IV	1 mg/kg	40 mg
<u>Epinephrine</u>	IM	0.01 mg/kg (Max 0.5 mg)	0.4 mg
<u>Epinephrine</u>	NEB	5 mg	5 mg
<u>Epinephrine</u>	IV	0.005 mg/kg (Max 0.3 mg)	0.2 mg
<u>Salbutamol</u>	NEB	5 mg	5 mg
<u>Salbutamol</u>	MDI	10 x 100 mcg per course, May repeat up to 3x	1 mg
<u>Ipratropium</u>	NEB	250 mcg	250 mcg
<u>Ipratropium</u>	MDI	20mcg x 4 sprays	80 mcg
<u>Magnesium Sulfate</u>	IV Infusion	50 mg/kg over 20 minutes (Max 2 g)	2 g

Cardiac Arrest

12 Years, 40 kg (88.2 lbs)

Drug	Route	Weight Based Dose	Calculated Dose
Defibrillation		2 & 4 J/kg	80/160 J
EPINEPHrine	IV	0.01 mg/kg (Max 1 mg)	0.4 mg
EPINEPHrine	ETT	0.1 mg/kg (Max 10 mg)	4 mg
Amiodarone	IV	5 mg/kg (Max 300 mg)	150 mg
Lidocaine	IV	1 mg/kg	40 mg
Lidocaine	ETT	2 mg/kg	80 mg
Sodium Bicarbonate	IV	1 mEq/kg; May repeat	40 mEq
Magnesium Sulfate	IV	50 mg/kg (Max 4 g)	2 g
Calcium Chloride	IV	20 mg/kg (Max 500 mg)	500 mg
Naloxone	IV	0.1 mg/kg (Max 4 mg)	4 mg
Naloxone	ETT	0.2 mg/kg (Max 8 mg)	8 mg

Tachycardia

12 Years, 40 kg (88.2 lbs)

Drug	Route	Weight Based Dose	Calculated Dose
Adenosine	IV	0.1 & 0.2 mg/kg	4mg & 8mg
Amiodarone	IV infusion	5 mg/kg over 20 minutes (Max 300 mg); May repeat x 2	150 mg
Cardioversion		0.5 & 1.0 J/kg	20/40 J

Bradycardia

12 Years, 40 kg (88.2 lbs)

Drug	Route	Weight Based Dose	Calculated Dose
EPINEPHrine	IV	0.01 mg/kg (Max 0.5 mg); q 3-5 minutes	0.4 mg
Atropine	IV	0.02 mg/kg (Max single dose 0.6 mg); May repeat once	0.6 mg
Atropine	ETT	0.04 mg/kg (Max single dose 1.2 mg; Max total dose 6 mg); May repeat x 5 q 3-5 minutes	1.2 mg

Fluid Resuscitation

12 Years, 40 kg (88.2 lbs)

Drug	Route	Weight Based Dose	Calculated Dose
Normal Saline	IV/IO	5 mL/kg bolus x 4 (Max 20 mL/kg)	200 mL/kg (Max 800 mL)
Tranexemic Acid	IV/IO	2 g slow push	20 mL

Sedation, Seizure, & Analgesia

12 Years, 40 kg (88.2 lbs)

Drug	Route	Weight Based Dose	Calculated Dose
KetAMINE	IN	1.5 mg/kg (Max 50 mg*)	50 mg
KetAMINE	IM	0.5 mg/kg*	20 mg
KetAMINE	IV/IO	0.3 mg/kg (Max 20 mg), Max Total 0.6 mg/kg*	12 mg
MIDAZOLam	IM/IN	0.2 mg/kg (Max 10 mg)	8 mg
MIDAZOLam	IV/IO	0.1 mg/kg (Max 5 mg)	4 mg
FentaNYL	IN	1.5-2 mcg/kg, (single dose Max 100 mcg)	60-80 mcg
FentaNYL	IM/IV/IO	40 mcg - 50 mcg	1-2 mcg/kg, Single Dose Max 50 mcg q 5 min, Max Total 200 mcg
Morphine	IV/IM	0.1 mg/kg	4 mg
DimenhyDRINATE	IV/IM	1.25 mg/kg (Max single dose of 25 mg or Max 5 mg/kg/day)	25 mg
Ondansetron	IV	0.1 mg/kg	4 mg
Ibuprofen	PO	10 mg/kg	300 mg
Acetaminophen	PO	15 mg/kg (80 mg/mL)	600 mg (7.5 mL)

*See drug monographs for repeat dosages

Poisoning & Overdose

12 Years, 40 kg (88.2 lbs)

Drug	Route	Weight Based Dose	Calculated Dose	<i>**Note: Higher doses for naloxone in pediatrics are prescribed as pediatric patients are unlikely to experience withdrawal</i>
Naloxone	IV/IM	0.1 mg/kg (Max 2 mg/dose). Repeat q 3 mins to effect. No maximum cumulative dose.	2 mg	
Glucagon	IV	Beta-blocker overdose 0.1 mg/kg	4 mg	

Diabetic

12 Years, 40 kg (88.2 lbs)

Drug	Route	Weight Based Dose	Calculated dose
Dextrose 10% (D10W)	IV/IO	5 mL/Kg; May be repeated	200 mL
Glucagon	IM	0.03 mg/Kg (Max 1 mg)	1 mg

