

## 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









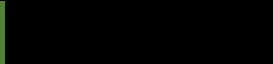
Diphenhydramine	50mg/mL	1mg/kg	50mg
DuoDote™ (Pralidoxime Chloride)	Auto injector	1 DuoDote™	3 DuoDotes™
Epinephrine ( <b>Push Dose</b> ) 0.1mg/mL IV	0.01mg/mL	0.1mL/kg every 1-5 mins	10mcg (1 mL)

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.

Epinephrine 0.1mg/mL IV	0.1mg/mL	0.01mg/kg	1mg
Epinephrine 1mg/mL IM	1mg/mL	0.01mg/kg	0.5mg
Epinephrine 1mg/mL Nebulized (NEB)	1mg/mL	2.5mg <1 year; 5mg ≥1 year	5mg (5mL)
Fentanyl IV/IM	50mcg/mL	1mcg/kg	50mcg
Fentanyl IN	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
Hydroxocobalamin	25mg/mL	70mg/kg	5g
Ketorolac slow IV/IO push	15mg/mL	0.5mg/kg	15mg
Ketorolac IM (Adult)	15mg/mL	1mg/kg	30mg
Ketorolac IM (Pediatric)	15mg/mL	0.5mg/kg ≥4 years	15mg
Lidocaine 2% (IO ONLY)	20mg/mL	0.5 mg/kg	40mg
Midazolam all indications IV/IO	5mg/mL	0.1mg/kg	5mg

MEDICATION	FORMULATION	DOSAGE	Maximum Single Dose
Midazolam Agitation/Sedation <b>IN/IM</b>	5mg/mL	0.2mg/kg	5 or 10mg
Midazolam Seizure 0-11 mo <b>IN/IM</b>	5mg/mL	0.2mg/kg	2.5mg
Midazolam Seizure ≥12mo <b>IN/IM</b>	5mg/mL	PediDOSE* 12-16 months: 1.25mg 17months-5 years: 2.5mg 6-11 years: 5mg ≥12 years: 10mg	1.25mg, 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-4mg
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	0-11 months	12-16 months	17 months – 5 years	6-11 years	≥12 years
Midazolam Dose IN/IM	0.2mg/kg	1.25 mg	2.5 mg	5 mg	10 mg
Volume IN/IM	See color code	0.25 mL	0.5 mL	1mL	2mL
If age is unknown				 	   

For patients with severe growth restriction (e.g., genetic disorder, severe malnutrition), administer weight-based dose per color code.

## COLOR CODE DRUG DOSES:

3 Kg	Length 47 – 59.5 cm			Less than 3 months		
	Normal Vital Signs:		Heart Rate: 100-180	Respirations: 30-60		Systolic BP: >60
	Cardioversion:		3 joules	6 joules		6 joules
	Defibrillation:		6 joules	12 joules		12 joules
	Supraglottic Airway:		igel	Size 1	No gastric suction catheter	
	Medication	Dose	mLs	Medication	Dose	mLs
	Adenosine	0.3mg	0.1mL	Fentanyl IV/IM	3mcg	0.06mL
	Albuterol NEB	2.5mg	3mL	Fentanyl IN	4.5mcg	0.09mL
	Amiodarone	15mg	0.3mL	Glucagon IM	0.5mg	0.5mL
	Atropine	0.06mg	0.6mL	Hydroxocobalamin IV/IO**	210mg	8.4mL
	Calcium Chloride*	60mg	0.6mL	Lidocaine 2% IO	1.5mg	0.08mL
	Dextrose 10% slow IV	15mL	15mL	Midazolam Agitation/Sedation IV/IO	0.3mg	0.06mL
	Diphenhydramine IV/IM	3mg	0.06mL	Midazolam Agitation/Sedation IN/IM	0.6mg	0.12mL
DuoDote™	1 dose	NA	Midazolam Seizure 0- 11mo IN/IM	0.6mg	0.12mL	
Epinephrine Push Dose	3mcg	0.3mL	Morphine IV/IM/IO	0.3mg	0.08mL	
Epinephrine 0.1mg/mL IV	0.03mg	0.3mL	Naloxone IV/IM/IN	0.3mg	0.3mL	
Epinephrine 1mg/mL IM	0.03mg	0.03mL	Normal Saline IV Bolus	60mL	60mL	
Epinephrine 1mg/mL NEB	2.5mg	2.5mL	Sodium Bicarbonate*	3mEq	3mL	
*Dilute 1:1 with NS						
**Reconstitute 5g vial in 200ml NS						

4 Kg	Length 47 – 59.5 cm			Less than 3 months		
	Normal Vital Signs:		Heart Rate: 100-180	Respirations: 30-60		Systolic BP: >60
	Cardioversion:		4 joules	8 joules		8 joules
	Defibrillation:		8 joules	16 joules		16 joules
	Supraglottic Airway:		igel	Size 1	No gastric suction catheter	
	Medication	Dose	mLs	Medication	Dose	mLs
	Adenosine	0.4mg	0.13mL	Fentanyl IV/IM	4mcg	0.08mL
	Albuterol NEB	2.5mg	3mL	Fentanyl IN	6mcg	0.12mL
	Amiodarone	20mg	0.4mL	Glucagon IM	0.5mg	0.5mL
	Atropine	0.08mg	0.8mL	Hydroxocobalamin IV/IO**	280mg	11.2mL
	Calcium Chloride*	80mg	0.8mL	Lidocaine 2% IO	2mg	0.1mL
	Dextrose 10% slow IV	20mL	20mL	Midazolam Agitation/Sedation IV/IO	0.4mg	0.08mL
	Diphenhydramine IV/IM	4mg	0.08mL	Midazolam Agitation/Sedation IN/IM	0.8mg	0.16mL
DuoDote™	1 dose	NA	Midazolam Seizure 0-11mo IN/IM	0.8mg	0.16mL	
Epinephrine Push Dose	4mcg	0.4mL	Morphine IV/IM/IO	0.4mg	0.1mL	
Epinephrine 0.1mg/mL IV	0.04mg	0.4mL	Naloxone IV/IM/IN	0.4mg	0.4mL	
Epinephrine 1mg/mL IM	0.04mg	0.04mL	Normal Saline IV Bolus	80mL	80mL	
Epinephrine 1mg/mL NEB	2.5mg	2.5mL	Sodium Bicarbonate*	4mEq	4mL	
*Dilute 1:1 with NS						
**Reconstitute 5g vial in 200ml NS						

5Kg	Length 47 – 59.5 cm			Less than 3 months		
	Normal Vital Signs:		Heart Rate: 100-180	Respirations: 30-60		Systolic BP: >60
	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	Hydroxocobalamin IV/IO**	350mg	14mL
	Calcium Chloride*	100mg	1mL	Lidocaine 2% IO	2.5mg	0.12mL
	Dextrose 10% slow IV	25mL	25mL	Midazolam Agitation/Sedation IV/IO	0.5mg	0.1mL
Diphenhydramine IV/IM	5mg	0.1mL	Midazolam Agitation/Sedation IN/IM	1mg	0.2mL	
DuoDote™	1 dose	NA	Midazolam Seizure 0-11mo IN/IM	1mg	0.2mL	
Epinephrine Push Dose	5mcg	0.5mL	Morphine IV/IM/IO	0.5mg	0.12mL	
Epinephrine 0.1mg/mL IV	0.05mg	0.5mL	Naloxone IV/IM/IN	0.5mg	0.5mL	
Epinephrine 1mg/mL IM	0.05mg	0.05mL	Normal Saline IV Bolus	100mL	100mL	
Epinephrine 1mg/mL NEB	2.5mg	2.5mL	Sodium Bicarbonate*	5mEq	5mL	
*Dilute 1:1 with NS						
**Reconstitute 5g vial in 200ml NS						

GREY

6 Kg	Length 59.5 – 62 cm			3 – 4 months				
	Normal Vital Signs:		Heart Rate: 100-160	Respirations: 25-40		Systolic BP: >70		
	Cardioversion:		6 joules	12 joules		12 joules		
	Defibrillation:		12 joules	24 joules		24 joules		
	Supraglottic Airway:		igel	Size 1.5	10 F gastric suction catheter			
	Medication		Dose	mLs	Medication		Dose	mLs
	Adenosine		0.6mg	0.2mL	Fentanyl IV/IM		6mcg	0.12mL
	Albuterol NEB		2.5mg	3mL	Fentanyl IN		9mcg	0.18mL
	Amiodarone		30mg	0.6mL	Glucagon IM		0.5mg	0.5mL
	Atropine		0.12mg	1.2mL	Hydroxocobalamin IV/IO**		420mg	16.8mL
	Calcium Chloride*		120mg	1.2mL	Lidocaine 2% IO		3mg	0.15mL
	Dextrose 10% slow IV		30mL	30mL	Midazolam Agitation/Sedation IV/IO		0.6mg	0.12mL
	Diphenhydramine IV/IM		6mg	0.12mL	Midazolam Agitation/Sedation IN/IM		1.2mg	0.24mL
	DuoDote™		1 dose	NA	Midazolam Seizure 0-11mo IN/IM		1.2mg	0.24mL
Epinephrine Push Dose		6mcg	0.6mL	Morphine IV/IM/IO		0.6mg	0.15mL	
Epinephrine 0.1mg/mL IV		0.06mg	0.6mL	Naloxone IV/IM/IN		0.6mg	0.6mL	
Epinephrine 1mg/mL IM		0.06mg	0.06mL	Normal Saline IV Bolus		120mL	120mL	
Epinephrine 1mg/mL NEB		2.5mg	2.5mL	Sodium Bicarbonate*		6mEq	6mL	
*Dilute 1:1 with NS								
**Reconstitute 5g vial in 200ml NS								
PINK								

7 Kg	Length 62 – 66 cm			5 – 6 months			PINK						
	Normal Vital Signs:		Heart Rate: 100-160		Respirations: 25-40			Systolic BP: >70					
	Cardioversion:		7 joules		14 joules			14 joules					
	Defibrillation:		14 joules		28 joules			28 joules					
	Supraglottic Airway:		igel		Size 1.5			10 F gastric suction catheter					
	Medication		Dose		mLs			Medication		Dose		mLs	
	Adenosine		0.7mg		0.23mL			Fentanyl IV/IM		7mcg		0.14mL	
	Albuterol NEB		2.5mg		3mL			Fentanyl IN		10.5mcg		0.21mL	
	Amiodarone		35mg		0.7mL			Glucagon IM		0.5mg		0.5mL	
	Atropine		0.14mg		1.4mL			Hydroxocobalamin IV/IO**		490mg		19.6mL	
	Calcium Chloride*		140mg		1.4mL			Lidocaine 2% IO		3.5mg		0.18mL	
	Dextrose 10% slow IV		35mL		35mL			Midazolam Agitation/Sedation IV/IO		0.7mg		0.14mL	
	Diphenhydramine IV/IM		7mg		0.14mL			Midazolam Agitation/Sedation IN/IM		1.4mg		0.28mL	
DuoDote™		1 dose		NA		Midazolam Seizure 0-11mo IN/IM		1.4mg		0.28mL			
Epinephrine Push Dose		7mcg		0.7mL		Morphine IV/IM/IO		0.7mg		0.18mL			
Epinephrine 0.1mg/mL IV		0.07mg		0.7mL		Naloxone IV/IM/IN		0.7mg		0.7mL			
Epinephrine 1mg/mL IM		0.07mg		0.07mL		Normal Saline IV Bolus		140mL		140mL			
Epinephrine 1mg/mL NEB		2.5mg		2.5mL		Sodium Bicarbonate*		7mEq		7mL			
*Dilute 1:1 with NS													
**Reconstitute 5g vial in 200ml NS													

8 Kg	Length 66 – 69.5 cm			7 - 8 months		
	Normal Vital Signs:		Heart Rate: 100-160	Respirations: 20-40	Systolic BP: >70	
	Cardioversion:		8 joules	16 joules	16 joules	
	Defibrillation:		16 joules	32 joules	32 joules	
	Supraglottic Airway:		igel	Size 1.5	10 F gastric suction catheter	
	Medication		Dose	mLs	Medication	
	Adenosine		0.8mg	0.27mL	Fentanyl IV/IM	
	Albuterol NEB		2.5mg	3mL	Fentanyl IN	
	Amiodarone		40mg	0.8mL	Glucagon IM	
	Atropine		0.16mg	1.6mL	Hydroxocobalamin IV/IO**	
	Calcium Chloride*		160mg	1.6mL	Lidocaine 2% IO	
	Dextrose 10% slow IV		40mL	40mL	Midazolam Agitation/Sedation IV/IO	
	Diphenhydramine IV/IM		8mg	0.16mL	Midazolam Agitation/SedationIN/IM	
	DuoDote™		1 dose	NA	Midazolam Seizure 0-11mo IN/IM	
	Epinephrine Push Dose		8mcg	0.8mL	Midazolam Seizure ≥12mo IN/IM	
Epinephrine 0.1mg/mL IV		0.08mg	0.8mL	Morphine IV/IM/IO		
Epinephrine 1mg/mL IM		0.08mg	0.08mL	Naloxone IV/IM/IN		
Epinephrine 1mg/mL NEB		2.5mg	2.5mL	Normal Saline IV Bolus		
				Sodium Bicarbonate*		

9 Kg	Length 69 – 73 cm			9 – 10 months				
	Normal Vital Signs:		Heart Rate: 100-160	Respirations: 20-40		Systolic BP: >70		
	Cardioversion:		9 joules	18 joules		18 joules		
	Defibrillation:		18 joules	36 joules		36 joules		
	Supraglottic Airway:		igel	Size 1.5	10 F gastric suction catheter			
	Medication		Dose	mLs	Medication		Dose	mLs
	Adenosine		0.9mg	0.3mL	Fentanyl IV/IM		9mcg	0.18mL
	Albuterol NEB		2.5mg	3mL	Fentanyl IN		13.5mcg	0.27mL
	Amiodarone		45mg	0.9mL	Glucagon IM		0.5mg	0.5mL
	Atropine		0.18mg	1.8mL	Hydroxocobalamin IV/IO**		630mg	25.2mL
	Calcium Chloride*		180mg	1.8mL	Lidocaine 2% IO		4.5mg	0.22mL
	Dextrose 10% slow IV		45mL	45mL	Midazolam Agitation/Sedation IV/IO		0.9mg	0.18mL
	Diphenhydramine IV/IM		9mg	0.18mL	Midazolam Agitation/SedationIN/IM		1.8mg	0.36mL
	DuoDote™		1 dose	NA	Midazolam Seizure 0-11mo IN/IM		1.8mg	0.36mL
	Epinephrine Push Dose		9mcg	0.9mL	Midazolam Seizure ≥12mo IN/IM		PediDOSE	-
Epinephrine 0.1mg/mL IV		0.09mg	0.9mL	Morphine IV/IM/IO		0.9mg	0.22mL	
Epinephrine 1mg/mL IM		0.09mg	0.09mL	Naloxone IV/IM/IN		0.9mg	0.9mL	
Epinephrine 1mg/mL NEB		2.5mg	2.5mL	Normal Saline IV Bolus		180mL	180mL	
				Sodium Bicarbonate*		9mEq	9mL	
*Dilute 1:1 with NS								
**Reconstitute 5g vial in 200ml NS								

RED

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	0.33mL	Fentanyl IV/IM	10mcg	0.2mL
	Albuterol NEB	2.5mg	3mL	Fentanyl IN	15mcg	0.3mL
	Amiodarone	50mg	1mL	Glucagon IM	1mg	1mL
	Atropine	0.2mg	2mL	Hydroxocobalamin IV/IO**	700mg	28mL
	Calcium Chloride	200mg	2mL	Lidocaine 2% IO	5mg	0.25mL
	Dextrose 10% slow IV	50mL	50mL	Midazolam Agitation/Sedation IV/IO	1mg	0.2mL
	Diphenhydramine IV/IM	10mg	0.2mL	Midazolam Agitation/Sedation IN/IM	2mg	0.4mL
DuoDote™	1 dose	NA	Midazolam Seizure 0-11mo IN/IM	2mg	0.4mL	
Epinephrine Push Dose	10mcg	1mL	Midazolam Seizure ≥12mo IN/IM	PediDOSE	-	
Epinephrine 0.1mg/mL IV	0.1mg	1mL	Morphine IV/IM/IO	1mg	0.25mL	
Epinephrine 1mg/mL IM	0.1mg	0.1mL	Naloxone IV/IM/IN	1mg	1mL	
Epinephrine 1mg/mL NEB	5mg	5mL	Normal Saline IV Bolus	200mL	200mL	
			Sodium Bicarbonate*	10mEq	10mL	

PURPLE

\*Dilute 1:1 with NS

\*\*Reconstitute 5g vial in 200ml 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	0.37mL	Fentanyl IV/IM	11mcg	0.22mL
	Albuterol NEB	2.5mg	3mL	Fentanyl IN	16.5mcg	0.33mL
	Amiodarone	55mg	1.1mL	Glucagon IM	1mg	1mL
	Atropine	0.22mg	2.2mL	Hydroxocobalamin IV/IO**	770mg	30.8mL
	Calcium Chloride	220mg	2.2mL	Lidocaine 2% IO	5.5mg	0.28mL
Dextrose 10% slow IV	55mL	55mL	Midazolam Agitation/Sedation IV/IO	1.1mg	0.22mL	
Diphenhydramine IV/IM	11mg	0.22mL	Midazolam Agitation/Sedation IN/IM	2.2mg	0.44mL	
DuoDote™	1 dose	NA	Midazolam Seizure 0-11mo IN/IM	2.2mg	0.44mL	
Epinephrine Push Dose	10mcg	1mL	Midazolam Seizure ≥12mo IN/IM	PediDOSE	-	
Epinephrine 0.1mg/mL IV	0.11mg	1.1mL	Morphine IV/IM/IO	1.1mg	0.28mL	
Epinephrine 1mg/mL IM	0.11mg	0.11mL	Naloxone IV/IM/IN	1.1mg	1.1mL	
Epinephrine 1mg/mL NEB	5mg	5mL	Normal Saline IV Bolus	220mL	220mL	
			Sodium Bicarbonate	11mEq	11mL	

\*\*Reconstitute 5g vial in 200ml NS



12 Kg	Length 83 – 94.5 cm			19 -35 months		
	Normal Vital Signs:		Heart Rate: 90-140	Respirations: 20-30		Systolic BP: >70
	Cardioversion:		12 joules	24 joules		24 joules
	Defibrillation:		24 joules	48 joules		48 joules
	Supraglottic Airway:		igel	Size 2	12 F gastric suction catheter	
	Medication	Dose	mLs	Medication	Dose	mLs
	Adenosine	1.2mg	0.4mL	Fentanyl IV/IM	12mcg	0.24mL
	Albuterol NEB	2.5mg	3mL	Fentanyl IN	18mcg	0.36mL
	Amiodarone	60mg	1.2mL	Glucagon IM	1mg	1mL
	Atropine	0.24mg	2.4mL	Hydroxocobalamin IV/IO**	840mg	33.6mL
	Calcium Chloride	240mg	2.4mL	Lidocaine 2% IO	6mg	0.3mL
	Dextrose 10% slow IV	60mL	60mL	Midazolam Agitation/Sedation IV/IO	1.2mg	0.24mL
Diphenhydramine IV/IM	12mg	0.24mL	Midazolam Agitation/Sedation IN/IM	2.4mg	0.48mL	
DuoDote™	1 dose	NA	Midazolam Seizure ≥12mo IN/IM	PediDose	-	
Epinephrine Push Dose	10mcg	1mL	Morphine IV/IM/IO	1.2mg	0.3mL	
Epinephrine 0.1mg/mL IV	0.12mg	1.2mL	Naloxone IV/IM/IN	1.2mg	1.2mL	
Epinephrine 1mg/mL IM	0.12mg	0.12mL	Normal Saline IV Bolus	240mL	240mL	
Epinephrine 1mg/mL NEB	5mg	5mL	Sodium Bicarbonate	12mEq	12mL	

YELLOW

\*\*Reconstitute 5g vial in 200ml NS

13 Kg	Length 83 – 94.5 cm			19 -35 months				
	Normal Vital Signs:		Heart Rate: 90-140	Respirations: 20-30		Systolic BP: >70		
	Cardioversion:		13 joules	26 joules		26 joules		
	Defibrillation:		26 joules	52 joules		52 joules		
	Supraglottic Airway:		igel	Size 2	12 F gastric suction catheter			
	Medication		Dose	mLs	Medication		Dose	mLs
	Adenosine		1.3mg	0.43mL	Fentanyl IV/IM		13mcg	0.26mL
	Albuterol NEB		2.5mg	3mL	Fentanyl IN		19.5mcg	0.39mL
	Amiodarone		65mg	1.3mL	Glucagon IM		1mg	1mL
	Atropine		0.26mg	2.6mL	Hydroxocobalamin IV/IO**		910mg	36.4mL
	Calcium Chloride		260mg	2.6mL	Lidocaine 2% IO		6.5mg	0.32mL
	Dextrose 10% slow IV		65mL	65mL	Midazolam Agitation/Sedation IV/IO		1.3mg	0.26mL
	Diphenhydramine IV/IM		13mg	0.26mL	Midazolam Agitation/Sedation IN/IM		2.6mg	0.52mL
DuoDote™		1 dose	NA	Midazolam Seizure ≥12mo IN/IM		PediDose	-	
Epinephrine Push Dose		10mcg	1mL	Morphine IV/IM/IO		1.3mg	0.32mL	
Epinephrine 0.1mg/mL IV		0.13mg	1.3mL	Naloxone IV/IM/IN		1.3mg	1.3mL	
Epinephrine 1mg/mL IM		0.13mg	0.13mL	Normal Saline IV Bolus		260mL	260mL	
Epinephrine 1mg/mL NEB		5mg	5mL	Sodium Bicarbonate		13mEq	13mL	
YELLOW								

\*\*Reconstitute 5g vial in 200ml NS

14 Kg	Length 83 – 94.5 cm			19 -35 months				
	Normal Vital Signs:		Heart Rate: 90-140	Respirations: 20-30		Systolic BP: >70		
	Cardioversion:		14 joules	28 joules		28 joules		
	Defibrillation:		28 joules	56 joules		56 joules		
	Supraglottic Airway:		igel	Size 2	12 F gastric suction catheter			
	Medication		Dose	mLs	Medication		Dose	mLs
	Adenosine		1.4mg	0.47mL	Fentanyl IV/IM		14mcg	0.28mL
	Albuterol NEB		2.5mg	3mL	Fentanyl IN		21mcg	0.42mL
	Amiodarone		70mg	1.4mL	Glucagon IM		1mg	1mL
	Atropine		0.28mg	2.8mL	Hydroxocobalamin IV/IO**		980mg	39.2mL
	Calcium Chloride		280mg	2.8mL	Lidocaine 2% IO		7mg	0.35mL
	Dextrose 10% slow IV		70mL	70mL	Midazolam Agitation/Sedation IV/IO		1.4mg	0.28mL
	Diphenhydramine IV/IM		14mg	0.28mL	Midazolam Agitation/Sedation IN/IM		2.8mg	0.56mL
DuoDote™		1 dose	NA	Midazolam Seizure ≥12mo IN/IM		PediDose	-	
Epinephrine Push Dose		10mcg	1mL	Morphine IV/IM/IO		1.4mg	0.35mL	
Epinephrine 0.1mg/mL IV		0.14mg	1.4mL	Naloxone IV/IM/IN		1.4mg	1.4mL	
Epinephrine 1mg/mL IM		0.14mg	0.14mL	Normal Saline IV Bolus		280mL	280mL	
Epinephrine 1mg/mL NEB		5mg	5mL	Sodium Bicarbonate		14mEq	14mL	

YELLOW

Epinephrine **Push Dose** 10mcg **1mL**  
 Epinephrine **0.1mg/mL IV** 0.14mg **1.4mL**  
 Epinephrine **1mg/mL IM** 0.14mg **0.14mL**  
 Epinephrine **1mg/mL NEB** 5mg **5mL**

Morphine IV/IM/IO 1.4mg **0.35mL**  
 Naloxone IV/IM/IN 1.4mg **1.4mL**  
 Normal Saline IV Bolus 280mL **280mL**  
 Sodium Bicarbonate 14mEq **14mL**

\*\*Reconstitute 5g vial in 200ml NS

15 Kg	Length 94.5 – 107 cm			3 – 4 years				
	Normal Vital Signs:		Heart Rate: 80-130	Respirations: 20-30		Systolic BP: >75		
	Cardioversion:		15 joules	30 joules		30 joules		
	Defibrillation:		30 joules	60 joules		60 joules		
	Supraglottic Airway:		igel	Size 2	12 F gastric suction catheter			
	Medication		Dose	mLs	Medication		Dose	mLs
	Adenosine		1.5mg	0.5mL	Glucagon IM		1mg	1mL
	Albuterol NEB <4 years		2.5mg	3mL	Glucopaste*		15gm	1 dose
	Albuterol NEB ≥ 4 years		5mg	6mL	Hydroxocobalamin IV/IO**		1050mg	42mL
	Amiodarone		75mg	1.5mL	Ketorolac slow IV/IO*		7.5mg	0.5mL
	Atropine		0.3mg	3mL	Ketorolac IM*		7.5mg	0.5mL
	Calcium Chloride		300mg	3mL	Lidocaine 2% IO		7.5mg	0.38mL
	Dextrose 10% slow IV		75mL	75mL	Midazolam Agitation/Sedation IV/IO		1.5mg	0.3mL
	Diphenhydramine IV/IM		15mg	0.3mL	Midazolam Agitation/Sedation IN/IM		3mg	0.6mL
	DuoDote™		1 dose	NA	Midazolam Seizure ≥12mo IN/IM		PediDose	-
	Epinephrine Push Dose		10mcg	1mL	Morphine IV/IM/IO		1.5mg	0.38mL
Epinephrine 0.1mg/mL IV		0.15mg	1.5mL	Naloxone IV/IM/IN		1.5mg	1.5mL	
Epinephrine 1mg/mL IM		0.15mg	0.15mL	Normal Saline IV Bolus		300mL	300mL	
Epinephrine 1mg/mL NEB		5mg	5mL	Ondansetron ODT*		4mg	1 tablet	
Fentanyl IV/IM		15mcg	0.3mL	Sodium Bicarbonate		15mEq	15mL	
Fentanyl IN		22.5mcg	0.45mL					

\*4 years or older

\*\*Reconstitute 5g vial in 200mL NS

16 Kg	Length 94.5 – 107 cm			3 – 4 years				
	Normal Vital Signs:		Heart Rate: 80-130	Respirations: 20-30		Systolic BP: >75		
	Cardioversion:		16 joules	32 joules		32 joules		
	Defibrillation:		32 joules	64 joules		64 joules		
	Supraglottic Airway:		igel	Size 2	12 F gastric suction catheter			
	Medication		Dose	mLs	Medication		Dose	mLs
	Adenosine		1.6mg	0.53mL	Glucagon IM		1mg	1mL
	Albuterol NEB <4 years		2.5mg	3mL	Glucopaste*		15gm	1 dose
	Albuterol NEB ≥4 years		5mg	6mL	Hydroxocobalamin IV/IO**		1120mg	44.8mL
	Amiodarone		80mg	1.6mL	Ketorolac slow IV/IO*		8mg	0.53mL
	Atropine		0.32mg	3.2mL	Ketorolac IM*		8mg	0.53mL
	Calcium Chloride		320mg	3.2mL	Lidocaine 2% IO		8mg	0.4mL
	Dextrose 10% slow IV		80mL	80mL	Midazolam Agitation/Sedation IV/IO		1.6mg	0.32mL
	Diphenhydramine IV/IM		16mg	0.32mL	Midazolam Agitation/Sedation IN/IM		3.2mg	0.64mL
	DuoDote™		1 dose	NA	Midazolam Seizure ≥12mo IN/IM		PediDose	-
	Epinephrine Push Dose		10mcg	1mL	Morphine IV/IM/IO		1.6mg	0.4mL
	Epinephrine 0.1mg/mL IV		0.16mg	1.6mL	Naloxone IV/IM/IN		1.6mg	1.6mL
Epinephrine 1mg/mL IM		0.16mg	0.16mL	Normal Saline IV Bolus		320mL	320mL	
Epinephrine 1mg/mL NEB		5mg	5mL	Ondansetron ODT*		4mg	1 tablet	
Fentanyl IV/IM		16mcg	0.32mL	Sodium Bicarbonate		16mEq	16mL	
Fentanyl IN		24mcg	0.48mL					
*4 years or older								
WHITE								

\*4 years or older

\*\*Reconstitute 5g vial in 200mL NS

1	Length 94.5 – 107 cm	3 – 4 years	V
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1	<b>Normal Vital Signs:</b>		<b>Heart Rate:</b> 80-130		<b>Respirations:</b> 20-30		<b>Systolic BP:</b> >75		WHITE	
	<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	0.57mL	Glucagon IM		1mg	1mL		
	Albuterol NEB <4 years		2.5mg	3mL	Glucopaste*		15gm	1 dose		
	Albuterol NEB ≥4 years		5mg	6mL	Hydroxocobalamin IV/IO**		1190mg	47.6mL		
	Amiodarone		85mg	1.7mL	Ketorolac slow IV/IO*		8.5mg	0.57mL		
	Atropine		0.34mg	3.4mL	Ketorolac IM*		8.5mg	0.57mL		
	Calcium Chloride		340mg	3.4mL	Lidocaine 2% IO		8.5mg	0.42mL		
	Dextrose 10% slow IV		85mL	85mL	Midazolam Agitation/Sedation IV/IO		1.7mg	0.34mL		
	Diphenhydramine IV/IM		17mg	0.34mL	Midazolam Agitation/SedationIN/IM		3.4mg	0.68mL		
	DuoDote™		1 dose	NA	Midazolam Seizure ≥12mo IN/IM		PediDose	-		
	Epinephrine Push Dose		10mcg	1mL	Morphine IV/IM/IO		1.7mg	0.43mL		
	Epinephrine 0.1mg/mL IV		0.17mg	1.7mL	Naloxone IV/IM/IN		1.7mg	1.7mL		
	Epinephrine 1mg/mL IM		0.17mg	0.17mL	Normal Saline IV Bolus		340mL	340mL		
	Epinephrine 1mg/mL NEB		5mg	5mL	Ondansetron ODT*		4mg	1 tablet		
	Fentanyl IV/IM		17mcg	0.34mL	Sodium Bicarbonate		17mEq	17mL		
	Fentanyl IN		25.5mcg	0.51mL						
*4 years or older										

\*4 years or older

\*\*Reconstitute 5g vial in 200mL NS

18 Kg	Length 94.5 – 107 cm			3 – 4 years				
	Normal Vital Signs:		Heart Rate: 80-130	Respirations: 20-30		Systolic BP: >75		
	Cardioversion:		18 joules	36 joules		36 joules		
	Defibrillation:		36 joules	72 joules		72 joules		
	Supraglottic Airway:		igel	Size 2	12 F gastric suction catheter			
	Medication		Dose	mLs	Medication		Dose	mLs
	Adenosine		1.8mg	0.6mL	Glucagon IM		1mg	1mL
	Albuterol NEB <4 years		2.5mg	3mL	Glucopaste*		15gm	1 dose
	Albuterol NEB ≥4 years		5mg	6mL	Hydroxocobalamin IV/IO**		1260mg	50.4mL
	Amiodarone		90mg	1.8mL	Ketorolac slow IV/IO*		9mg	0.6mL
	Atropine		0.36mg	3.6mL	Ketorolac IM*		9mg	0.6mL
	Calcium Chloride		360mg	3.6mL	Lidocaine 2% IO		9mg	0.45mL
	Dextrose 10% slow IV		90mL	90mL	Midazolam Agitation/Sedation IV/IO		1.8mg	0.36mL
	Diphenhydramine IV/IM		18mg	0.36mL	Midazolam Agitation/Sedation IN/IM		3.6mg	0.72mL
	DuoDote™		1 dose	NA	Midazolam Seizure ≥12mo IN/IM		PediDose	-
	Epinephrine Push Dose		10mcg	1mL	Morphine IV/IM/IO		1.8mg	0.45mL
Epinephrine 0.1mg/mL IV		0.18mg	1.8mL	Naloxone IV/IM/IN		1.8mg	1.8mL	
Epinephrine 1mg/mL IM		0.18mg	0.18mL	Normal Saline IV Bolus		360mL	360mL	
Epinephrine 1mg/mL NEB		5mg	5mL	Ondansetron ODT*		4mg	1 tablet	
Fentanyl IV/IM		18mcg	0.36mL	Sodium Bicarbonate		18mEq	18mL	
Fentanyl IN		27mcg	0.54mL					

\*4 years or older

\*\*Reconstitute 5g vial in 200mL NS

1	Length 107 – 119.5 cm		5 – 6 years		B
	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	0.63mL	Glucagon IM		1mg	1mL
	Albuterol NEB	5mg	6mL	Glucopaste		15gm	1 dose
	Amiodarone	95mg	1.9mL	Hydroxocobalamin IV/IO**		1330mg	53.2mL
	Atropine	0.38mg	3.8mL	Ketorolac slow IV/IO		9.5mg	0.63mL
	Calcium Chloride	380mg	3.8mL	Ketorolac IM		9.5mg	0.63mL
	Dextrose 10% slow IV	95mL	95mL	Lidocaine 2% IO		9.5mg	0.48mL
	Diphenhydramine IV/IM	19mg	0.38mL	Midazolam Agitation/Sedation IV/IO		1.9mg	0.38mL
	DuoDote™	1 dose	NA	Midazolam Agitation/SedationIN/IM		3.8mg	0.76mL
	Epinephrine Push Dose	10mcg	1mL	Midazolam Seizure ≥12mo IN/IM		PediDose	-
	Epinephrine 0.1mg/mL IV	0.19mg	1.9mL	Morphine IV/IM/IO		1.9mg	0.48mL
	Epinephrine 1mg/mL IM	0.19mg	0.19mL	Naloxone IV/IM/IN		1.9mg	1.9mL
Epinephrine 1mg/mL NEB	5mg	5mL	Normal Saline IV Bolus	380mL	380mL		
Fentanyl IV/IM	19mcg	0.38mL	Ondansetron ODT	4mg	1 tablet		
Fentanyl IN	28.5mcg	0.57mL	Sodium Bicarbonate	19mEq	19mL		

\*\*Reconstitute 5g vial in 200ml NS

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	0.67mL	Glucagon IM	1mg	1mL
	Albuterol NEB	5mg	6mL	Glucopaste	15gm	1 dose
	Amiodarone	100mg	2mL	Hydroxocobalamin IV/IO**	1400mg	56mL
	Atropine	0.4mg	4mL	Ketorolac slow IV/IO	10mg	0.67mL
	Calcium Chloride	400mg	4mL	Ketorolac IM	10mg	0.67mL
	Dextrose 10% slow IV	100mL	100mL	Lidocaine 2% IO	10mg	0.5mL
	Diphenhydramine IV/IM	20mg	0.4mL	Midazolam Agitation/Sedation IV/IO	2mg	0.4mL
	DuoDote™	1 dose	NA	Midazolam Agitation/SedationIN/IM	4mg	0.8mL
	Epinephrine Push Dose	10mcg	1mL	Midazolam Seizure ≥12mo IN/IM	PediDose	-
Epinephrine 0.1mg/mL IV	0.2mg	2mL	Morphine IV/IM/IO	2mg	0.5mL	
Epinephrine 1mg/mL IM	0.2mg	0.2mL	Naloxone IV/IM/IN	2mg	2mL	
Epinephrine 1mg/mL NEB	5mg	5mL	Normal Saline IV Bolus	400mL	400mL	
Fentanyl IV/IM	20mcg	0.4mL	Ondansetron ODT	4mg	1 tablet	
Fentanyl IN	30mcg	0.6mL	Sodium Bicarbonate	20mEq	20mL	
BLUE						

\*\*Reconstitute 5g vial in 200ml NS

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	0.73mL	Glucagon IM	1mg	1mL
	Albuterol NEB	5mg	6mL	Glucopaste	15gm	1 dose
	Amiodarone	110mg	2.2mL	Hydroxocobalamin IV/IO**	1540mg	61.6mL
	Atropine	0.44mg	4.4mL	Ketorolac slow IV/IO	11mg	0.73mL
	Calcium Chloride	440mg	4.4mL	Ketorolac IM	11mg	0.73mL
	Dextrose 10% slow IV	110mL	110mL	Lidocaine 2% IO	11mg	0.55mL
Diphenhydramine IV/IM	22mg	0.44mL	Midazolam Agitation/Sedation IV/IO	2.2mg	0.44mL	
DuoDote™	1 dose	NA	Midazolam Agitation/Sedation IN/IM	4.4mg	0.88mL	
Epinephrine Push Dose	10mcg	1mL	Midazolam Seizure ≥12mo IN/IM	PediDose	-	
Epinephrine 0.1mg/mL IV	0.22mg	2.2mL	Morphine IV/IM/IO	2.2mg	0.55mL	
Epinephrine 1mg/mL IM	0.22mg	0.22mL	Naloxone IV/IM/IN	2mg	2mL	
Epinephrine 1mg/mL NEB	5mg	5mL	Normal Saline IV Bolus	440mL	440mL	
Fentanyl IV/IM	22mcg	0.44mL	Ondansetron ODT	4mg	1 tablet	
Fentanyl IN	33mcg	0.66mL	Sodium Bicarbonate	22mEq	22mL	

BLUE

\*\*Reconstitute 5g vial in 200ml NS

24 Kg	Length 119 – 129 cm			7 – 9 years		
	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	0.8mL	Glucagon IM	1mg	1mL
	Albuterol NEB	5mg	6mL	Glucopaste	15gm	1 dose
	Amiodarone	120mg	2.4mL	Hydroxocobalamin IV/IO**	1680mg	67.2mL
	Atropine	0.48mg	4.8mL	Ketorolac slow IV/IO	12mg	0.8mL
	Calcium Chloride	480mg	4.8mL	Ketorolac IM	12mg	0.8mL
	Dextrose 10% slow IV	120mL	120mL	Lidocaine 2% IO	12mg	0.6mL
Diphenhydramine IV/IM	24mg	0.48mL	Midazolam Agitation/Sedation IV/IO	2.4mg	0.48mL	
DuoDote™	2 doses	NA	Midazolam Agitation/Sedation IN/IM	4.8mg	0.96mL	
Epinephrine Push Dose	10mcg	1mL	Midazolam Seizure ≥12mo IN/IM	PediDose	-	
Epinephrine 0.1mg/mL IV	0.24mg	2.4mL	Morphine IV/IM/IO	2.4mg	0.6mL	
Epinephrine 1mg/mL IM	0.24mg	0.24mL	Naloxone IV/IM/IN	2mg	2mL	
Epinephrine 1mg/mL NEB	5mg	5mL	Normal Saline IV Bolus	480mL	480mL	
Fentanyl IV/IM	24mcg	0.48mL	Ondansetron ODT	4mg	1 tablet	
Fentanyl IN	36mcg	0.72mL	Sodium Bicarbonate	24mEq	24mL	

ORANGE

\*\*Reconstitute 5g vial in 200ml NS

26 Kg	Length 119 – 129 cm			7 – 9 years		
	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	0.87mL	Glucagon IM	1mg	1mL
	Albuterol NEB	5mg	6mL	Glucopaste	15gm	1 dose
	Amiodarone	130mg	2.6mL	Hydroxocobalamin IV/IO**	1820mg	72.8mL
	Atropine	0.5mg	5mL	Ketorolac slow IV/IO	13mg	0.87mL
	Calcium Chloride	520mg	5.2mL	Ketorolac IM	13mg	0.87mL
	Dextrose 10% slow IV	125mL	125mL	Lidocaine 2% IO	13mg	0.65mL
Diphenhydramine IV/IM	26mg	0.52mL	Midazolam Agitation/Sedation IV/IO	2.6mg	0.52mL	
DuoDote™	2 doses	NA	Midazolam Agitation/Sedation IN/IM	5mg	1mL	
Epinephrine Push Dose	10mcg	1mL	Midazolam Seizure ≥12mo IN/IM	PediDose	-	
Epinephrine 0.1mg/mL IV	0.26mg	2.6mL	Morphine IV/IM/IO	2.6mg	0.65mL	
Epinephrine 1mg/mL IM	0.26mg	0.26mL	Naloxone IV/IM/IN	2mg	2mL	
Epinephrine 1mg/mL NEB	5mg	5mL	Normal Saline IV Bolus	520mL	520mL	
Fentanyl IV/IM	26mcg	0.52mL	Ondansetron ODT	4mg	1 tablet	
Fentanyl IN	39mcg	0.78mL	Sodium Bicarbonate	26mEq	26mL	

ORANGE

\*\*Reconstitute 5g vial in 200ml NS

28 Kg	Length 119 – 129 cm			7 – 9 years		
	Normal Vital Signs:		Heart Rate: 70-110	Respirations: 15-30		Systolic BP: >80
	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	0.93mL	Glucagon IM	1mg	1mL
	Albuterol NEB	5mg	6mL	Glucopaste	15gm	1 dose
	Amiodarone	140mg	2.8mL	Hydroxocobalamin IV/IO**	1960mg	78.4mL
	Atropine	0.5mg	5mL	Ketorolac slow IV/IO	14mg	0.93mL
	Calcium Chloride	560mg	5.6mL	Ketorolac IM	14mg	0.93mL
	Dextrose 10% slow IV	125-140mL	125-140mL	Lidocaine 2% IO	14mg	0.7mL
	Diphenhydramine IV/IM	28mg	0.56mL	Midazolam Agitation/Sedation IV/IO	2.8mg	0.56mL
DuoDote™	2 doses	NA	Midazolam Agitation/Sedation IN/IM	5mg	1mL	
Epinephrine Push Dose	10mcg	1mL	Midazolam Seizure ≥12mo IN/IM	PediDose	-	
Epinephrine 0.1mg/mL IV	0.28mg	2.8mL	Morphine IV/IM/IO	2.8mg	0.7mL	
Epinephrine 1mg/mL IM	0.28mg	0.28mL	Naloxone IV/IM/IN	2mg	2mL	
Epinephrine 1mg/mL NEB	5mg	5mL	Normal Saline IV Bolus	560mL	560mL	
Fentanyl IV/IM	28mcg	0.56mL	Ondansetron ODT	4mg	1 tablet	
Fentanyl IN	42mcg	0.84mL	Sodium Bicarbonate	28mEq	28mL	

ORANGE

\*\*Reconstitute 5g vial in 200ml NS



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	Hydroxocobalamin IV/IO**	2100mg	84mL
	Atropine	0.5mg	5mL	Ketorolac slow IV/IO	15mg	1mL
	Calcium Chloride	600mg	6mL	Ketorolac IM	15mg	1mL
	Dextrose 10% slow IV	125- 150mL	125- 150mL	Lidocaine 2% IO	15mg	0.75mL
	Diphenhydramine IV/IM	30mg	0.6mL	Midazolam Agitation/Sedation IV/IO	3mg	0.6mL
	DuoDote™	2 doses	NA	Midazolam Agitation/Sedation IN/IM	5mg	1mL
Epinephrine Push Dose	10mcg	1mL	Midazolam Seizure ≥12mo IN/IM	PediDose	-	
Epinephrine 0.1mg/mL IV	0.3mg	3mL	Morphine IV/IM/IO	3mg	0.75mL	
Epinephrine 1mg/mL IM	0.3mg	0.3mL	Naloxone IV/IM/IN	2mg	2mL	
Epinephrine 1mg/mL NEB	5mg	5mL	Normal Saline IV Bolus	600mL	600mL	
Fentanyl IV/IM	30mcg	0.6mL	Ondansetron ODT	4mg	1 tablet	
Fentanyl IN	45mcg	0.9mL	Sodium Bicarbonate	30mEq	30mL	

GREEN

\*\*Reconstitute 5g vial in 200mL NS

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	
	Defibrillation:		64 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	
	Albuterol NEB		5mg		6mL	
	Amiodarone		160mg		3.2mL	
	Atropine		0.5mg		5mL	
	Calcium Chloride		640mg		6.4mL	
Dextrose 10% slow IV		125-		125-		
160mL		160mL				
Diphenhydramine IV/IM		32mg		0.64mL		
DuoDote™		2 doses		NA		
Epinephrine Push Dose		10mcg		1mL		
Epinephrine 0.1mg/mL		0.32mg		3.2mL		
IV						
Epinephrine 1mg/mL IM		0.32mg		0.32mL		
Epinephrine 1mg/mL		5mg		5mL		
NEB						
Fentanyl IV/IM		32mcg		0.64mL		
Fentanyl IN		48mcg		0.96mL		
Glucagon IM		1mg		1mL		
Glucopaste		15gm		1 dose		
Hydroxocobalamin IV/IO**		2240mg		89.6mL		
Ketorolac slow IV/IO		15mg		1mL		
Ketorolac IM		15mg		1mL		
Lidocaine 2% IO		16mg		0.8mL		
Midazolam Agitation/Sedation IV/IO		3.2mg		0.64mL		
Midazolam Agitation/Sedation IN/IM		5mg		1mL		
Midazolam Seizure ≥12mo IN/IM		PediDose		-		
Morphine IV/IM/IO		3.2mg		0.8mL		
Naloxone IV/IM/IN		2mg		2mL		
Normal Saline IV Bolus		640mL		640mL		
Ondansetron ODT		4mg		1 tablet		
Sodium Bicarbonate		32mEq		32mL		

GREEN

\*\*Reconstitute 5g vial in 200mL NS

34 Kg	Length 129 – 141.5 cm			10 – 12 years			GREEN						
	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			Hydroxocobalamin IV/IO**		2380mg		95.2mL	
	Atropine		0.5mg		5mL			Ketorolac slow IV/IO		15mg		1mL	
	Calcium Chloride		680mg		6.8mL			Ketorolac IM		15mg		1mL	
	Dextrose 10% slow IV		125-170mL		125-170mL			Lidocaine 2% IO		17mg		0.85mL	
	Diphenhydramine IV/IM		34mg		0.68mL			Midazolam Agitation/Sedation IV/IO		3.4mg		0.68mL	
	DuoDote™		2 doses		NA			Midazolam Agitation/Sedation IN/IM		5mg		1mL	
	Epinephrine Push Dose		10mcg		1mL			Midazolam Seizure ≥12mo IN/IM		PediDose		-	
	Epinephrine 0.1mg/mL IV		0.34mg		3.4mL			Morphine IV/IM/IO		3.4mg		0.85mL	
Epinephrine 1mg/mL IM		0.34mg		0.34mL		Naloxone IV/IM/IN		2mg		2mL			
Epinephrine 1mg/mL NEB		5mg		5mL		Normal Saline IV Bolus		680mL		680mL			
Fentanyl IV/IM		34mcg		0.68mL		Ondansetron ODT		4mg		1 tablet			
Fentanyl IN		50mcg		1mL		Sodium Bicarbonate		34mEq		34mL			

\*\*Reconstitute 5g vial in 200mL NS

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	Hydroxocobalamin IV/IO**	2520mg	100.8mL
	Atropine	0.5mg	5mL	Ketorolac slow IV/IO	15mg	1mL
	Calcium Chloride	720mg	7.2mL	Ketorolac IM	15mg	1mL
	Dextrose 10% slow IV	125-180mL	125-180mL	Lidocaine 2% IO	18mg	0.9mL
	Diphenhydramine IV/IM	36mg	0.72mL	Midazolam Agitation/Sedation IV/IO	3.6mg	0.72mL
	DuoDote™	2 doses	NA	Midazolam Agitation/Sedation IN/IM	5mg	1mL
	Epinephrine Push Dose	10mcg	1mL	Midazolam Seizure ≥12mo IN/IM	PediDose	-
Epinephrine 0.1mg/mL IV	0.36mg	3.6mL	Morphine IV/IM/IO	3.6mg	0.9mL	
Epinephrine 1mg/mL IM	0.36mg	0.36mL	Naloxone IV/IM/IN	2mg	2mL	
Epinephrine 1mg/mL NEB	5mg	5mL	Normal Saline IV Bolus	720mL	720mL	
Fentanyl IV/IM	36mcg	0.72mL	Ondansetron ODT	4mg	1 tablet	
Fentanyl IN	50mcg	1mL	Sodium Bicarbonate	36mEq	36mL	

GREEN

\*\*Reconstitute 5g vial in 200mL NS

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

<b>Normal Vital Signs:</b>	<b>Heart Rate:</b> 60-100	<b>Respirations:</b> 12-20	<b>Systolic BP:</b> >90
<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**

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>	5 mg	<b>1 mL</b>
Aspirin	325mg	<b>1 tablet</b>	Midazolam Agitation/Sedation IM/IN <sup>3</sup>	5 or 10mg	<b>1 or 2mL</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>

**BLACK****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: Dose varies by indication, refer to Treatment Protocol and MCG 1317.25

<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