

## MEDICAL CONTROL GUIDELINE: COLOR CODE DRUG DOSES



### PRINCIPLES:

1. Correct dosing of medications based on weight in kilograms is a safety concern for delivery of medications to children and adults in the prehospital setting.
2. To optimize safety in dosing medications for children and adults, a standard formulary has been created. This **Color Code Drug Doses** medical control guideline pre-calculates all doses based on kilogram weight for children and an adult dose including maximum dose is delineated.
3. EMS provider agencies shall procure medications and stock approved Assessment and ALS Units in accordance with the drug formulation specified in this medical control guideline.
4. The Color Code Drug Doses and the Treatment Protocols shall be used to determine drug doses.

### GUIDELINES:

1. EMS providers shall utilize a length-based resuscitation tape (i.e., Broselow™) to determine weight in kilograms and color code of children less than or equal to 14 years of age.
2. EMS providers shall use this guideline to determine dose of medication for children 3 to 36 kilograms. Documentation of dose will be in mgs and in mLs.
3. EMS providers contacting the base hospital shall report and document the appropriate color code and weight in kilograms utilizing a length-based resuscitation tape (i.e., Broselow™).
4. Base hospital personnel shall use this guideline to order dose of medication for children 3 to 36 kilograms; all doses will be given in mg and mLs.
5. Adult dosing will be used for children who are measured to be longer than the length-based resuscitation tape.

## DRUG FORMULATIONS:

MEDICATION	FORMULATION	DOSAGE	Maximum Single Dose
Adenosine	3mg/mL	0.1mg/kg Repeat dose 0.2mg/kg	12mg
Albuterol	2.5mg/3mL	2.5mg <4 years; 5mg ≥4 years	5mg
Albuterol MDI	90 mcg/puff	2 puffs <4 years; 4 puffs ≥4 years	360 mcg
Amiodarone	50mg/mL	5mg/kg	300mg
Atropine	0.1mg/mL	0.02mg/kg	1mg (adult) 0.5mg (pediatric)
Calcium Chloride (dilute 1:1 with NS if <1year)	100mg/mL	20mg/kg	1gm
Dextrose 10%	0.1gm/mL	5mL/kg*	250mL
<p>≤24kg: Dextrose 10% in water, 5mL/kg IV/IO in 1mL/kg increments, reassess for clinical improvement after every 1mL/kg. Administer slow IVP. May repeat as needed, maximum total dose 5mL/kg. Recheck glucose prn after 3mL/kg infused</p> <p>&gt;24 kg: Dextrose 10% in water, administer 125mL IVPB/IO and reassess, continue infusion as needed with maximum dose of 5mL/kg</p>			
Diphenhydramine	50mg/mL	1mg/kg	50mg
DuoDote™ (Pralidoxime Chloride)	Auto injector	1 DuoDote™	3 DuoDotes™
Epinephrine ( <b>Push Dose</b> ) <b>0.1mg/mL IV</b>	0.01mg/mL	0.1mL/kg every 1-5 mins	10mcg (1 mL)
<p>Mix 9mL of normal saline with 1mL of epinephrine 0.1mg/mL (IV epi) in a 10mL syringe to create epinephrine 0.01mg/mL, administer 0.1mL/kg (up to 1 mL at a time) every 1-5 mins to maintain adequate SBP.</p>			
Epinephrine <b>0.1mg/mL IV</b>	0.1mg/mL	0.01mg/kg	1mg
Epinephrine <b>1mg/mL IM</b>	1mg/mL	0.01mg/kg	0.5mg
Epinephrine <b>1mg/mL Nebulized (NEB)</b>	1mg/mL	2.5mg <1 year; 5mg ≥1 year	5mg (5mL)
Fentanyl <b>IV/IM</b>	50mcg/mL	1mcg/kg	50mcg
Fentanyl <b>IN</b>	50mcg/mL	1.5mcg/kg	50mcg
Glucagon	1mg/mL	0.5 mg <1 year; 1mg ≥1 year	1mg
Glucopaste (4 years or older)	15gm	15gm	15gm
Ketorolac <b>slow IV/IO push</b>	15mg/mL	0.5mg/kg	15mg
Ketorolac <b>IM (Adult)</b>	15mg/mL	1mg/kg	30mg
Ketorolac <b>IM (Pediatric)</b>	15mg/mL	0.5mg/kg ≥4 years	15mg
Lidocaine 2% ( <b>IO ONLY</b> )	20mg/mL	0.5 mg/kg	40mg

MEDICATION	FORMULATION	DOSAGE	Maximum Single Dose
Midazolam all indications <b>IV/IO</b>	5mg/mL	0.1mg/kg	5mg
Midazolam Agitation/Sedation <b>IN/IM</b>	5mg/mL	0.2mg/kg	5mg
Midazolam Seizure 0-16 mo <b>IN/IM</b>	5mg/mL	0.2mg/kg	2.2mg
Midazolam Seizure ≥17mo <b>IN/IM</b>	5mg/mL	PediDOSE* 17months-5 years: 2.5mg 6-11 years: 5mg ≥12 years: 10mg	2.5mg, 5mg, or 10mg depending on age
Morphine Sulfate <b>IV/IM/IO</b>	4mg/mL	0.1mg/kg	4mg
Naloxone	1mg/mL	0.1mg/kg	2mg
Normal Saline	0.9% Na Cl	20mL/kg	1L
Nitroglycerin SL (adults only)	0.4mg	0.4mg	1.2mg
Olanzapine ODT	10mg	10mg	10mg
Ondansetron ODT/IV/IM	4mg tab or (4 years or older ODT only) 2mg/mL IV/IM (adults only)	4mg	4mg
Sodium Bicarbonate IV (dilute 1:1 with NS if <1year)	1mEq/mL	1mEq/kg	50mEq
Tranexamic Acid (TXA)	1gm/10mL	1gm/10mL	1gm in 50 or 100mL infused over 10 minutes

**\*PediDOSE Midazolam IN/IM only - dosing chart for treatment of seizures**

Age	0-16 months	17 months – 5 years	6-11 years	≥12 years
Midazolam Dose IN/IM	0.2mg/kg	2.5 mg	5 mg	10 mg
Volume IN/IM	See color code	0.5 mL	1mL	2mL
If age is unknown				

**COLOR CODE DRUG DOSES:**

<b>3 Kg</b>	<b>Length 47 – 59.5 cm</b>			<b>Less than 3 months</b>		
	<b>Normal Vital Signs:</b>	<b>Heart Rate:</b> 100-180		<b>Respirations:</b> 30-60		<b>Systolic BP:</b> >60
	<b>Cardioversion:</b>	3 joules		6 joules		6 joules
	<b>Defibrillation:</b>	6 joules		12 joules		12 joules
	<b>Supraglottic Airway:</b>	igel	Size 1	No gastric suction catheter		
	<b>Medication</b>	<b>Dose</b>	<b>mLs</b>	<b>Medication</b>	<b>Dose</b>	<b>mLs</b>
	Adenosine	0.3mg	<b>0.1mL</b>	Fentanyl IV/IM	3mcg	<b>0.06mL</b>
	Albuterol NEB	2.5mg	<b>3mL</b>	Fentanyl IN	4.5mcg	<b>0.09mL</b>
	Amiodarone	15mg	<b>0.3mL</b>	Glucagon IM	0.5mg	<b>0.5mL</b>
	Atropine	0.06mg	<b>0.6mL</b>	Lidocaine 2% IO	1.5mg	<b>0.08mL</b>
Calcium Chloride*	60mg	<b>0.6mL</b>	Midazolam Agitation/Sedation IV/IO	0.3mg	<b>0.06mL</b>	
Dextrose 10% slow IV	15mL	<b>15mL</b>	Midazolam Agitation/Sedation IN/IM	0.6mg	<b>0.12mL</b>	
Diphenhydramine IV/IM	3mg	<b>0.06mL</b>	Midazolam Seizure 0-16mo IN/IM	0.6mg	<b>0.12mL</b>	
DuoDote™	1 dose	<b>NA</b>	Morphine IV/IM/IO	0.3mg	<b>0.08mL</b>	
Epinephrine Push Dose	3mcg	<b>0.3mL</b>	Naloxone IV/IM/IN	0.3mg	<b>0.3mL</b>	
Epinephrine 0.1mg/mL IV	0.03mg	<b>0.3mL</b>	Normal Saline IV Bolus	60mL	<b>60mL</b>	
Epinephrine 1mg/mL IM	0.03mg	<b>0.03mL</b>	Sodium Bicarbonate*	3mEq	<b>3mL</b>	
Epinephrine 1mg/mL NEB	2.5mg	<b>2.5mL</b>				

**GREY**

\*Dilute 1:1 with NS

<b>4 Kg</b>	<b>Length 47 – 59.5 cm</b>			<b>Less than 3 months</b>		
	<b>Normal Vital Signs:</b>	<b>Heart Rate:</b> 100-180		<b>Respirations:</b> 30-60		<b>Systolic BP:</b> >60
	<b>Cardioversion:</b>	4 joules		8 joules		8 joules
	<b>Defibrillation:</b>	8 joules		16 joules		16 joules
	<b>Supraglottic Airway:</b>	igel	Size 1	No gastric suction catheter		
	<b>Medication</b>	<b>Dose</b>	<b>mLs</b>	<b>Medication</b>	<b>Dose</b>	<b>mLs</b>
	Adenosine	0.4mg	<b>0.13mL</b>	Fentanyl IV/IM	4mcg	<b>0.08mL</b>
	Albuterol NEB	2.5mg	<b>3mL</b>	Fentanyl IN	6mcg	<b>0.12mL</b>
	Amiodarone	20mg	<b>0.4mL</b>	Glucagon IM	0.5mg	<b>0.5mL</b>
	Atropine	0.08mg	<b>0.8mL</b>	Lidocaine 2% IO	2mg	<b>0.1mL</b>
Calcium Chloride*	80mg	<b>0.8mL</b>	Midazolam Agitation/Sedation IV/IO	0.4mg	<b>0.08mL</b>	
Dextrose 10% slow IV	20mL	<b>20mL</b>	Midazolam Agitation/Sedation IN/IM	0.8mg	<b>0.16mL</b>	
Diphenhydramine IV/IM	4mg	<b>0.08mL</b>	Midazolam Seizure 0-16mo IN/IM	0.8mg	<b>0.16mL</b>	
DuoDote™	1 dose	<b>NA</b>	Morphine IV/IM/IO	0.4mg	<b>0.1mL</b>	
Epinephrine Push Dose	4mcg	<b>0.4mL</b>	Naloxone IV/IM/IN	0.4mg	<b>0.4mL</b>	
Epinephrine 0.1mg/mL IV	0.04mg	<b>0.4mL</b>	Normal Saline IV Bolus	80mL	<b>80mL</b>	
Epinephrine 1mg/mL IM	0.04mg	<b>0.04mL</b>	Sodium Bicarbonate*	4mEq	<b>4mL</b>	
Epinephrine 1mg/mL NEB	2.5mg	<b>2.5mL</b>				

**GREY**

\*Dilute 1:1 with NS

5Kg	Length 47 – 59.5 cm			Less than 3 months				
	Normal Vital Signs:		Heart Rate: 100-180		Normal Vital Signs:		Heart Rate: 100-180	
	Cardioversion:		5 joules		10 joules		10 joules	
	Defibrillation:		10 joules		20 joules		20 joules	
	Supraglottic Airway:		igel Size 1		No gastric suction catheter			
	Medication		Dose	mLs	Medication		Dose	mLs
	Adenosine		0.5mg	0.17mL	Fentanyl IV/IM		5mcg	0.1mL
	Albuterol NEB		2.5mg	3mL	Fentanyl IN		7.5mcg	0.15mL
	Amiodarone		25mg	0.5mL	Glucagon IM		0.5mg	0.5mL
	Atropine		0.1mg	1mL	Lidocaine 2% IO		2.5mg	0.12mL
Calcium Chloride*		100mg	1mL	Midazolam Agitation/Sedation IV/IO		0.5mg	0.1mL	
Dextrose 10% slow IV		25mL	25mL	Midazolam Agitation/Sedation IN/IM		1mg	0.2mL	
Diphenhydramine IV/IM		5mg	0.1mL	Midazolam Seizure 0-16mo IN/IM		1mg	0.2mL	
DuoDote™		1 dose	NA	Morphine IV/IM/IO		0.5mg	0.12mL	
Epinephrine Push Dose		5mcg	0.5mL	Naloxone IV/IM/IN		0.5mg	0.5mL	
Epinephrine 0.1mg/mL IV		0.05mg	0.5mL	Normal Saline IV Bolus		100mL	100mL	
Epinephrine 1mg/mL IM		0.05mg	0.05mL	Sodium Bicarbonate*		5mEq	5mL	
Epinephrine 1mg/mL NEB		2.5mg	2.5mL					

GREY

\*Dilute 1:1 with NS

<b>6 Kg</b>	<b>Length 59.5 – 62 cm</b>			<b>3 – 4 months</b>			<b>PINK</b>		
	<b>Normal Vital Signs:</b>		<b>Heart Rate:</b> 100-160	<b>Respirations:</b> 25-40		<b>Systolic BP:</b> >70			
	<b>Cardioversion:</b>		6 joules	12 joules		12 joules			
	<b>Defibrillation:</b>		12 joules	24 joules		24 joules			
	<b>Supraglottic Airway:</b>		igel	Size 1.5	10 F gastric suction catheter				
	<b>Medication</b>		<b>Dose</b>	<b>mLs</b>	<b>Medication</b>			<b>Dose</b>	<b>mLs</b>
	Adenosine		0.6mg	<b>0.2mL</b>	Fentanyl IV/IM			6mcg	<b>0.12mL</b>
	Albuterol NEB		2.5mg	<b>3mL</b>	Fentanyl IN			9mcg	<b>0.18mL</b>
	Amiodarone		30mg	<b>0.6mL</b>	Glucagon IM			0.5mg	<b>0.5mL</b>
	Atropine		0.12mg	<b>1.2mL</b>	Lidocaine 2% IO			3mg	<b>0.15mL</b>
	Calcium Chloride*		120mg	<b>1.2mL</b>	Midazolam Agitation/Sedation IV/IO			0.6mg	<b>0.12mL</b>
	Dextrose 10% slow IV		30mL	<b>30mL</b>	Midazolam Agitation/Sedation IN/IM			1.2mg	<b>0.24mL</b>
	Diphenhydramine IV/IM		6mg	<b>0.12mL</b>	Midazolam Seizure 0-16mo IN/IM			1.2mg	<b>0.24mL</b>
DuoDote™		1 dose	<b>NA</b>	Morphine IV/IM/IO		0.6mg	<b>0.15mL</b>		
Epinephrine Push Dose		6mcg	<b>0.6mL</b>	Naloxone IV/IM/IN		0.6mg	<b>0.6mL</b>		
Epinephrine 0.1mg/mL IV		0.06mg	<b>0.6mL</b>	Normal Saline IV Bolus		120mL	<b>120mL</b>		
Epinephrine 1mg/mL IM		0.06mg	<b>0.06mL</b>	Sodium Bicarbonate*		6mEq	<b>6mL</b>		
Epinephrine 1mg/mL NEB		2.5mg	<b>2.5mL</b>	*Dilute 1:1 with NS					

<b>7 Kg</b>	<b>Length 62 – 66 cm</b>			<b>5 – 6 months</b>			<b>PINK</b>		
	<b>Normal Vital Signs:</b>		<b>Heart Rate:</b> 100-160	<b>Respirations:</b> 25-40		<b>Systolic BP:</b> >70			
	<b>Cardioversion:</b>		7 joules	14 joules		14 joules			
	<b>Defibrillation:</b>		14 joules	28 joules		28 joules			
	<b>Supraglottic Airway:</b>		igel	Size 1.5	10 F gastric suction catheter				
	<b>Medication</b>		<b>Dose</b>	<b>mLs</b>	<b>Medication</b>			<b>Dose</b>	<b>mLs</b>
	Adenosine		0.7mg	<b>0.23mL</b>	Fentanyl IV/IM			7mcg	<b>0.14mL</b>
	Albuterol NEB		2.5mg	<b>3mL</b>	Fentanyl IN			10.5mcg	<b>0.21mL</b>
	Amiodarone		35mg	<b>0.7mL</b>	Glucagon IM			0.5mg	<b>0.5mL</b>
	Atropine		0.14mg	<b>1.4mL</b>	Lidocaine 2% IO			3.5mg	<b>0.18mL</b>
	Calcium Chloride*		140mg	<b>1.4mL</b>	Midazolam Agitation/Sedation IV/IO			0.7mg	<b>0.14mL</b>
	Dextrose 10% slow IV		35mL	<b>35mL</b>	Midazolam Agitation/Sedation IN/IM			1.4mg	<b>0.28mL</b>
	Diphenhydramine IV/IM		7mg	<b>0.14mL</b>	Midazolam Seizure 0-16mo IN/IM			1.4mg	<b>0.28mL</b>
DuoDote™		1 dose	<b>NA</b>	Morphine IV/IM/IO		0.7mg	<b>0.18mL</b>		
Epinephrine Push Dose		7mcg	<b>0.7mL</b>	Naloxone IV/IM/IN		0.7mg	<b>0.7mL</b>		
Epinephrine 0.1mg/mL IV		0.07mg	<b>0.7mL</b>	Normal Saline IV Bolus		140mL	<b>140mL</b>		
Epinephrine 1mg/mL IM		0.07mg	<b>0.07mL</b>	Sodium Bicarbonate*		7mEq	<b>7mL</b>		
Epinephrine 1mg/mL NEB		2.5mg	<b>2.5mL</b>	*Dilute 1:1 with NS					

<b>8 Kg</b>	<b>Length 66 – 69.5 cm</b>			<b>7 - 8 months</b>			<b>RED</b>		
	<b>Normal Vital Signs:</b>		<b>Heart Rate:</b> 100-160	<b>Respirations:</b> 20-40		<b>Systolic BP:</b> >70			
	<b>Cardioversion:</b>		8 joules	16 joules		16 joules			
	<b>Defibrillation:</b>		16 joules	32 joules		32 joules			
	<b>Supraglottic Airway:</b>		igel	Size 1.5	10 F gastric suction catheter				
	<b>Medication</b>		<b>Dose</b>	<b>mLs</b>	<b>Medication</b>			<b>Dose</b>	<b>mLs</b>
	Adenosine		0.8mg	<b>0.27mL</b>	Fentanyl IV/IM			8mcg	<b>0.16mL</b>
	Albuterol NEB		2.5mg	<b>3mL</b>	Fentanyl IN			12mcg	<b>0.24mL</b>
	Amiodarone		40mg	<b>0.8mL</b>	Glucagon IM			0.5mg	<b>0.5mL</b>
	Atropine		0.16mg	<b>1.6mL</b>	Lidocaine 2% IO			4mg	<b>0.2mL</b>
	Calcium Chloride*		160mg	<b>1.6mL</b>	Midazolam Agitation/Sedation IV/IO			0.8mg	<b>0.16mL</b>
	Dextrose 10% slow IV		40mL	<b>40mL</b>	Midazolam Agitation/Sedation IN/IM			1.6mg	<b>0.32mL</b>
	Diphenhydramine IV/IM		8mg	<b>0.16mL</b>	Midazolam Seizure 0-16mo IN/IM			1.6mg	<b>0.32mL</b>
	DuoDote™		1 dose	<b>NA</b>	Morphine IV/IM/IO			0.8mg	<b>0.2mL</b>
Epinephrine <b>Push Dose</b>		8mcg	<b>0.8mL</b>	Naloxone IV/IM/IN		0.8mg	<b>0.8mL</b>		
Epinephrine <b>0.1mg/mL IV</b>		0.08mg	<b>0.8mL</b>	Normal Saline IV Bolus		160mL	<b>160mL</b>		
Epinephrine <b>1mg/mL IM</b>		0.08mg	<b>0.08mL</b>	Sodium Bicarbonate*		8mEq	<b>8mL</b>		
Epinephrine <b>1mg/mL NEB</b>		2.5mg	<b>2.5mL</b>			*Dilute 1:1 with NS			

<b>9 Kg</b>	<b>Length 69 – 73 cm</b>			<b>9 – 10 months</b>			<b>RED</b>		
	<b>Normal Vital Signs:</b>		<b>Heart Rate:</b> 100-160	<b>Respirations:</b> 20-40		<b>Systolic BP:</b> >70			
	<b>Cardioversion:</b>		9 joules	18 joules		18 joules			
	<b>Defibrillation:</b>		18 joules	36 joules		36 joules			
	<b>Supraglottic Airway:</b>		igel	Size 1.5	10 F gastric suction catheter				
	<b>Medication</b>		<b>Dose</b>	<b>mLs</b>	<b>Medication</b>			<b>Dose</b>	<b>mLs</b>
	Adenosine		0.9mg	<b>0.3mL</b>	Fentanyl IV/IM			9mcg	<b>0.18mL</b>
	Albuterol NEB		2.5mg	<b>3mL</b>	Fentanyl IN			13.5mcg	<b>0.27mL</b>
	Amiodarone		45mg	<b>0.9mL</b>	Glucagon IM			0.5mg	<b>0.5mL</b>
	Atropine		0.18mg	<b>1.8mL</b>	Lidocaine 2% IO			4.5mg	<b>0.22mL</b>
	Calcium Chloride*		180mg	<b>1.8mL</b>	Midazolam Agitation/Sedation IV/IO			0.9mg	<b>0.18mL</b>
	Dextrose 10% slow IV		45mL	<b>45mL</b>	Midazolam Agitation/Sedation IN/IM			1.8mg	<b>0.36mL</b>
	Diphenhydramine IV/IM		9mg	<b>0.18mL</b>	Midazolam Seizure 0-16mo IN/IM			1.8mg	<b>0.36mL</b>
	DuoDote™		1 dose	<b>NA</b>	Morphine IV/IM/IO			0.9mg	<b>0.22mL</b>
Epinephrine <b>Push Dose</b>		9mcg	<b>0.9mL</b>	Naloxone IV/IM/IN		0.9mg	<b>0.9mL</b>		
Epinephrine <b>0.1mg/mL IV</b>		0.09mg	<b>0.9mL</b>	Normal Saline IV Bolus		180mL	<b>180mL</b>		
Epinephrine <b>1mg/mL IM</b>		0.09mg	<b>0.09mL</b>	Sodium Bicarbonate*		9mEq	<b>9mL</b>		
Epinephrine <b>1mg/mL NEB</b>		2.5mg	<b>2.5mL</b>			*Dilute 1:1 with NS			

10 Kg	Length 73 – 78 cm			11 – 14 months		
	Normal Vital Signs:	Heart Rate: 90-140		Respirations: 24-40		Systolic BP: >70
	Cardioversion:	10 joules		20 joules		20 joules
	Defibrillation:	20 joules		40 joules		40 joules
	Supraglottic Airway:	igel	Size 1.5	10 F gastric suction catheter		
	Medication	Dose	mLs	Medication	Dose	mLs
	Adenosine	1mg	<b>0.33mL</b>	Fentanyl IV/IM	10mcg	<b>0.2mL</b>
	Albuterol NEB	2.5mg	<b>3mL</b>	Fentanyl IN	15mcg	<b>0.3mL</b>
	Amiodarone	50mg	<b>1mL</b>	Glucagon IM	1mg	<b>1mL</b>
	Atropine	0.2mg	<b>2mL</b>	Lidocaine 2% IO	5mg	<b>0.25mL</b>
Calcium Chloride	200mg	<b>2mL</b>	Midazolam Agitation/Sedation IV/IO	1mg	<b>0.2mL</b>	
Dextrose 10% slow IV	50mL	<b>50mL</b>	Midazolam Agitation/Sedation IN/IM	2mg	<b>0.4mL</b>	
Diphenhydramine IV/IM	10mg	<b>0.2mL</b>	Midazolam Seizure 0-16mo IN/IM	2mg	<b>0.4mL</b>	
DuoDote™	1 dose	<b>NA</b>	Midazolam Seizure ≥17mo IN/IM	PediDOSE	-	
Epinephrine Push Dose	10mcg	<b>1mL</b>	Morphine IV/IM/IO	1mg	<b>0.25mL</b>	
Epinephrine 0.1mg/mL IV	0.1mg	<b>1mL</b>	Naloxone IV/IM/IN	1mg	<b>1mL</b>	
Epinephrine 1mg/mL IM	0.1mg	<b>0.1mL</b>	Normal Saline IV Bolus	200mL	<b>200mL</b>	
Epinephrine 1mg/mL NEB	5mg	<b>5mL</b>	Sodium Bicarbonate*	10mEq	<b>10mL</b>	

PURPLE

\*Dilute 1:1 with NS

11 Kg	Length 78 – 83 cm			15 – 18 months		
	Normal Vital Signs:	Heart Rate: 90-140		Respirations: 24-40		Systolic BP: >70
	Cardioversion:	11 joules		22 joules		22 joules
	Defibrillation:	22 joules		44 joules		44 joules
	Supraglottic Airway:	igel	Size 1.5	10 F gastric suction catheter		
	Medication	Dose	mLs	Medication	Dose	mLs
	Adenosine	1.1mg	<b>0.37mL</b>	Fentanyl IV/IM	11mcg	<b>0.22mL</b>
	Albuterol NEB	2.5mg	<b>3mL</b>	Fentanyl IN	16.5mcg	<b>0.33mL</b>
	Amiodarone	55mg	<b>1.1mL</b>	Glucagon IM	1mg	<b>1mL</b>
	Atropine	0.22mg	<b>2.2mL</b>	Lidocaine 2% IO	5.5mg	<b>0.28mL</b>
Calcium Chloride	220mg	<b>2.2mL</b>	Midazolam Agitation/Sedation IV/IO	1.1mg	<b>0.22mL</b>	
Dextrose 10% slow IV	55mL	<b>55mL</b>	Midazolam Agitation/Sedation IN/IM	2.2mg	<b>0.44mL</b>	
Diphenhydramine IV/IM	11mg	<b>0.22mL</b>	Midazolam Seizure 0-16mo IN/IM	2.2mg	<b>0.44mL</b>	
DuoDote™	1 dose	<b>NA</b>	Midazolam Seizure ≥17mo IN/IM	PediDOSE	-	
Epinephrine Push Dose	10mcg	<b>1mL</b>	Morphine IV/IM/IO	1.1mg	<b>0.28mL</b>	
Epinephrine 0.1mg/mL IV	0.11mg	<b>1.1mL</b>	Naloxone IV/IM/IN	1.1mg	<b>1.1mL</b>	
Epinephrine 1mg/mL IM	0.11mg	<b>0.11mL</b>	Normal Saline IV Bolus	220mL	<b>220mL</b>	
Epinephrine 1mg/mL NEB	5mg	<b>5mL</b>	Sodium Bicarbonate	11mEq	<b>11mL</b>	

PURPLE



<b>12 Kg</b>	<b>Length 83 – 94.5 cm</b>			<b>19 -35 months</b>			<b>YELLOW</b>
	<b>Normal Vital Signs:</b>		<b>Heart Rate:</b> 90-140	<b>Respirations:</b> 20-30		<b>Systolic BP:</b> >70	
	<b>Cardioversion:</b>		12 joules	24 joules		24 joules	
	<b>Defibrillation:</b>		24 joules	48 joules		48 joules	
	<b>Supraglottic Airway:</b>		igel Size 2	12 F gastric suction catheter			
	<b>Medication</b>	<b>Dose</b>	<b>mLs</b>	<b>Medication</b>	<b>Dose</b>	<b>mLs</b>	
	Adenosine	1.2mg	<b>0.4mL</b>	Fentanyl IV/IM	12mcg	<b>0.24mL</b>	
	Albuterol NEB	2.5mg	<b>3mL</b>	Fentanyl IN	18mcg	<b>0.36mL</b>	
	Amiodarone	60mg	<b>1.2mL</b>	Glucagon IM	1mg	<b>1mL</b>	
	Atropine	0.24mg	<b>2.4mL</b>	Lidocaine 2% IO	6mg	<b>0.3mL</b>	
	Calcium Chloride	240mg	<b>2.4mL</b>	Midazolam Agitation/Sedation IV/IO	1.2mg	<b>0.24mL</b>	
	Dextrose 10% slow IV	60mL	<b>60mL</b>	Midazolam Agitation/Sedation IN/IM	2.4mg	<b>0.48mL</b>	
	Diphenhydramine IV/IM	12mg	<b>0.24mL</b>	Midazolam Seizure ≥17mo IN/IM	PediDose	-	
DuoDote™	1 dose	<b>NA</b>	Morphine IV/IM/IO	1.2mg	<b>0.3mL</b>		
Epinephrine Push Dose	10mcg	<b>1mL</b>	Naloxone IV/IM/IN	1.2mg	<b>1.2mL</b>		
Epinephrine 0.1mg/mL IV	0.12mg	<b>1.2mL</b>	Normal Saline IV Bolus	240mL	<b>240mL</b>		
Epinephrine 1mg/mL IM	0.12mg	<b>0.12mL</b>	Sodium Bicarbonate	12mEq	<b>12mL</b>		
Epinephrine 1mg/mL NEB	5mg	<b>5mL</b>					

<b>13 Kg</b>	<b>Length 83 – 94.5 cm</b>			<b>19 -35 months</b>			<b>YELLOW</b>
	<b>Normal Vital Signs:</b>		<b>Heart Rate:</b> 90-140	<b>Respirations:</b> 20-30		<b>Systolic BP:</b> >70	
	<b>Cardioversion:</b>		13 joules	26 joules		26 joules	
	<b>Defibrillation:</b>		26 joules	52 joules		52 joules	
	<b>Supraglottic Airway:</b>		igel Size 2	12 F gastric suction catheter			
	<b>Medication</b>	<b>Dose</b>	<b>mLs</b>	<b>Medication</b>	<b>Dose</b>	<b>mLs</b>	
	Adenosine	1.3mg	<b>0.43mL</b>	Fentanyl IV/IM	13mcg	<b>0.26mL</b>	
	Albuterol NEB	2.5mg	<b>3mL</b>	Fentanyl IN	19.5mcg	<b>0.39mL</b>	
	Amiodarone	65mg	<b>1.3mL</b>	Glucagon IM	1mg	<b>1mL</b>	
	Atropine	0.26mg	<b>2.6mL</b>	Lidocaine 2% IO	6.5mg	<b>0.32mL</b>	
	Calcium Chloride	260mg	<b>2.6mL</b>	Midazolam Agitation/Sedation IV/IO	1.3mg	<b>0.26mL</b>	
	Dextrose 10% slow IV	65mL	<b>65mL</b>	Midazolam Agitation/Sedation IN/IM	2.6mg	<b>0.52mL</b>	
	Diphenhydramine IV/IM	13mg	<b>0.26mL</b>	Midazolam Seizure ≥17mo IN/IM	PediDose	-	
DuoDote™	1 dose	<b>NA</b>	Morphine IV/IM/IO	1.3mg	<b>0.32mL</b>		
Epinephrine Push Dose	10mcg	<b>1mL</b>	Naloxone IV/IM/IN	1.3mg	<b>1.3mL</b>		
Epinephrine 0.1mg/mL IV	0.13mg	<b>1.3mL</b>	Normal Saline IV Bolus	260mL	<b>260mL</b>		
Epinephrine 1mg/mL IM	0.13mg	<b>0.13mL</b>	Sodium Bicarbonate	13mEq	<b>13mL</b>		
Epinephrine 1mg/mL NEB	5mg	<b>5mL</b>					

<b>14 Kg</b>	<b>Length 83 – 94.5 cm</b>			<b>19 -35 months</b>				
	<b>Normal Vital Signs:</b>		<b>Heart Rate:</b> 90-140	<b>Respirations:</b> 20-30		<b>Systolic BP:</b> >70		
	<b>Cardioversion:</b>		14 joules	28 joules		28 joules		
	<b>Defibrillation:</b>		28 joules	56 joules		56 joules		
	<b>Supraglottic Airway:</b>		igel	Size 2	12 F gastric suction catheter			
	<b>Medication</b>		<b>Dose</b>	<b>mLs</b>	<b>Medication</b>		<b>Dose</b>	<b>mLs</b>
	Adenosine		1.4mg	<b>0.47mL</b>	Fentanyl IV/IM		14mcg	<b>0.28mL</b>
	Albuterol NEB		2.5mg	<b>3mL</b>	Fentanyl IN		21mcg	<b>0.42mL</b>
	Amiodarone		70mg	<b>1.4mL</b>	Glucagon IM		1mg	<b>1mL</b>
	Atropine		0.28mg	<b>2.8mL</b>	Lidocaine 2% IO		7mg	<b>0.35mL</b>
	Calcium Chloride		280mg	<b>2.8mL</b>	Midazolam Agitation/Sedation IV/IO		1.4mg	<b>0.28mL</b>
	Dextrose 10% slow IV		70mL	<b>70mL</b>	Midazolam Agitation/Sedation IN/IM		2.8mg	<b>0.56mL</b>
	Diphenhydramine IV/IM		14mg	<b>0.28mL</b>	Midazolam Seizure ≥17mo IN/IM		PediDose	-
DuoDote™		1 dose	<b>NA</b>	Morphine IV/IM/IO		1.4mg	<b>0.35mL</b>	
Epinephrine <b>Push Dose</b>		10mcg	<b>1mL</b>	Naloxone IV/IM/IN		1.4mg	<b>1.4mL</b>	
Epinephrine <b>0.1mg/mL IV</b>		0.14mg	<b>1.4mL</b>	Normal Saline IV Bolus		280mL	<b>280mL</b>	
Epinephrine <b>1mg/mL IM</b>		0.14mg	<b>0.14mL</b>	Sodium Bicarbonate		14mEq	<b>14mL</b>	
Epinephrine <b>1mg/mL NEB</b>		5mg	<b>5mL</b>					

**YELLOW**

<b>15 Kg</b>	<b>Length 94.5 – 107 cm</b>			<b>3 – 4 years</b>			<b>WHITE</b>		
	<b>Normal Vital Signs:</b>		<b>Heart Rate:</b> 80-130	<b>Respirations:</b> 20-30		<b>Systolic BP:</b> >75			
	<b>Cardioversion:</b>		15 joules	30 joules		30 joules			
	<b>Defibrillation:</b>		30 joules	60 joules		60 joules			
	<b>Supraglottic Airway:</b>		igel Size 2	12 F gastric suction catheter					
	<b>Medication</b>		<b>Dose</b>	<b>mLs</b>	<b>Medication</b>			<b>Dose</b>	<b>mLs</b>
	Adenosine		1.5mg	<b>0.5mL</b>	Glucagon IM			1mg	<b>1mL</b>
	Albuterol NEB		2.5mg	<b>3mL</b>	Glucopaste*			15gm	<b>1 dose</b>
	Amiodarone		75mg	<b>1.5mL</b>	Ketorolac slow IV/IO*			7.5mg	<b>0.5mL</b>
	Atropine		0.3mg	<b>3mL</b>	Ketorolac IM*			7.5mg	<b>0.5mL</b>
	Calcium Chloride		300mg	<b>3mL</b>	Lidocaine 2% IO			7.5mg	<b>0.38mL</b>
	Dextrose 10% slow IV		75mL	<b>75mL</b>	Midazolam Agitation/Sedation IV/IO			1.5mg	<b>0.3mL</b>
	Diphenhydramine IV/IM		15mg	<b>0.3mL</b>	Midazolam Agitation/Sedation IN/IM			3mg	<b>0.6mL</b>
	DuoDote™		1 dose	<b>NA</b>	Midazolam Seizure ≥17mo IN/IM			PediDose	-
	Epinephrine Push Dose		10mcg	<b>1mL</b>	Morphine IV/IM/IO			1.5mg	<b>0.38mL</b>
Epinephrine 0.1mg/mL IV		0.15mg	<b>1.5mL</b>	Naloxone IV/IM/IN		1.5mg	<b>1.5mL</b>		
Epinephrine 1mg/mL IM		0.15mg	<b>0.15mL</b>	Normal Saline IV Bolus		300mL	<b>300mL</b>		
Epinephrine 1mg/mL NEB		5mg	<b>5mL</b>	Ondansetron ODT*		4mg	<b>1 tablet</b>		
Fentanyl IV/IM		15mcg	<b>0.3mL</b>	Sodium Bicarbonate		15mEq	<b>15mL</b>		
Fentanyl IN		22.5mcg	<b>0.45mL</b>				*4 years or older		

<b>16 Kg</b>	<b>Length 94.5 – 107 cm</b>			<b>3 – 4 years</b>			<b>WHITE</b>		
	<b>Normal Vital Signs:</b>		<b>Heart Rate:</b> 80-130	<b>Respirations:</b> 20-30		<b>Systolic BP:</b> >75			
	<b>Cardioversion:</b>		16 joules	32 joules		32 joules			
	<b>Defibrillation:</b>		32 joules	64 joules		64 joules			
	<b>Supraglottic Airway:</b>		igel Size 2	12 F gastric suction catheter					
	<b>Medication</b>		<b>Dose</b>	<b>mLs</b>	<b>Medication</b>			<b>Dose</b>	<b>mLs</b>
	Adenosine		1.6mg	<b>0.53mL</b>	Glucagon IM			1mg	<b>1mL</b>
	Albuterol NEB		2.5mg	<b>3mL</b>	Glucopaste*			15gm	<b>1 dose</b>
	Amiodarone		80mg	<b>1.6mL</b>	Ketorolac slow IV/IO*			8mg	<b>0.53mL</b>
	Atropine		0.32mg	<b>3.2mL</b>	Ketorolac IM*			8mg	<b>0.53mL</b>
	Calcium Chloride		320mg	<b>3.2mL</b>	Lidocaine 2% IO			8mg	<b>0.4mL</b>
	Dextrose 10% slow IV		80mL	<b>80mL</b>	Midazolam Agitation/Sedation IV/IO			1.6mg	<b>0.32mL</b>
	Diphenhydramine IV/IM		16mg	<b>0.32mL</b>	Midazolam Agitation/Sedation IN/IM			3.2mg	<b>0.64mL</b>
	DuoDote™		1 dose	<b>NA</b>	Midazolam Seizure ≥17mo IN/IM			PediDose	-
	Epinephrine Push Dose		10mcg	<b>1mL</b>	Morphine IV/IM/IO			1.6mg	<b>0.4mL</b>
Epinephrine 0.1mg/mL IV		0.16mg	<b>1.6mL</b>	Naloxone IV/IM/IN		1.6mg	<b>1.6mL</b>		
Epinephrine 1mg/mL IM		0.16mg	<b>0.16mL</b>	Normal Saline IV Bolus		320mL	<b>320mL</b>		
Epinephrine 1mg/mL NEB		5mg	<b>5mL</b>	Ondansetron ODT*		4mg	<b>1 tablet</b>		
Fentanyl IV/IM		16mcg	<b>0.32mL</b>	Sodium Bicarbonate		16mEq	<b>16mL</b>		
Fentanyl IN		24mcg	<b>0.48mL</b>				*4 years or older		

<b>17 Kg</b>	<b>Length 94.5 – 107 cm</b>			<b>3 – 4 years</b>			<b>WHITE</b>		
	<b>Normal Vital Signs:</b>		<b>Heart Rate:</b> 80-130	<b>Respirations:</b> 20-30		<b>Systolic BP:</b> >75			
	<b>Cardioversion:</b>		17 joules	34 joules		34 joules			
	<b>Defibrillation:</b>		34 joules	68 joules		68 joules			
	<b>Supraglottic Airway:</b>		igel	Size 2	12 F gastric suction catheter				
	<b>Medication</b>		<b>Dose</b>	<b>mLs</b>	<b>Medication</b>			<b>Dose</b>	<b>mLs</b>
	Adenosine		1.7mg	<b>0.57mL</b>	Glucagon IM			1mg	<b>1mL</b>
	Albuterol NEB		2.5mg	<b>3mL</b>	Glucopaste*			15gm	<b>1 dose</b>
	Amiodarone		85mg	<b>1.7mL</b>	Ketorolac slow IV/IO*			8.5mg	<b>0.57mL</b>
	Atropine		0.34mg	<b>3.4mL</b>	Ketorolac <b>IM*</b>			8.5mg	<b>0.57mL</b>
	Calcium Chloride		340mg	<b>3.4mL</b>	Lidocaine 2% IO			8.5mg	<b>0.42mL</b>
	Dextrose 10% slow IV		85mL	<b>85mL</b>	Midazolam Agitation/Sedation IV/IO			1.7mg	<b>0.34mL</b>
	Diphenhydramine IV/IM		17mg	<b>0.34mL</b>	Midazolam Agitation/Sedation <b>IN/IM</b>			3.4mg	<b>0.68mL</b>
	DuoDote™		1 dose	<b>NA</b>	Midazolam Seizure ≥17mo <b>IN/IM</b>			PediDose	-
	Epinephrine <b>Push Dose</b>		10mcg	<b>1mL</b>	Morphine IV/IM/IO			1.7mg	<b>0.43mL</b>
Epinephrine <b>0.1mg/mL IV</b>		0.17mg	<b>1.7mL</b>	Naloxone IV/IM/IN		1.7mg	<b>1.7mL</b>		
Epinephrine <b>1mg/mL IM</b>		0.17mg	<b>0.17mL</b>	Normal Saline IV Bolus		340mL	<b>340mL</b>		
Epinephrine <b>1mg/mL NEB</b>		5mg	<b>5mL</b>	Ondansetron ODT*		4mg	<b>1 tablet</b>		
Fentanyl IV/IM		17mcg	<b>0.34mL</b>	Sodium Bicarbonate		17mEq	<b>17mL</b>		
Fentanyl IN		25.5mcg	<b>0.51mL</b>				*4 years or older		

<b>18 Kg</b>	<b>Length 94.5 – 107 cm</b>			<b>3 – 4 years</b>			<b>WHITE</b>		
	<b>Normal Vital Signs:</b>		<b>Heart Rate:</b> 80-130	<b>Respirations:</b> 20-30		<b>Systolic BP:</b> >75			
	<b>Cardioversion:</b>		18 joules	36 joules		36 joules			
	<b>Defibrillation:</b>		36 joules	72 joules		72 joules			
	<b>Supraglottic Airway:</b>		igel	Size 2	12 F gastric suction catheter				
	<b>Medication</b>		<b>Dose</b>	<b>mLs</b>	<b>Medication</b>			<b>Dose</b>	<b>mLs</b>
	Adenosine		1.8mg	<b>0.6mL</b>	Glucagon IM			1mg	<b>1mL</b>
	Albuterol NEB		2.5mg	<b>3mL</b>	Glucopaste*			15gm	<b>1 dose</b>
	Amiodarone		90mg	<b>1.8mL</b>	Ketorolac slow IV/IO*			9mg	<b>0.6mL</b>
	Atropine		0.36mg	<b>3.6mL</b>	Ketorolac <b>IM*</b>			9mg	<b>0.6mL</b>
	Calcium Chloride		360mg	<b>3.6mL</b>	Lidocaine 2% IO			9mg	<b>0.45mL</b>
	Dextrose 10% slow IV		90mL	<b>90mL</b>	Midazolam Agitation/Sedation IV/IO			1.8mg	<b>0.36mL</b>
	Diphenhydramine IV/IM		18mg	<b>0.36mL</b>	Midazolam Agitation/Sedation <b>IN/IM</b>			3.6mg	<b>0.72mL</b>
	DuoDote™		1 dose	<b>NA</b>	Midazolam Seizure ≥17mo <b>IN/IM</b>			PediDose	-
	Epinephrine <b>Push Dose</b>		10mcg	<b>1mL</b>	Morphine IV/IM/IO			1.8mg	<b>0.45mL</b>
Epinephrine <b>0.1mg/mL IV</b>		0.18mg	<b>1.8mL</b>	Naloxone IV/IM/IN		1.8mg	<b>1.8mL</b>		
Epinephrine <b>1mg/mL IM</b>		0.18mg	<b>0.18mL</b>	Normal Saline IV Bolus		360mL	<b>360mL</b>		
Epinephrine <b>1mg/mL NEB</b>		5mg	<b>5mL</b>	Ondansetron ODT*		4mg	<b>1 tablet</b>		
Fentanyl IV/IM		18mcg	<b>0.36mL</b>	Sodium Bicarbonate		18mEq	<b>18mL</b>		
Fentanyl IN		27mcg	<b>0.54mL</b>				*4 years or older		

19 Kg	Length 107 – 119.5 cm			5 – 6 years		
	Normal Vital Signs:	Heart Rate: 70-120		Respirations: 15-30		Systolic BP: >80
	Cardioversion:	19 joules		38 joules		38 joules
	Defibrillation:	38 joules		76 joules		76 joules
	Supraglottic Airway:	igel	Size 2	12 F gastric suction catheter		
	Medication	Dose	mLs	Medication	Dose	mLs
	Adenosine	1.9mg	<b>0.63mL</b>	Glucagon IM	1mg	<b>1mL</b>
	Albuterol NEB	5mg	<b>6mL</b>	Glucopaste	15gm	<b>1 dose</b>
	Amiodarone	95mg	<b>1.9mL</b>	Ketorolac slow IV/IO	9.5mg	<b>0.63mL</b>
	Atropine	0.38mg	<b>3.8mL</b>	Ketorolac IM	9.5mg	<b>0.63mL</b>
Calcium Chloride	380mg	<b>3.8mL</b>	Lidocaine 2% IO	9.5mg	<b>0.48mL</b>	
Dextrose 10% slow IV	95mL	<b>95mL</b>	Midazolam Agitation/Sedation IV/IO	1.9mg	<b>0.38mL</b>	
Diphenhydramine IV/IM	19mg	<b>0.38mL</b>	Midazolam Agitation/Sedation IN/IM	3.8mg	<b>0.76mL</b>	
DuoDote™	1 dose	NA	Midazolam Seizure ≥17mo IN/IM	PediDose	-	
Epinephrine Push Dose	10mcg	<b>1mL</b>	Morphine IV/IM/IO	1.9mg	<b>0.48mL</b>	
Epinephrine 0.1mg/mL IV	0.19mg	<b>1.9mL</b>	Naloxone IV/IM/IN	1.9mg	<b>1.9mL</b>	
Epinephrine 1mg/mL IM	0.19mg	<b>0.19mL</b>	Normal Saline IV Bolus	380mL	<b>380mL</b>	
Epinephrine 1mg/mL NEB	5mg	<b>5mL</b>	Ondansetron ODT	4mg	<b>1 tablet</b>	
Fentanyl IV/IM	19mcg	<b>0.38mL</b>	Sodium Bicarbonate	19mEq	<b>19mL</b>	
Fentanyl IN	28.5mcg	<b>0.57mL</b>				

BLUE

20 Kg	Length 107 – 119.5 cm			5 – 6 years		
	Normal Vital Signs:	Heart Rate: 70-120		Respirations: 15-30		Systolic BP: >80
	Cardioversion:	20 joules		40 joules		40 joules
	Defibrillation:	40 joules		80 joules		80 joules
	Supraglottic Airway:	igel	Size 2	12 F gastric suction catheter		
	Medication	Dose	mLs	Medication	Dose	mLs
	Adenosine	2mg	<b>0.67mL</b>	Glucagon IM	1mg	<b>1mL</b>
	Albuterol NEB	5mg	<b>6mL</b>	Glucopaste	15gm	<b>1 dose</b>
	Amiodarone	100mg	<b>2mL</b>	Ketorolac slow IV/IO	10mg	<b>0.67mL</b>
	Atropine	0.4mg	<b>4mL</b>	Ketorolac IM	10mg	<b>0.67mL</b>
Calcium Chloride	400mg	<b>4mL</b>	Lidocaine 2% IO	10mg	<b>0.5mL</b>	
Dextrose 10% slow IV	100mL	<b>100mL</b>	Midazolam Agitation/Sedation IV/IO	2mg	<b>0.4mL</b>	
Diphenhydramine IV/IM	20mg	<b>0.4mL</b>	Midazolam Agitation/Sedation IN/IM	4mg	<b>0.8mL</b>	
DuoDote™	1 dose	NA	Midazolam Seizure ≥17mo IN/IM	PediDose	-	
Epinephrine Push Dose	10mcg	<b>1mL</b>	Morphine IV/IM/IO	2mg	<b>0.5mL</b>	
Epinephrine 0.1mg/mL IV	0.2mg	<b>2mL</b>	Naloxone IV/IM/IN	2mg	<b>2mL</b>	
Epinephrine 1mg/mL IM	0.2mg	<b>0.2mL</b>	Normal Saline IV Bolus	400mL	<b>400mL</b>	
Epinephrine 1mg/mL NEB	5mg	<b>5mL</b>	Ondansetron ODT	4mg	<b>1 tablet</b>	
Fentanyl IV/IM	20mcg	<b>0.4mL</b>	Sodium Bicarbonate	20mEq	<b>20mL</b>	
Fentanyl IN	30mcg	<b>0.6mL</b>				

BLUE

22 Kg	Length 107 – 119.5 cm			5 – 6 years		
	Normal Vital Signs:	Heart Rate: 70-120		Respirations: 15-30		Systolic BP: >80
	Cardioversion:	22 joules		44 joules		44 joules
	Defibrillation:	44 joules		88 joules		88 joules
	Supraglottic Airway:	igel	Size 2	12 F gastric suction catheter		
	Medication	Dose	mLs	Medication	Dose	mLs
	Adenosine	2.2mg	<b>0.73mL</b>	Glucagon IM	1mg	<b>1mL</b>
	Albuterol NEB	5mg	<b>6mL</b>	Glucopaste	15gm	<b>1 dose</b>
	Amiodarone	110mg	<b>2.2mL</b>	Ketorolac slow IV/IO	11mg	<b>0.73mL</b>
	Atropine	0.44mg	<b>4.4mL</b>	Ketorolac IM	11mg	<b>0.73mL</b>
Calcium Chloride	440mg	<b>4.4mL</b>	Lidocaine 2% IO	11mg	<b>0.55mL</b>	
Dextrose 10% slow IV	110mL	<b>110mL</b>	Midazolam Agitation/Sedation IV/IO	2.2mg	<b>0.44mL</b>	
Diphenhydramine IV/IM	22mg	<b>0.44mL</b>	Midazolam Agitation/Sedation IN/IM	4.4mg	<b>0.88mL</b>	
DuoDote™	1 dose	<b>NA</b>	Midazolam Seizure ≥17mo IN/IM	PediDose	<b>-</b>	
Epinephrine Push Dose	10mcg	<b>1mL</b>	Morphine IV/IM/IO	2.2mg	<b>0.55mL</b>	
Epinephrine 0.1mg/mL IV	0.22mg	<b>2.2mL</b>	Naloxone IV/IM/IN	2mg	<b>2mL</b>	
Epinephrine 1mg/mL IM	0.22mg	<b>0.22mL</b>	Normal Saline IV Bolus	440mL	<b>440mL</b>	
Epinephrine 1mg/mL NEB	5mg	<b>5mL</b>	Ondansetron ODT	4mg	<b>1 tablet</b>	
Fentanyl IV/IM	22mcg	<b>0.44mL</b>	Sodium Bicarbonate	22mEq	<b>22mL</b>	
Fentanyl IN	33mcg	<b>0.66mL</b>				

BLUE

<b>24 Kg</b>	<b>Length 119 – 129 cm</b>			<b>7 – 9 years</b>		
	Normal Vital Signs:		Heart Rate: 70-110	Respirations: 15-30		Systolic BP: >80
	Cardioversion:		24 joules	48 joules		48 joules
	Defibrillation:		48 joules	96 joules		96 joules
	Supraglottic Airway:		igel	Size 2.5	12 F gastric suction catheter	
	Medication	Dose	mLs	Medication	Dose	mLs
	Adenosine	2.4mg	<b>0.8mL</b>	Glucagon IM	1mg	<b>1mL</b>
	Albuterol NEB	5mg	<b>6mL</b>	Glucopaste	15gm	<b>1 dose</b>
	Amiodarone	120mg	<b>2.4mL</b>	Ketorolac slow IV/IO	12mg	<b>0.8mL</b>
	Atropine	0.48mg	<b>4.8mL</b>	Ketorolac IM	12mg	<b>0.8mL</b>
Calcium Chloride	480mg	<b>4.8mL</b>	Lidocaine 2% IO	12mg	<b>0.6mL</b>	
Dextrose 10% slow IV	120mL	<b>120mL</b>	Midazolam Agitation/Sedation IV/IO	2.4mg	<b>0.48mL</b>	
Diphenhydramine IV/IM	24mg	<b>0.48mL</b>	Midazolam Agitation/Sedation IN/IM	4.8mg	<b>0.96mL</b>	
DuoDote™	2 doses	<b>NA</b>	Midazolam Seizure ≥17mo IN/IM	PediDose	-	
Epinephrine Push Dose	10mcg	<b>1mL</b>	Morphine IV/IM/IO	2.4mg	<b>0.6mL</b>	
Epinephrine 0.1mg/mL IV	0.24mg	<b>2.4mL</b>	Naloxone IV/IM/IN	2mg	<b>2mL</b>	
Epinephrine 1mg/mL IM	0.24mg	<b>0.24mL</b>	Normal Saline IV Bolus	480mL	<b>480mL</b>	
Epinephrine 1mg/mL NEB	5mg	<b>5mL</b>	Ondansetron ODT	4mg	<b>1 tablet</b>	
Fentanyl IV/IM	24mcg	<b>0.48mL</b>	Sodium Bicarbonate	24mEq	<b>24mL</b>	
Fentanyl IN	36mcg	<b>0.72mL</b>				

**ORANGE**

<b>26 Kg</b>	<b>Length 119 – 129 cm</b>			<b>7 – 9 years</b>		
	Normal Vital Signs:		Heart Rate: 70-110	Respirations: 15-30		Systolic BP: >80
	Cardioversion:		26 joules	52 joules		52 joules
	Defibrillation:		52 joules	104 joules		104 joules
	Supraglottic Airway:		igel	Size 2.5	12 F gastric suction catheter	
	Medication	Dose	mLs	Medication	Dose	mLs
	Adenosine	2.6mg	<b>0.87mL</b>	Glucagon IM	1mg	<b>1mL</b>
	Albuterol NEB	5mg	<b>6mL</b>	Glucopaste	15gm	<b>1 dose</b>
	Amiodarone	130mg	<b>2.6mL</b>	Ketorolac slow IV/IO	13mg	<b>0.87mL</b>
	Atropine	0.5mg	<b>5mL</b>	Ketorolac IM	13mg	<b>0.87mL</b>
Calcium Chloride	520mg	<b>5.2mL</b>	Lidocaine 2% IO	13mg	<b>0.65mL</b>	
Dextrose 10% slow IV	130mL	<b>130mL</b>	Midazolam Agitation/Sedation IV/IO	2.6mg	<b>0.52mL</b>	
Diphenhydramine IV/IM	26mg	<b>0.52mL</b>	Midazolam Agitation/Sedation IN/IM	5mg	<b>1mL</b>	
DuoDote™	2 doses	<b>NA</b>	Midazolam Seizure ≥17mo IN/IM	PediDose	-	
Epinephrine Push Dose	10mcg	<b>1mL</b>	Morphine IV/IM/IO	2.6mg	<b>0.65mL</b>	
Epinephrine 0.1mg/mL IV	0.26mg	<b>2.6mL</b>	Naloxone IV/IM/IN	2mg	<b>2mL</b>	
Epinephrine 1mg/mL IM	0.26mg	<b>0.26mL</b>	Normal Saline IV Bolus	520mL	<b>520mL</b>	
Epinephrine 1mg/mL NEB	5mg	<b>5mL</b>	Ondansetron ODT	4mg	<b>1 tablet</b>	
Fentanyl IV/IM	26mcg	<b>0.52mL</b>	Sodium Bicarbonate	26mEq	<b>26mL</b>	
Fentanyl IN	39mcg	<b>0.78mL</b>				

**ORANGE**

28 Kg	Length 119 – 129 cm			7 – 9 years		
	Normal Vital Signs:		Heart Rate: 70-110	Normal Vital Signs:		Heart Rate: 70-110
	Cardioversion:		28 joules	56 joules		56 joules
	Defibrillation:		56 joules	112 joules		112 joules
	Supraglottic Airway:		igel	Size 2.5	12 F gastric suction catheter	
	Medication	Dose	mLs	Medication	Dose	mLs
	Adenosine	2.8mg	<b>0.93mL</b>	Glucagon IM	1mg	<b>1mL</b>
	Albuterol NEB	5mg	<b>6mL</b>	Glucopaste	15gm	<b>1 dose</b>
	Amiodarone	140mg	<b>2.8mL</b>	Ketorolac slow IV/IO	14mg	<b>0.93mL</b>
	Atropine	0.5mg	<b>5mL</b>	Ketorolac IM	14mg	<b>0.93mL</b>
Calcium Chloride	560mg	<b>5.6mL</b>	Lidocaine 2% IO	14mg	<b>0.7mL</b>	
Dextrose 10% slow IV	140mL	<b>140mL</b>	Midazolam Agitation/Sedation IV/IO	2.8mg	<b>0.56mL</b>	
Diphenhydramine IV/IM	28mg	<b>0.56mL</b>	Midazolam Agitation/Sedation IN/IM	5mg	<b>1mL</b>	
DuoDote™	2 doses	<b>NA</b>	Midazolam Seizure ≥17mo IN/IM	PediDose	-	
Epinephrine Push Dose	10mcg	<b>1mL</b>	Morphine IV/IM/IO	2.8mg	<b>0.7mL</b>	
Epinephrine 0.1mg/mL IV	0.28mg	<b>2.8mL</b>	Naloxone IV/IM/IN	2mg	<b>2mL</b>	
Epinephrine 1mg/mL IM	0.28mg	<b>0.28mL</b>	Normal Saline IV Bolus	560mL	<b>560mL</b>	
Epinephrine 1mg/mL NEB	5mg	<b>5mL</b>	Ondansetron ODT	4mg	<b>1 tablet</b>	
Fentanyl IV/IM	28mcg	<b>0.56mL</b>	Sodium Bicarbonate	28mEq	<b>28mL</b>	
Fentanyl IN	42mcg	<b>0.84mL</b>				

ORANGE



30 Kg	Length 129 – 141.5 cm			10 – 12 years		
	Normal Vital Signs:	Heart Rate: 60-100	Respirations: 15-20	Systolic BP: >90		
	Cardioversion:	30 joules	60 joules	60 joules		
	Defibrillation:	60 joules	120 joules	120 joules		
	Supraglottic Airway:	igel	Size 2.5	12 F gastric suction catheter		
	Medication	Dose	mLs	Medication	Dose	mLs
	Adenosine	3mg	1mL	Glucagon IM	1mg	1mL
	Albuterol NEB	5mg	6mL	Glucopaste	15gm	1 dose
	Amiodarone	150mg	3mL	Ketorolac slow IV/IO	15mg	1mL
	Atropine	0.5mg	5mL	Ketorolac IM	15mg	1mL
Calcium Chloride	600mg	6mL	Lidocaine 2% IO	15mg	0.75mL	
Dextrose 10% slow IV	150mL	150mL	Midazolam Agitation/Sedation IV/IO	3mg	0.6mL	
Diphenhydramine IV/IM	30mg	0.6mL	Midazolam Agitation/Sedation IN/IM	5mg	1mL	
DuoDote™	2 doses	NA	Midazolam Seizure ≥17mo IN/IM	PediDose	-	
Epinephrine Push Dose	10mcg	1mL	Morphine IV/IM/IO	3mg	0.75mL	
Epinephrine 0.1mg/mL	0.3mg	3mL	Naloxone IV/IM/IN	2mg	2mL	
IV						
Epinephrine 1mg/mL IM	0.3mg	0.3mL	Normal Saline IV Bolus	600mL	600mL	
Epinephrine 1mg/mL	5mg	5mL	Ondansetron ODT	4mg	1 tablet	
NEB						
Fentanyl IV/IM	30mcg	0.6mL	Sodium Bicarbonate	30mEq	30mL	
Fentanyl IN	45mcg	0.9mL				

GREEN

32 Kg	Length 129 – 141.5 cm			10 – 12 years		
	Normal Vital Signs:	Heart Rate: 60-100	Respirations: 15-20	Systolic BP: >90		
	Cardioversion:	32 joules	64 joules	64 joules		
	Defibrillation:	64 joules	128 joules	128 joules		
	Supraglottic Airway:	igel	Size 2.5	12 F gastric suction catheter		
	Medication	Dose	mLs	Medication	Dose	mLs
	Adenosine	3.2mg	1.07mL	Glucagon IM	1mg	1mL
	Albuterol NEB	5mg	6mL	Glucopaste	15gm	1 dose
	Amiodarone	160mg	3.2mL	Ketorolac slow IV/IO	15mg	1mL
	Atropine	0.5mg	5mL	Ketorolac IM	15mg	1mL
Calcium Chloride	640mg	6.4mL	Lidocaine 2% IO	16mg	0.8mL	
Dextrose 10% slow IV	160mL	160mL	Midazolam Agitation/Sedation IV/IO	3.2mg	0.64mL	
Diphenhydramine IV/IM	32mg	0.64mL	Midazolam Agitation/Sedation IN/IM	5mg	1mL	
DuoDote™	2 doses	NA	Midazolam Seizure ≥17mo IN/IM	PediDose	-	
Epinephrine Push Dose	10mcg	1mL	Morphine IV/IM/IO	3.2mg	0.8mL	
Epinephrine 0.1mg/mL IV	0.32mg	3.2mL	Naloxone IV/IM/IN	2mg	2mL	
Epinephrine 1mg/mL IM	0.32mg	0.32mL	Normal Saline IV Bolus	640mL	640mL	
Epinephrine 1mg/mL NEB	5mg	5mL	Ondansetron ODT	4mg	1 tablet	
Fentanyl IV/IM	32mcg	0.64mL	Sodium Bicarbonate	32mEq	32mL	
Fentanyl IN	48mcg	0.96mL				

GREEN

34 Kg	Length 129 – 141.5 cm			10 – 12 years		
	Normal Vital Signs:	Heart Rate: 60-100	Respirations: 15-20	Systolic BP: >90		
	Cardioversion:	34 joules	68 joules	68 joules		
	Defibrillation:	68 joules	136 joules	136 joules		
	Supraglottic Airway:	igel	Size 2.5	12 F gastric suction catheter		
	Medication	Dose	mLs	Medication	Dose	mLs
	Adenosine	3.4mg	1.13mL	Glucagon IM	1mg	1mL
	Albuterol NEB	5mg	6mL	Glucopaste	15gm	1 dose
	Amiodarone	170mg	3.4mL	Ketorolac slow IV/IO	15mg	1mL
	Atropine	0.5mg	5mL	Ketorolac IM	15mg	1mL
Calcium Chloride	680mg	6.8mL	Lidocaine 2% IO	17mg	0.85mL	
Dextrose 10% slow IV	170mL	170mL	Midazolam Agitation/Sedation IV/IO	3.4mg	0.68mL	
Diphenhydramine IV/IM	34mg	0.68mL	Midazolam Agitation/Sedation IN/IM	5mg	1mL	
DuoDote™	2 doses	NA	Midazolam Seizure ≥17mo IN/IM	PediDose	-	
Epinephrine Push Dose	10mcg	1mL	Morphine IV/IM/IO	3.4mg	0.85mL	
Epinephrine 0.1mg/mL IV	0.34mg	3.4mL	Naloxone IV/IM/IN	2mg	2mL	
Epinephrine 1mg/mL IM	0.34mg	0.34mL	Normal Saline IV Bolus	680mL	680mL	
Epinephrine 1mg/mL NEB	5mg	5mL	Ondansetron ODT	4mg	1 tablet	
Fentanyl IV/IM	34mcg	0.68mL	Sodium Bicarbonate	34mEq	34mL	
Fentanyl IN	50mcg	1mL				

GREEN

36 Kg	Length 129 – 141.5 cm			10 – 12 years		
	Normal Vital Signs:	Heart Rate: 60-100	Respirations: 15-20	Systolic BP: >90		
	Cardioversion:	36 joules	72 joules	72 joules		
	Defibrillation:	72 joules	144 joules	144 joules		
	Supraglottic Airway:	igel	Size 2.5	12 F gastric suction catheter		
	Medication	Dose	mLs	Medication	Dose	mLs
	Adenosine	3.6mg	1.2mL	Glucagon IM	1mg	1mL
	Albuterol NEB	5mg	6mL	Glucopaste	15gm	1 dose
	Amiodarone	180mg	3.6mL	Ketorolac slow IV/IO	15mg	1mL
	Atropine	0.5mg	5mL	Ketorolac IM	15mg	1mL
Calcium Chloride	720mg	7.2mL	Lidocaine 2% IO	18mg	0.9mL	
Dextrose 10% slow IV	180mL	180mL	Midazolam Agitation/Sedation IV/IO	3.6mg	0.72mL	
Diphenhydramine IV/IM	36mg	0.72mL	Midazolam Agitation/Sedation IN/IM	5mg	1mL	
DuoDote™	2 doses	NA	Midazolam Seizure ≥17mo IN/IM	PediDose	-	
Epinephrine Push Dose	10mcg	1mL	Morphine IV/IM/IO	3.6mg	0.9mL	
Epinephrine 0.1mg/mL IV	0.36mg	3.6mL	Naloxone IV/IM/IN	2mg	2mL	
Epinephrine 1mg/mL IM	0.36mg	0.36mL	Normal Saline IV Bolus	720mL	720mL	
Epinephrine 1mg/mL NEB	5mg	5mL	Ondansetron ODT	4mg	1 tablet	
Fentanyl IV/IM	36mcg	0.72mL	Sodium Bicarbonate	36mEq	36mL	
Fentanyl IN	50mcg	1mL				

GREEN

**Longer than the Length-Based Resuscitation Tape**

<b>Normal Vital Signs:</b>	<b>Heart Rate:</b> 50-99	<b>Respirations:</b> 12-20	<b>Systolic BP:</b> >100
<b>Cardioversion:</b>	120 joules	150 joules	200 joules
<b>Defibrillation:</b>	200 joules	200 joules	200 joules
<b>Supraglottic Airway:</b>	igel	30-60 kg	Size 3 (12 F gastric suction catheter)
		50-90 kg	Size 4 (12 F gastric suction catheter)
		>90 kg	Size 5 (12 F gastric suction catheter)

**ADULT**

**BLACK**

Medication	Dose	mLs	Medication	Dose	mLs
Adenosine	6 or 12mg	<b>2 or 4mL</b>	Ketorolac IM	30mg	<b>2mL</b>
Albuterol NEB	5mg	<b>6mL</b>	Lidocaine 2% IO	40mg	<b>2mL</b>
Amiodarone	300mg	<b>6mL</b>	Midazolam Agitation/Sedation IV/IO <sup>3</sup>	5mg	<b>1mL</b>
Aspirin	325mg	<b>1 tablet</b>	Midazolam Agitation/Sedation IM/IN <sup>3</sup>	5mg	<b>1mL</b>
Atropine	1mg	<b>10mL</b>	Midazolam Seizure >14y IV/IO <sup>3</sup>	5mg	<b>1mL</b>
Calcium Chloride	1gm	<b>10mL</b>	Midazolam Seizure IM/IN <sup>3</sup>	10mg	<b>2mL</b>
Dextrose 10% slow IV <sup>1</sup>	125-250mL	<b>125-250mL</b>	Morphine IV/IM/IO <sup>4</sup>	4mg	<b>1mL</b>
Diphenhydramine IV/IM	50mg	<b>1mL</b>	Naloxone IV	0.8-2mg	<b>0.8-2mL</b>
DuoDote™	1-3 doses	<b>NA</b>	Naloxone IM	2mg	<b>2mL</b>
Epinephrine <b>Push Dose</b>	10mcg	<b>1mL</b>	Naloxone IN	2-4mg	<b>2-4mL</b>
Epinephrine <b>0.1mg/mL IV</b>	1mg	<b>10mL</b>	Nitroglycerin <sup>5</sup>	0.4mg	<b>1 dose</b>
Epinephrine <b>1mg/mL IM</b>	0.5mg	<b>0.5mL</b>	Normal Saline IV Bolus	1L	<b>1L</b>
Epinephrine <b>1mg/mL NEB</b>	5mg	<b>5mL</b>	Olanzapine ODT <sup>6</sup>	10mg	<b>1 tablet</b>
Fentanyl IV/IM/IN <sup>2</sup>	50mcg	<b>1mL</b>	Ondansetron ODT	4mg	<b>1 tablet</b>
Glucagon IM	1mg	<b>1mL</b>	Ondansetron IV/IM <sup>7</sup>	4mg	<b>2mL</b>
Glucopaste	15gm	<b>1 dose</b>	Sodium Bicarbonate	50mEq	<b>50mL</b>
Ketorolac slow IV/IO	15mg	<b>1mL</b>	Tranexamic Acid (TXA) <sup>8</sup>	1gm	<b>50/100mL</b>

**NOTES:**

- <sup>1</sup> Dextrose: **125mL IV** and reassess, if patient remains symptomatic, repeat x1 for a total of 250mL
- <sup>2</sup> Fentanyl: **50mcg (1mL) slow IV push or IM/IN**, repeat every 5min prn, maximum total dose prior to Base Contact 150mcg
- <sup>3</sup> Midazolam:
  - Agitated Delirium / Behavioral / Psychiatric Crisis  
**5mg (1mL) IM/IN/IV**, repeat x1 in 5 min prn, maximum total dose prior to Base contact 10mg for Agitated Delirium (Psychiatric Crisis requires Base order prior to any medication administered)
  - Cardiac Dysrhythmia - sedation prior to synchronized cardioversion / transcutaneous pacing  
**5mg (1mL) slow IV/IO push/IM/IN**, may repeat X1 in 5 min prn, maximum total dose prior to Base contact 10mg
  - Seizure - Active  
**10 mg (2mL) IN/IM**, contact Base for additional dosing, with Base Contact may repeat x1 to a maximum of 20mg  
**5 mg (1mL) IV/IO**, if existing vascular access, repeat x1 in 2 min prn
- <sup>4</sup> Morphine: **4mg (1mL) slow IV/IO push or IM**, repeat every 5min prn, maximum total dose prior to Base contact 12mg
- <sup>5</sup> Nitroglycerin
  - Chest Pain – Suspected Cardiac / Chest Pain – STEMI  
**0.4 mg SL** prn, repeat every 5min prn x2, total 3 doses, hold if SBP < 100mmHg or patient has taken sexually enhancing medication within 48 hours
  - Pulmonary Edema / CHF  
**0.4mg SL**, for SBP ≥ 100mmHg; **0.8mg SL**, for SBP ≥ 150mmHg; **1.2mg SL**, for SBP ≥ 200mmHg  
Repeat every 3-5 min prn x2 for persistent dyspnea, assess blood pressure prior to each administration and determine subsequent dose base on SBP as listed above. Hold if SBP
- <sup>6</sup> Olanzapine ODT given once
- <sup>7</sup> Ondansetron IV/IM – only for 15 years of age or older
- <sup>8</sup> Tranexamic Acid (TXA) – 1gm(10mL) dilute in 50 or 100mL of normal saline infused over 10 minutes