



PEDIATRIC MEDICATION VOLUME DOSE BY WEIGHT

3-5 KG NEWBORN	Defibrillation (2-4J/kg)		8-16 joules		Normal Vital Signs				NEWBORN 3-5 KG
	Cardioversion** (1J/kg)		4 joules		HR: 100-180 Respirations: 30-60 SBP: >60mmHg				
	Medication Concentration	Route	Dose	mLs	Medication Concentration	Route	Dose	mLs	
	**Adenosine (1 <sup>st</sup> dose) 3mg/mL	Rapid IV	0.4 mg	0.1 mL BHO	**Hydroxocobalamin 25mg/mL	IV	280 mg Over 15 min	11 mL BHO	
	**Adenosine (2 <sup>nd</sup> dose) 3mg/mL	Rapid IV	0.8 mg	0.3 mL BHO	Lidocaine 2% 100mg/5mL	IO	2 mg	0.15 mL	
	Albuterol 2.5mg/3mL	Neb	2.5 mg	3 mL	Lidocaine 2% (Cardiac arrest) 100mg/5mL	IV/IO	4 mg	0.2 mL	
	Amiodarone (VF/pulseless VT) 50mg/mL	IV/IO	20 mg	0.4 mL	Midazolam (Seizure 1 <sup>st</sup> line) 5mg/mL	IM	0.8 mg	0.16 mL	
	**Amiodarone (VT w/ pulse) 50mg/mL	IV	20 mg Over 10 min.	0.4 mL BHO	Midazolam (Seizure) 5mg/mL	IV/IO/IN	0.4 mg	0.1 mL	
	Atropine (Bradycardia) 1mg/mL	IV/IO	0.1 mg	0.1 mL	**Midazolam (Toxic delirium) 5mg/mL	IN/IM	0.8 mg	0.16 mL BHO	
	Atropine (Bradycardia) 0.1mg/mL	IV/IO	0.1 mg	1 mL	**Midazolam (Cardioversion) 5mg/mL	IN/IV/IM	0.4 mg	0.1 mL BHO	
	Atropine (Organophosphate) 1mg/mL	IV	0.1 mg	0.1 mL	Midazolam (ETT) 5mg/mL	IV/IO/IM	0.4 mg	0.1 mL	
	Atropine (Organophosphate) 0.1mg/mL	IV	0.1 mg	1 mL	**Morphine 4mg/mL	IV carpuject	0.4 mg	0.1 mL BHO <2yrs	
	Atropine (Organophosphate) 1mg/mL	IM	0.4 mg	0.4 mL	**Morphine 10mg/10mL	IV carpuject	0.4 mg	0.4 mL BHO <2yrs	
	Dextrose 10% 100 mg/mL	IV		20 mL	**Morphine 10mg/mL	IM	0.4 mg	0.05 mL BHO <2yrs	
	Diphenhydramine 50mg/mL	IV/IO/IM	4 mg	0.1 mL	Naloxone 0.8mg/2mL	IN/IV/IM	0.4 mg	1 mL	
	Epinephrine (Anaphylaxis) 1mg/mL (1:1000)	IM	0.04 mg	0.04 mL	Naloxone 1mg/mL	IN/IV/IM	0.4 mg	0.4 mL	
	Epinephrine (Anaphylaxis) 0.1mg/mL 1:10,000)	IV/IO	0.04 mg	0.4 mL	Naloxone 4mg/0.1mL	IN		Single spray	
	**Epinephrine (Push dose) 10mcg/mL	IV/IO	4 mcg	0.4 mL BHO	Normal Saline 0.9% NaCl	IV/IO		80 mL	
	Epinephrine (Cardiac arrest) 0.1mg/mL (1:10,000)	IV/IO	0.04 mg	0.4 mL	Normal Saline 0.9% NaCl	Neb		3 mL	
	**Epinephrine (Asthma) 1mg/mL (1:1000)	IM	0.04 mg	0.04 mL BHO	Ondansetron 4mg	ODT		N/A	
	**Fentanyl 50mcg/mL	IN/IV/IM	8 mcg	0.2 mL BHO <2 yrs	Sodium Bicarbonate 1mEq/mL	IV/IO	4 mEq	4 mL	
	Glucagon 1mg/mL	IM	0.5 mg	0.5 mL	1:1 dilution with NS Toradol (Ketorolac) 15mg/mL	IV/IO/IM		N/A	

Updated 03.26.2026

\*\*Base Hospital Order

All milliliters rounded

Approved:



PEDIATRIC MEDICATION VOLUME DOSE BY WEIGHT

6-7 kg 3 MONTHS	Defibrillation (2-4 J/kg)		12-24 joules		Normal Vital Signs				3 MONTHS 6-7 KG
	Cardioversion** (1 J/kg)		6 joules		HR: 100-160	Respirations: 25-40	SBP: >70mmHg		
	Medication Concentration	Route	Dose	mLs	Medication Concentration	Route	Dose	mLs	
	**Adenosine (1 <sup>st</sup> dose) 3mg/mL	Rapid IV	0.6 mg	0.2 mL BHO	**Hydroxocobalamin 25mg/mL	IV	420 mg Over 15 min	17 mL BHO	
	**Adenosine (2 <sup>nd</sup> dose) 3mg/mL	Rapid IV	1.2 mg	0.4 mL BHO	Lidocaine 2% 100mg/5mL	IO	3 mg	0.15 mL	
	Albuterol 2.5mg/3mL	Neb	5 mg	6 mL	Lidocaine 2% (Cardiac arrest) 100mg/5mL	IV/IO	6 mg	0.3 mL	
	Amiodarone (VF/pulseless VT) 50mg/mL	IV/IO	30 mg	0.6 mL	Midazolam (Seizure 1 <sup>st</sup> line) 5mg/mL	IM	1.2 mg	0.25 mL	
	**Amiodarone (VT w/ pulse) 50mg/mL	IV	30 mg Over 10 min.	0.6 mL BHO	Midazolam (Seizure) 5mg/mL	IV/IO/IN	0.6 mg	0.1 mL	
	Atropine (Bradycardia) 1mg/mL	IV/IO	0.14 mg	0.14 mL	**Midazolam (Toxic delirium) 5mg/mL	IN/IM	1.2 mg	0.25 mL BHO	
	Atropine (Bradycardia) 0.1mg/mL	IV/IO	0.14 mg	1.4 mL	**Midazolam (Cardioversion) 5mg/mL	IN/IV/IM	0.6 mg	0.1 mL BHO	
	Atropine (Organophosphate) 1mg/mL	IV	0.14 mg	0.14 mL	Midazolam (ETT) 5mg/mL	IV/IO/IM	0.6 mg	0.1 mL	
	Atropine (Organophosphate) 0.1mg/mL	IV	0.14 mg	1.4 mL	**Morphine 4mg/mL	IV carpuject	0.6 mg	0.15 mL BHO <2yrs	
	Atropine (Organophosphate) 1mg/mL	IM	0.6 mg	0.6 mL	**Morphine 10mg/10mL	IV carpuject	0.6 mg	0.6 mL BHO <2yrs	
	Dextrose 10% 100 mg/mL	IV		30 mL	**Morphine 10mg/mL	IM	0.6 mg	0.05 mL BHO <2yrs	
	Diphenhydramine 50mg/mL	IV/IO/IM	6 mg	0.1 mL	Naloxone 0.8mg/2mL	IN/IV/IM	0.6 mg	1.5 mL	
	Epinephrine (Anaphylaxis) 1mg/mL (1:1000)	IM	0.06 mg	0.06 mL	Naloxone 1mg/mL	IN/IV/IM	0.6 mg	0.6 mL	
	Epinephrine (Anaphylaxis) 0.1mg/mL (1:10,000)	IV/IO	0.06 mg	0.6 mL	Naloxone 4mg/0.1mL	IN		Single spray	
	**Epinephrine (Push dose) 10mcg/mL	IV	7 mcg	0.7 mL BHO	Normal Saline 0.9% NaCl	IV/IO		120 mL	
	Epinephrine (Cardiac arrest) 0.1mg/mL (1:10,000)	IV	0.06 mg	0.6 mL	Normal Saline 0.9% NaCl	Neb		3 mL	
	**Epinephrine (Asthma) 1mg/mL (1:1000)	IM	0.06 mg	0.06 mL BHO	Ondansetron 4mg	ODT		N/A	
	**Fentanyl 50mcg/mL	IN/IV/IM	12 mcg	0.25 mL BHO <2yrs	Sodium Bicarbonate 1mEq/mL	IV/IO	6 mEq	6 mL	
	Glucagon 1mg/mL	IM	0.5 mg	0.5 mL	1:1 dilution with NS Toradol (Ketorolac) 15mg/mL	IV/IO/IM		N/A	
	**Base Hospital Order				All milliliters rounded				

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PEDIATRIC MEDICATION VOLUME DOSE BY WEIGHT

8-9 KG 6 MONTHS	Defibrillation (2-4 J/kg)			16-32 joules			Normal Vital Signs				6 MONTHS 8-9 KG
	Cardioversion** (1 J/kg)			8 joules			HR: 100-160	Respirations: 20-40	SBP: >70mmHg		
	Medication Concentration	Route	Dose	mLs	Medication Concentration	Route	Dose	mLs			
	**Adenosine (1 <sup>st</sup> dose)	Rapid IV	0.8 mg	0.3 mL BHO	**Hydroxocobalamin	IV	560 mg Over 15 min	22 mL BHO			
	3mg/mL				Lidocaine 2%	IO	4 mg	0.2 mL			
	**Adenosine (2 <sup>nd</sup> dose)	Rapid IV	1.6 mg	0.5 mL BHO	100mg/5mL						
	3mg/mL				Lidocaine 2% (Cardiac arrest)	IV/IO	8 mg	0.4 mL			
	Albuterol	Neb	5 mg	6 mL	100mg/5mL						
	2.5mg/3mL				Midazolam (Seizure 1 <sup>st</sup> line)	IM	1.6 mg	0.32 mL			
	Amiodarone (VF/pulseless VT)	IV/IO	40 mg	0.8 mL	5mg/mL						
	50mg/mL				Midazolam (Seizure)	IV/IO/IN	0.8 mg	0.16 mL			
	**Amiodarone (VT w/ pulse)	IV	40 mg Over 10 min.	0.8 mL BHO	5mg/mL						
	50mg/mL				**Midazolam (Toxic delirium)	IN/IM	1.6 mg	0.32 mL BHO			
	Atropine (Bradycardia)	IV/IO	0.16 mg	0.16 mL	5mg/mL						
	1mg/mL				**Midazolam (Cardioversion)	IN/IV/IM	0.8 mg	0.16 mL BHO			
	Atropine (Bradycardia)	IV/IO	0.16 mg	1.6 mL	5mg/mL						
	0.1mg/mL				Midazolam (ETT)	IV/IO/IM	0.8 mg	0.16 mL			
	Atropine (Organophosphate)	IV	0.16 mg	0.16 mL	5mg/mL						
	1mg/mL				**Morphine	IV carpuject	0.8 mg	0.2 mL BHO <2yrs			
	Atropine (Organophosphate)	IV	0.16 mg	1.6 mL	4mg/mL						
	0.1mg/mL				**Morphine	IV carpuject	0.8 mg	0.8 mL BHO <2yrs			
	Atropine (Organophosphate)	IM	0.8 mg	0.8 mL	10mg/10mL						
	1mg/mL				**Morphine	IM	0.8 mg	0.08 mL BHO <2yrs			
	Dextrose 10%	IV		40 mL	10mg/mL						
	100 mg/mL				Naloxone	IN/IV/IM	0.8 mg	2 mL			
	Diphenhydramine	IV/IO/IM	8 mg	0.15 mL	0.8mg/2mL						
	50mg/mL				Naloxone	IN/IV/IM	0.8 mg	0.8 mL			
	Epinephrine (Anaphylaxis)	IM	0.08 mg	0.08 mL	1mg/mL						
	1mg/mL (1:1000)				Naloxone	IN		Single spray			
	Epinephrine (Anaphylaxis)	IV/IO	0.08 mg	0.8 mL	4mg/0.1mL						
	0.1mg/mL (1:10,000)				Normal Saline	IV/IO		160 mL			
	**Epinephrine (Push dose)	IV/IO	9 mcg	0.9 mL BHO	0.9% NaCl						
	10mcg/mL				Normal Saline	Neb		3 mL			
	Epinephrine (Cardiac arrest)	IV/IO	0.08 mg	0.8 mL	0.9% NaCl						
	0.1mg/mL (1:10,000)				Ondansetron	ODT		N/A			
	**Epinephrine (Asthma)	IM	0.08 mg	0.08 mL BHO	4mg						
	1mg/mL (1:1000)				Sodium Bicarbonate	IV/IO	8 mEq	8 mL			
	**Fentanyl	IN/IV/IM	16 mcg	0.3 mL BHO <2yrs	1mEq/mL 1:1 dilution with NS						
	50mcg/mL				Toradol (Ketorolac)	IV/IO/IM		N/A			
	Glucagon	IM	0.5 mg	0.5 mL	15mg/mL						
	1mg/mL										
	**Base Hospital Order				All milliliters rounded						

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PEDIATRIC MEDICATION VOLUME DOSE BY WEIGHT

10-11 KG 1 YEAR	Defibrillation (2-4 J/kg)		20-40 joules		Normal Vital Signs				1 YEAR 10-11 KG
	Cardioversion** (1 J/kg)		10 joules		HR: 90-140 Respirations: 24-40 SBP: >80mmHg				
	Medication Concentration	Route	Dose	mLs	Medication Concentration	Route	Dose	mLs	
	**Adenosine (1 <sup>st</sup> dose) 3mg/mL	Rapid IV	1 mg	0.3 mL BHO	**Hydroxocobalamin 25mg/mL	IV	700 mg Over 15 min	28 mL BHO	
	**Adenosine (2 <sup>nd</sup> dose) 3mg/mL	Rapid IV	2 mg	0.7 mL BHO	Lidocaine 2% 100mg/5mL	IO	5 mg	0.25 mL	
	Albuterol 2.5mg/3mL	Neb	5 mg	6 mL	Lidocaine 2% (Cardiac arrest) 100mg/5mL	IV/IO	10 mg	0.5 mL	
	Amiodarone (VF/pulseless VT) 50mg/mL	IV/IO	50 mg	1 mL	Midazolam (Seizure 1 <sup>st</sup> line) 5mg/mL	IM	2 mg	0.4 mL	
	**Amiodarone (VT w/ pulse) 50mg/mL	IV	50 mg Over 10 min.	1 mL BHO	Midazolam (Seizure) 5mg/mL	IV/IO/IN	1 mg	0.2 mL	
	Atropine (Bradycardia) 1mg/mL	IV/IO	0.2 mg	0.2 mL	**Midazolam (Toxic delirium) 5mg/mL	IN/IM	2 mg	0.4 mL BHO	
	Atropine (Bradycardia) 0.1mg/mL	IV/IO	0.2 mg	2 mL	**Midazolam (Cardioversion) 5mg/mL	IN/IV/IM	1 mg	0.2 mL BHO	
	Atropine (Organophosphate) 1mg/mL	IV	0.2 mg	0.2 mL	Midazolam (ETT) 5mg/mL	IV/IO/IM	1 mg	0.2 mL	
	Atropine (Organophosphate) 0.1mg/mL	IV	0.2 mg	2 mL	**Morphine 4mg/mL	IV carpuject	1 mg	0.25 mL BHO <2yrs	
	Atropine (Organophosphate) 1mg/mL	IM	1 mg	1 mL	**Morphine 10mg/10mL	IV carpuject	1 mg	1 mL BHO <2yrs	
	Dextrose 10% 100 mg/mL	IV		50 mL	**Morphine 10mg/mL	IM	1 mg	0.1 mL BHO <2yrs	
	Diphenhydramine 50mg/mL	IV/IO/IM	10 mg	0.2 mL	Naloxone 0.8mg/2mL	IN/IV/IM	0.8 mg	2 mL	
	Epinephrine (Anaphylaxis) 1mg/mL (1:1000)	IM	0.1 mg	0.1 mL	Naloxone 1mg/mL	IN/IV/IM	1 mg	1 mL	
	Epinephrine (Anaphylaxis) 0.1mg/mL (1:10,000)	IV/IO	0.1 mg	1 mL	Naloxone 4mg/0.1mL	IN		Single spray	
	**Epinephrine (Push dose) 10mcg/mL	IV/IO	10 mcg	1 mL BHO	Normal Saline 0.9% NaCl	IV/IO		200 mL	
	Epinephrine (Cardiac arrest) 0.1mg/mL (1:10,000)	IV/IO	0.1 mg	1 mL	Normal Saline 0.9% NaCl	Neb		3 mL	
	**Epinephrine (Asthma) 1mg/mL (1:1000)	IM	0.1 mg	0.1 mL BHO	Ondansetron 4mg	ODT		N/A	
	**Fentanyl 50mcg/mL	IN/IV/IM	20 mcg	0.4 mL BHO <2yrs	Sodium Bicarbonate 1mEq/mL	IV/IO	10 mEq	10 mL	
	Glucagon 1mg/mL	IM	0.5 mg	0.5 mL	Toradol (Ketorolac) 15mg/mL	IV/IO/IM		N/A	
	**Base Hospital Order							All milliliters rounded	

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PEDIATRIC MEDICATION VOLUME DOSE BY WEIGHT

12-14 KG 2 YEARS	Defibrillation (2-4 J/kg)		24-48 joules		Normal Vital Signs				12-14 KG 2 YEARS
	Cardioversion** (1 J/kg)		15 joules		HR: 90-140	Respirations: 20-30	SBP: >80mmHg		
	Medication Concentration	Route	Dose	mLs	Medication Concentration	Route	Dose	mLs	
	**Adenosine (1 <sup>st</sup> dose) 3mg/mL	Rapid IV	1.2 mg	0.4 mL BHO	**Hydroxocobalamin 25mg/mL	IV	840 mg Over 15 min	34 mL BHO	
	**Adenosine (2 <sup>nd</sup> dose) 3mg/mL	Rapid IV	2.4 mg	0.8 mL BHO	Lidocaine 2% 100mg/5mL	IO	6 mg	0.3 mL	
	Albuterol 2.5mg/3mL	Neb	5 mg	6 mL	Lidocaine 2% (Cardiac arrest) 100mg/5mL	IV/IO	12 mg	0.6 mL	
	Amiodarone (VF/pulseless VT) 50mg/mL	IV/IO	70 mg	1.4 mL	Midazolam (Seizure 1 <sup>st</sup> line) 5mg/mL	IM	2.4 mg	0.5 mL	
	**Amiodarone (VT w/ pulse) 50mg/mL	IV	70 mg Over 10 min.	1.4 mL BHO	Midazolam (Seizure) 5mg/mL	IV/IO/IN	1.2 mg	0.25 mL	
	Atropine (Bradycardia) 1mg/mL	IV/IO	0.24 mg	0.24 mL	**Midazolam (Toxic delirium) 5mg/mL	IN/IM	2.4 mg	0.5 mL BHO	
	Atropine (Bradycardia) 0.1mg/mL	IV/IO	0.24 mg	2.4 mL	**Midazolam (Cardioversion) 5mg/mL	IN/IV/IM	1.2 mg	0.25 mL BHO	
	Atropine (Organophosphate) 1mg/mL	IV	0.24 mg	0.24 mL	Midazolam (ETT) 5mg/mL	IV/IO/IM	1.2 mg	0.25 mL	
	Atropine (Organophosphate) 0.1mg/mL	IV	0.24 mg	2.4 mL	**Morphine 4mg/mL	IV carpuject	1.2 mg	0.3 mL BHO <2 yrs	
	Atropine (Organophosphate) 1mg/mL	IM	1.2 mg	1.2 mL	**Morphine 10mg/10mL	IV carpuject	1.2 mg	1.2 mL BHO <2 yrs	
	Dextrose 10% 100 mg/mL	IV		60 mL	**Morphine 10mg/mL	IM	1.2 mg	0.12 mL BHO <2 yrs	
	Diphenhydramine 50mg/mL	IV/IO/IM	12 mg	0.25 mL	Naloxone 0.8mg/2mL	IN/IV/IM	0.8 mg	2 mL	
	Epinephrine (Anaphylaxis) 1mg/mL (1:1000)	IM	0.12 mg	0.12 mL	Naloxone 1mg/mL	IN/IV/IM	1 mg	1 mL	
	Epinephrine (Anaphylaxis) 0.1mg/mL (1:10,000)	IV/IO	0.12 mg	1.2 mL	Naloxone 4mg/0.1mL	IN		Single spray	
	**Epinephrine (Push dose) 10mcg/mL	IV/IO	10 mcg	1 mL BHO	Normal Saline 0.9% NaCl	IV/IO		240 mL	
	Epinephrine (Cardiac arrest) 0.1mg/mL (1:10,000)	IV/IO	0.12 mg	1.2 mL	Normal Saline 0.9% NaCl	Neb		3 mL	
	**Epinephrine (Asthma) 1mg/mL (1:1000)	IM	0.12 mg	0.12 mL BHO	Ondansetron 4mg	ODT		N/A	
	**Fentanyl 50mcg/mL	IN/IV/IM	24 mcg	0.5 mL BHO <2 yrs	Sodium Bicarbonate 1mEq/mL	IV/IO	12 mEq	12 mL	
	Glucagon 1mg/mL	IM	0.5 mg	0.5 mL	Toradol (Ketorolac) 15mg/mL	IV/IO/IM		N/A	
	**Base Hospital Order							All milliliters rounded	

Approved:



PEDIATRIC MEDICATION VOLUME DOSE BY WEIGHT

		30-60 joules		Normal Vital Signs				
		15 joules		HR: 80-130 Respirations: 20-30 SBP: >85mmHg				
Medication Concentration		Route	Dose	mLs	Medication Concentration		mLs	
15-18 KG 3-4 YEARS	**Adenosine (1 <sup>st</sup> dose)	Rapid IV	1.5 mg	0.5 mL BHO	**Hydroxocobalamin	IV	1050 mg Over 15 min	42 mL BHO
	3mg/mL				25mg/mL			
	**Adenosine (2 <sup>nd</sup> dose)	Rapid IV	3 mg	1 mL BHO	Lidocaine 2%	IO	7.5 mg	0.4 mL
	3mg/mL				100mg/5mL			
	Albuterol	Neb	5 mg	6 mL	Lidocaine 2% (Cardiac arrest)	IV/IO	15 mg	0.8 mL
	2.5mg/3mL				100mg/5mL			
	Amiodarone (VF/pulseless VT)	IV/IO	75 mg	1.5 mL	Midazolam (Seizure 1 <sup>st</sup> line)	IM	3 mg	0.6 mL
	50mg/mL				5mg/mL			
	**Amiodarone (VT w/ pulse)	IV	75 mg Over 10 min.	1.5 mL BHO	Midazolam (Seizure)	IV/IO/IN	1.5 mg	0.3 mL
	50mg/mL				5mg/mL			
	Atropine (Bradycardia)	IV/IO	0.3 mg	0.3 mL	**Midazolam (Toxic delirium)	IN/IM	3 mg	0.6 mL BHO
	1mg/mL				5mg/mL			
	Atropine (Bradycardia)	IV/IO	0.3 mg	3 mL	**Midazolam (Cardioversion)	IN/IV/IM	1.5 mg	0.3 mL BHO
	0.1mg/mL				5mg/mL			
	Atropine (Organophosphate)	IV	0.3 mg	0.3 mL	Midazolam (ETT)	IV/IO/IM	1.5 mg	0.3 mL
	1mg/mL				5mg/mL			
	Atropine (Organophosphate)	IV	0.3 mg	3 mL	Morphine	IV carpuject	1.5 mg	0.4 mL
	0.1mg/mL				4mg/mL			
	Atropine (Organophosphate)	IM	1.5 mg	1.5 mL	Morphine	IV carpuject	1.5 mg	1.5 mL
	1mg/mL				10mg/10mL			
Dextrose 10%	IV		75 mL	Morphine	IM	1.5 mg	0.15mL	
0.1mg/mL				10mg/mL				
Diphenhydramine	IV/IO/IM	15 mg	0.3 mL	Naloxone	IN/IV/IM	0.8 mg	2 mL	
50mg/mL				0.8mg/2mL				
Epinephrine (Anaphylaxis)	IM	0.15 mg	0.15 mL	Naloxone	IN/IV/IM	1 mg	1 mL	
1mg/mL (1:1000)				1mg/mL				
Epinephrine (Anaphylaxis)	IV/IO	0.15 mg	1.5 mL	Naloxone	IN		Single spray	
0.1mg/mL (1:10,000)				4mg/0.1mL				
**Epinephrine (Push dose)	IV/IO	10 mcg	1 mL BHO	Normal Saline	IV/IO		250 mL	
10mcg/mL				0.9% NaCl				
Epinephrine (Cardiac arrest)	IV/IO	0.15 mg	1.5 mL	Normal Saline	Neb		3 mL	
0.1mg/mL (1:10,000)				0.9% NaCl				
**Epinephrine (Asthma)	IM	0.15 mg	0.15 mL BHO	Ondansetron	ODT		4 mg Age ≥ 4	
1mg/mL (1:1000)				4mg				
Fentanyl	IN/IV/IM	30 mcg	0.6 mL	Sodium Bicarbonate	IV/IO	15 mEq	15 mL	
50mcg/mL				1mEq/mL				
Glucagon	IM	0.5 mg	0.5 mL	Toradol (Ketorolac)	IV/IO/IM	4.5 mg	0.3 mL	
1mg/mL				15mg/mL				
**Base Hospital Order				All milliliters rounded				

3-4 YEARS  
15-18 KG

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		40-80 joules			Normal Vital Signs				
		20 joules			HR: 70-120 Respirations: 15-30 SBP: >85mmHg				
Medication Concentration		Route	Dose	mLs	Medication Concentration		Route	Dose	mLs
Defibrillation (2-4 J/kg)									
Cardioversion** (1 J/kg)									
<b>**Adenosine (1<sup>st</sup> dose)</b> 3mg/mL		Rapid IV	2 mg	0.7 mL BHO	<b>**Hydroxocobalamin</b> 25mg/mL		IV	1400 mg Over 15 min	56 mL BHO
<b>**Adenosine (2<sup>nd</sup> dose)</b> 3mg/mL		Rapid IV	4 mg	1.3 mL BHO	Lidocaine 2% 100mg/5mL		IO	10 mg	0.5 mL
Albuterol 2.5mg/3mL		Neb	5 mg	6 mL	Lidocaine 2% (Cardiac arrest) 100mg/5mL		IV/IO	20 mg	1 mL
Amiodarone (VF/pulseless VT) 50mg/mL		IV/IO	100 mg	2 mL	Midazolam (Seizure 1 <sup>st</sup> line) 5mg/mL		IM	4 mg	0.8 mL
<b>**Amiodarone (VT w/ pulse)</b> 50mg/mL		IV	100 mg Over 10 min.	2 mL BHO	Midazolam (Seizure) 5mg/mL		IV/IO/IN	2 mg	0.4 mL
Atropine (Bradycardia) 1mg/mL		IV/IO	0.4 mg	0.4 mL	<b>**Midazolam (Toxic delirium)</b> 5mg/mL		IN/IM	4 mg	0.8 mL BHO
Atropine (Bradycardia) 0.1mg/mL		IV/IO	0.4 mg	4 mL	<b>**Midazolam (Cardioversion)</b> 5mg/mL		IN/IV/IM	2 mg	0.4 mL BHO
Atropine (Organophosphate) 1mg/mL		IV	0.4 mg	0.4 mL	Midazolam (ETT) 5mg/mL		IV/IO/IM	2 mg	0.4 mL
Atropine (Organophosphate) 0.1mg/mL		IV	0.4 mg	4 mL	Morphine 4mg/mL		IV carpuject	2 mg	0.5 mL
Atropine (Organophosphate) 1mg/mL		IM	2 mg	2 mL	Morphine 10mg/10mL		IV carpuject	2 mg	2 mL
Dextrose 10% 100 mg/mL		IV		100 mL	Morphine 10mg/mL		IM	2 mg	0.2 mL
Diphenhydramine 50mg/mL		IV/IO/IM	20 mg	0.4 mL	Naloxone 0.8mg/2mL		IN/IV/IM	0.8 mg	2 mL
Epinephrine (Anaphylaxis) 1mg/mL (1:1000)		IM	0.2 mg	0.2 mL	Naloxone 1mg/mL		IN/IV/IM	1 mg	1 mL
Epinephrine (Anaphylaxis) 0.1mg/mL (1:10,000)		IV/IO	0.2 mg	2 mL	Naloxone 4mg/0.1mL		IN		Single spray
<b>**Epinephrine (Push dose)</b> 10mcg/mL		IV/IO	10 mcg	1 mL BHO	Normal Saline 0.9% NaCl		IV/IO		250 mL
Epinephrine (Cardiac arrest) 0.1mg/mL (1:10,000)		IV/IO	0.2 mg	2 mL	Normal Saline 0.9% NaCl		Neb		3 mL
<b>**Epinephrine (Asthma)</b> 1mg/mL (1:1000)		IM	0.2 mg	0.2 mL BHO	Ondansetron 4mg		ODT		4 mg
Fentanyl 50mcg/mL		IN/IV/IM	40 mcg	0.8 mL	Sodium Bicarbonate 1mEq/mL		IV/IO	20 mEq	20 mL
Glucagon 1mg/mL		IM	0.5 mg	0.5 mL	Toradol (Ketorolac) 15mg/mL		IV/IO/IM	5.5 mg	0.4 mL
<b>**Base Hospital Order</b>		<i>All milliliters rounded</i>							

19-23 KG  
5-6 YEARS

5-6 YEARS  
19-23 KG

Updated 03.26.2026

Approved:



PEDIATRIC MEDICATION VOLUME DOSE BY WEIGHT

	Defibrillation (2-4 J/kg)		50-100 joules		Normal Vital Signs			
	Cardioversion** (1 J/kg)		30 joules		HR: 70-110	Respirations: 15-30	SBP: >90mmHg	
	Medication Concentration	Route	Dose	mLs	Medication Concentration	Route	Dose	mLs
<b>24-29 KG 7-8 YEARS</b>  Updated 03.26.2026	**Adenosine (1 <sup>st</sup> dose)	Rapid IV	2.5 mg	0.85 mL	**Hydroxocobalamin	IV	1820 mg	73 mL
	3mg/mL			BHO	25mg/mL		Over 15 min	BHO
	**Adenosine (2 <sup>nd</sup> dose)	Rapid IV	5 mg	1.7 mL	Lidocaine 2%	IO	13 mg	0.65 mL
	3mg/mL			BHO	100mg/5mL			
	Albuterol	Neb	5 mg	6 mL	Lidocaine 2% (Cardiac arrest)	IV/IO	25 mg	1.3 mL
	2.5mg/3mL				100mg/5mL			
	Amiodarone (VF/pulseless VT)	IV/IO	125 mg	2.5 mL	Midazolam (Seizure 1 <sup>st</sup> line)	IM	5 mg	1 mL
	50mg/mL				5mg/mL			
	**Amiodarone (VT w/ pulse)	IV	125 mg	2.5 mL	Midazolam (Seizure)	IV/IO/IN	2.5 mg	0.5 mL
	50mg/mL		Over 10 min.	BHO	5mg/mL			
	Atropine (Bradycardia)	IV/IO	0.5 mg	0.5 mL	**Midazolam (Toxic delirium)	IN/IM	5 mg	1 mL
	1mg/mL				5mg/mL			BHO
	Atropine (Bradycardia)	IV/IO	0.5 mg	5 mL	**Midazolam (Cardioversion)	IN/IV/IM	2.5 mg	0.5 mL
	0.1mg/mL				5mg/mL			BHO
	Atropine (Organophosphate)	IV	0.5 mg	0.5 mL	Midazolam (ETT)	IV/IO/IM	2.5 mg	0.5 mL
	1mg/mL				5mg/mL			
	Atropine (Organophosphate)	IV	0.5 mg	5 mL	Morphine	IV	2.5 mg	0.65 mL
	0.1mg/mL				4mg/mL	carpuject		
	Atropine (Organophosphate)	IM	2 mg	2 mL	Morphine	IV	2.5 mg	2.5 mL
	1mg/mL				10mg/10mL	carpuject		
Dextrose 10%	IV		130 mL	Morphine	IM	2.5 mg	0.25 mL	
100 mg/mL				10mg/mL				
Diphenhydramine	IV/IO/IM	25mg	0.5 mL	Naloxone	IN/IV/IM	0.8 mg	2 mL	
50mg/mL				0.8mg/2mL				
Epinephrine (Anaphylaxis)	IM	0.25 mg	0.25 mL	Naloxone	IN/IV/IM	1 mg	1 mL	
1mg/mL (1:1000)				1mg/mL				
Epinephrine (Anaphylaxis)	IV/IO	0.25 mg	2.5 mL	Naloxone	IN		Single spray	
0.1mg/mL (1:10,000)				4mg/0.1mL				
**Epinephrine (Push dose)	IV/IO	10 mcg	1 mL	Normal Saline	IV/IO		250 mL	
10mcg/mL			BHO	0.9% NaCl				
Epinephrine (Cardiac arrest)	IV/IO	0.25 mg	2.5 mL	Normal Saline	Neb		3 mL	
0.1mg/mL (1:10,000)				0.9% NaCl				
**Epinephrine (Asthma)	IM	0.25 mg	0.25 mL	Ondansetron	ODT		4 mg	
1mg/mL (1:1000)			BHO	4mg				
Fentanyl	IN/IV/IM	50 mcg	1 mL	Sodium Bicarbonate	IV/IO	25 mEq	25 mL	
50mcg/mL				1mEq/mL				
Glucagon	IM	0.5 mg	0.5 mL	Toradol (Ketorolac)	IV/IO/IM	7 mg	0.5 mL	
1mg/mL				15mg/mL				

\*\*Base Hospital Order

All milliliters rounded

Approved:

Review Dates: 7/21; 9/22; 6/23; 3/25; 3/26  
Final Date of Implementation: 04/01/2026  
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PEDIATRIC MEDICATION VOLUME DOSE BY WEIGHT

		70-140 joules			Normal Vital Signs			
		30 joules			HR: 60-100	Respirations: 15-20	SBP: >90mmHg	
Medication Concentration		Route	Dose	mLs	Medication Concentration	Route	Dose	mLs
30-36 KG 9-12 YEARS  Updated 03.26.2026	Defibrillation (2-4 J/kg)							
	Cardioversion** (1 J/kg)							
	**Adenosine (1 <sup>st</sup> dose) 3mg/mL	Rapid IV	3.5 mg	1.2 mL BHO	**Hydroxocobalamin 25mg/mL	IV	2380 mg Over 15 min	95 mL BHO
	**Adenosine (2 <sup>nd</sup> dose) 3mg/mL	Rapid IV	7 mg	2.4 mL BHO	Lidocaine 2% 100mg/5mL	IO	17 mg	0.85 mL
	Albuterol 2.5mg/3mL	Neb	5 mg	6 mL	Lidocaine 2% (Cardiac arrest) 100mg/5mL	IV/IO	35 mg	1.8 mL
	Amiodarone (VF/pulseless VT) 50mg/mL	IV/IO	175 mg	3.5 mL	Midazolam (Seizure 1 <sup>st</sup> line) 5mg/mL	IM	7 mg	1.4 mL
	**Amiodarone (VT w/ pulse) 50mg/mL	IV	150 mg Over 10 min.	3 mL BHO	Midazolam (Seizure) 5mg/mL	IV/IO/IN	3.5 mg	0.7 mL
	Atropine (Bradycardia) 1mg/mL	IV/IO	0.5 mg	0.5 mL	**Midazolam (Toxic delirium) 5mg/mL	IN/IM	7 mg	1.4 mL BHO
	Atropine (Bradycardia) 0.1mg/mL	IV/IO	0.5 mg	5 mL	**Midazolam (Cardioversion) 5mg/mL	IN/IV/IM	3.5 mg	0.7 mL BHO
	Atropine (Organophosphate) 1mg/mL	IV	0.7 mg	0.7 mL	Midazolam (ETT) 5mg/mL	IV/IO/IM	3.5 mg	0.7 mL
	Atropine (Organophosphate) 0.1mg/mL	IV	0.7 mg	7 mL	Morphine 4mg/mL	IV carpuject	3.5 mg	0.85 mL
	Atropine (Organophosphate) 1mg/mL	IM	2 mg	2 mL	Morphine 10mg/10mL	IV carpuject	3.5 mg	3.5 mL
	Dextrose 10% 100 mg/mL	IV		175 mL	Morphine 10mg/mL	IM	3.5 mg	0.35 mL
	Diphenhydramine 50mg/mL	IV/IO/IM	35 mg	0.7 mL	Naloxone 0.8mg/2mL	IN/IV/IM	0.8 mg	2 mL
	Epinephrine (Anaphylaxis) 1mg/mL (1:1000)	IM	0.35 mg	0.35 mL	Naloxone 1mg/mL	IN/IV/IM	1 mg	1 mL
	Epinephrine (Anaphylaxis) 0.1mg/mL (1:10,000)	IV/IO	0.3 mg	3 mL	Naloxone 4mg/0.1mL	IN		Single spray
	**Epinephrine (Push dose) 10mcg/mL	IV/IO	10 mcg	1 mL BHO	Normal Saline 0.9% NaCl	IV/IO		250 mL
	Epinephrine (Cardiac arrest) 0.1mg/mL (1:10,000)	IV/IO	0.35 mg	3.5 mL	Normal Saline 0.9% NaCl	Neb		3 mL
	**Epinephrine (Asthma) 1mg/mL (1:1000)	IM	0.35 mg	0.35 mL BHO	Ondansetron 4mg	ODT		4 mg
	Fentanyl 50mcg/mL	IN/IV/IM	50 mcg	1 mL	Sodium Bicarbonate 1mEq/mL	IV/IO	35 mEq	35 mL
Glucagon 1mg/mL	IM	0.5 mg	0.5 mL	Toradol (Ketorolac) 15mg/mL	IV/IO/IM	9 mg	0.6 mL	
**Base Hospital Order				All milliliters rounded				

9-12 YEARS  
30-36 KG

Approved:

Review Dates: 7/21; 9/22; 6/23; 3/25; 3/26  
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PEDIATRIC MEDICATION VOLUME DOSE BY WEIGHT

		80-160 joules			Normal Vital Signs			
		Route	Dose	mLs	Medication Concentration	Route	Dose	mLs
Defibrillation (2-4 J/kg)		80-160 joules			HR: 60-100 Respirations: 15-20 SBP: >90mmHg			
Cardioversion** (1 J/kg)		40 joules						
Medication Concentration		Route	Dose	mLs	Medication Concentration	Route	Dose	mLs
<b>37-49 KG (too tall for Broselow)</b>  <b>13-14 YEARS</b>  Updated 03.26.2026	**Adenosine (1 <sup>st</sup> dose)	Rapid IV	4.5 mg	1.5 mL BHO	**Hydroxocobalamin	IV	3,150 mg Over 15 min	126 mL BHO
	3mg/mL				25mg/mL			
	**Adenosine (2 <sup>nd</sup> dose)	Rapid IV	9 mg	3 mL BHO	Lidocaine 2%	IO	20 mg	1 mL
	3mg/mL				100mg/5mL			
	Albuterol	Neb	5 mg	6 mL	Lidocaine 2% (Cardiac arrest)	IV/IO	45 mg	2.3 mL
	2.5mg/3mL				100mg/5mL			
	Amiodarone (VF/pulseless VT)	IV/IO	225 mg	4.5 mL	Midazolam (Seizure 1 <sup>st</sup> line)	IM	9 mg	1.8 mL
	50mg/mL				5mg/mL			
	**Amiodarone (VT w/ pulse)	IV	150 mg Over 10 min.	3 mL BHO	Midazolam (Seizure)	IV/IO/IN	4.5 mg	0.9 mL
	50mg/mL				5mg/mL			
	Atropine (Bradycardia)	IV/IO	0.5 mg	0.5 mL	**Midazolam (Toxic delirium)	IN/IM	9 mg	1.8 mL BHO
	1mg/mL				5mg/mL			
	Atropine (Bradycardia)	IV/IO	0.5 mg	5 mL	**Midazolam (Cardioversion)	IN/IV/IM	4.5 mg	0.9 mL BHO
	0.1mg/mL				5mg/mL			
	Atropine (Organophosphate)	IV	0.9 mg	0.9 mL	Midazolam (ETT)	IV/IO/IM	4.5 mg	0.9 mL
	1mg/mL				5mg/mL			
	Atropine (Organophosphate)	IV	0.9 mg	9 mL	Morphine	IV carpuject	4 mg	1 mL
	0.1mg/mL				4mg/mL			
	Atropine (Organophosphate)	IM	2 mg	2 mL	Morphine	IV carpuject	4.5 mg	4.5 mL
	1mg/mL				10mg/10mL			
Dextrose 10%	IV		225 mL	Morphine	IM	4.5 mg	0.45 mL	
0.1mg/mL				10mg/mL				
Diphenhydramine	IV/IO/IM	45 mg	0.9 mL	Naloxone	IN/IV/IM	0.8 mg	2 mL	
50mg/mL				0.8mg/2mL				
Epinephrine (Anaphylaxis)	IM	0.45 mg	0.45 mL	Naloxone	IN/IV/IM	1 mg	1 mL	
1mg/mL (1:1000)				1mg/mL				
Epinephrine (Anaphylaxis)	IV/IO	0.3 mg	3 mL	Naloxone	IN		Single spray	
0.1mg/mL (1:10,000)				4mg/0.1mL				
**Epinephrine (Push dose)	IV/IO	10 mcg	1 mL BHO	Normal Saline	IV/IO		25 0 mL	
10mcg/mL				0.9% NaCl				
Epinephrine (Cardiac arrest)	IV/IO	0.45 mg	4.5 mL	Normal Saline	Neb		3 mL	
0.1mg/mL (1:10,000)				0.9% NaCl				
**Epinephrine (Asthma)	IM	0.45 mg	0.45 mL BHO	Ondansetron	ODT		4 mg	
1mg/mL (1:1000)				4mg				
Fentanyl	IN/IV/IM	50 mcg	1 mL	Sodium Bicarbonate	IV/IO	45 mEq	45 mL	
50mcg/mL				1mEq/mL				
Glucagon	IM	0.5 mg	0.5 mL	Toradol (Ketorolac)	IV/IO/IM	12.5 mg	0.8 mL	
1mg/mL				15mg/mL				

\*\*Base Hospital Order

All milliliters rounded

Approved: