Medication List

Acetaminophen	Glucagon
Adenosine	Glucose
Albuterol/Ipratropium	Hydroxocobalamin
Amiodarone	Ketamine
Aspirin	Ketorolac
Atropine	Lidocaine
Calcium Gluconate	Midazolam
Dexamethasone	Naloxone
Dextrose 5%	Nitroglycerin
Dextrose 10%	Norepinephrine
Diltiazem	Normal Saline
Diphenhydramine	Ondansetron
Epinephrine	Sodium Bicarbonate
Fentanyl	

Medical Director: Benjamin Weston, MD, MPH
Revision Date: May 2020

ACETAMINOPHEN

ACETAMINOPHEN	ADULT DOSE	PEDIATRIC DOSE	ADMINISTRATION GUIDELINE	INDICATIONS	CONTRAINDICATIONS	NOTES
Sepsis **PO**	**1 g** (2 Tablets)	**10-15 mg/kg** 1 g max Liquid Only	PO	Sepsis	Known Liver Disease Impaired Swallowing	✓
	Concentration: Tablets – 500g each Liquid Suspension– 160 mg/5mL					
Analgesia **PO**	**1 g** (2 Tablets)	**10-15 mg/kg** 1 g max Liquid Only	PO	Pain Management	Known Liver Disease Impaired Swallowing	✓
	Concentration: Tablets – 500g each Liquid Suspension– 160 mg/5mL					

Weight (kg)	5	10	15	20	25	30	35	40	≥ 45
Dose (mg)	64	128	224	288	352	416	480	576	1000
Sepsis/Analgesia (10-15mg/kg)	**2 mL**	**4 mL**	**7 mL**	**9 mL**	**11 mL**	**13 mL**	**15 mL**	**18 mL**	**2 tabs**

ADENOSINE

ADENOSINE	ADULT DOSE	PEDIATRIC DOSE	ADMINISTRATION GUIDELINE	INDICATIONS	CONTRAINDICATIONS	NOTES
Monomorphic Tachycardia **IV/IO***	12 mg	0.1 mg/kg Max Dose 12 mg	**RAPID** IV – proximal given over 2-3 seconds * Humeral IO **ONLY**	Monomorphic VT Tachycardia with Pulse	Wolf-Parkinson White Syndrome Irregular Cardiac Rhythm	✔
	Concentration: 12 mg in 4 mL					

Weight (kg)	5	10	15	20	25	30	35	40	≥ 45
Dose (mg)	0.5	1	1.5	2	2.5	3	3.5	4	12
Monomorphic Tachycardia (0.1 mg/kg)	**0.2 mL**	**0.3 mL**	**0.5 mL**	**0.7 mL**	**0.8 mL**	**1 mL**	**1.2 mL**	**1.3 mL**	**4 mL**

ALBUTEROL/IPRATROPIUM						
ALBUTEROL / IPRATROPRIUM	ADULT DOSE	PEDIATRIC DOSE	ADMINISTRATION GUIDELINE	INDICATIONS	CONTRAINDICATIONS	NOTES
Respiratory Distress NEB	5 mg (2 nebules)	2.5 mg (1 nebule)	Nebulized	Respiratory Distress Bronchospasm Allergic Reaction	Heart Rate > 180	✔
	Concentration: 2.5 mg Albuterol and 0.5 mg Ipratropium Bromide in 3 mL					

AMIODARONE

AMIODARONE	ADULT DOSE	PEDIATRIC DOSE	ADMINISTRATION GUIDELINE	INDICATIONS	CONTRAINDICATIONS	NOTES
Cardiac Arrest **IV/IO** **BOLUS**	1st Dose: **300 mg** 2nd Dose: **150 mg** **Concentration:** 150 mg in 3 mL	**5 mg/kg** 1st dose max of 300 mg 2nd dose max of 150 mg	IV/IO Bolus given over 10 seconds	Cardiac Arrest	2nd or 3rd degree AV block Bradycardia	✓

Weight (kg)	5	10	15	20	25	30	35	40	≥ 45
Dose (mg)	25	50	75	100	125	150	175	200	300
Cardiac Arrest (5mg/kg)	**0.5 mL**	**1 mL**	**1.5 mL**	**2.0 mL**	**2.5 mL**	**3 mL**	**3.5 mL**	**4 mL**	**6 mL**

Polymorphic Tachycardia **IV/IO** **INFUSION**	**150 mg** **Concentration:** **Dilute**: 150 mg in 100 mL	***Online Medical Control***	Dilute in D5W IV/IO Infusion over 10 minutes Wide open using mircodrip tubing	Wide, irregular polymorphic tachycardia	2nd or 3rd degree AV block Bradycardia Pregnancy	✓

ASPIRIN						
ASPIRIN	ADULT DOSE	PEDIATRIC DOSE	ADMINISTRATION GUIDELINE	INDICATIONS	CONTRAINDICATIONS	NOTES
Chest Pain PO	324 mg	N/A	PO	Chest Discomfort Acute Coronary Syndrome		✔
	Concentration: 81 mg / tablet					

ATROPINE

ATROPINE	ADULT DOSE	PEDIATRIC DOSE	ADMINISTRATION GUIDELINE	INDICATIONS	CONTRAINDICATIONS	NOTES
Bradycardia IV/IO BOLUS	**0.5 mg**	**0.2 mL/kg** Max dose 0.5 mg	IV/IO Bolus given over 10 seconds	Bradycardia		✓
	Concentration: 1 mg in 10 mL					

Weight (kg)	5	10	15	20	25	30	35	40	≥ 45
Dose (mg)	0.1	0.2	0.3	0.4	0.5	0.5	0.5	0.5	0.5
Bradycardia (0.2 mL/kg)	**1 mL**	**2mL**	**3 mL**	**4 mL**	**5 mL**	**5 mL**	**5 mL**	**5 mL**	**5 mL**

Anticholinergic Toxidrome IV/IO BOLUS	**2 mg**	**0.5 mL/kg** Max dose: 2 mg	IV/IO Bolus given over 10 seconds	Anticholinergic Toxidrome		May require frequent and high doses to reverse agent ✓
	Concentration: 1 mg in 10 mL					

Weight (kg)	5	10	15	20	25	30	35	40	≥ 45
Dose (mg)	0.25	0.5	0.75	1	1.25	1.5	1.75	2	2
Anticholinergic Toxidrome (0.5 mL/kg)	**2.5 mL**	**5 mL**	**7.5 mL**	**10 mL**	**12.5 mL**	**15 mL**	**17.5 mL**	**20 mL**	**20 mL**

CALCIUM GLUCONATE

CALCIUM GLUCONATE	ADULT DOSE	PEDIATRIC DOSE	ADMINISTRATION GUIDELINE	INDICATIONS	CONTRAINDICATIONS	NOTES
Hyperkalemia **IV/IO** SLOW PUSH	3 g	60 mg/kg Max dose: 3 g	IV/IO **slow** push given over 2 minutes	Hyperkalemia		✓
	Concentration: 1 g in 10 mL					

Weight (kg)	5	10	15	20	25	30	35	40	≥ 45
Dose (mg)	300	600	900	1200	1500	1800	2100	2400	3000
Hyperkalemia (60 mg/kg)	**3 mL**	**6 mL**	**9 mL**	**12 mL**	**15 mL**	**18 mL**	**21 mL**	**24 mL**	**30 mL**

DEXAMETHASONE

DEXAMETHASONE	ADULT DOSE	PEDIATRIC DOSE	ADMINISTRATION GUIDELINE	INDICATIONS	CONTRAINDICATIONS	NOTES
Airway Disease **IV/IO** SLOW PUSH **IN/IM/PO**	**0.5 mg/kg** Max Dose 16 mg	**0.5 mg/kg** Max Dose 16 mg	IV/IO **slow** push given over 3-5 min IN/IM bolus	Croup Bronchospasm Allergic Reaction		✓
	Concentration: 20 mg in 5 mL					

Weight (kg)	5	10	15	20	25	30	35	40	≥ 45
Dose (mg)	2.5	5	7.5	10	12.5	15	16	16	16
Airway Disease (0.5 mg/kg)	**0.6 mL**	**1.3 mL**	**1.9 mL**	**2.5 mL**	**3.1 mL**	**3.8 mL**	**4 mL**	**4 mL**	**4 mL**

DEXTROSE 5%						
DEXTROSE 5%	ADULT DOSE	PEDIATRIC DOSE	ADMINISTRATION GUIDELINE	INDICATIONS	CONTRAINDICATIONS	NOTES
Diluent IV/IO	Variable	Variable	IV/IO	Diluent for Amiodarone and Ketamine		✓
	Concentration: 100 mL Bag					

DEXTROSE 10%

DEXTROSE 10%	ADULT DOSE	PEDIATRIC DOSE	ADMINISTRATION GUIDELINE	INDICATIONS	CONTRAINDICATIONS	NOTES
Hypoglycemia **IV/IO** INFUSION	100 mL	4 mL/kg Max 100 mL	IV/IO	Hypoglycemia		✓
	Concentration: 250mL Bag					

Weight (kg)	5	10	15	20	25	30	35	40	≥ 45
Dose (g)	2	4	6	8	10	10	10	10	10
Hypoglycemia (4 mL/kg)	**20 mL**	**40 mL**	**60 mL**	**80 mL**	**100 mL**	**100 mL**	**100 mL**	**100 mL**	**100 mL**

DILTIAZEM

DILTIAZEM	ADULT DOSE	PEDIATRIC DOSE	ADMINISTRATION GUIDELINE	INDICATIONS	CONTRAINDICATIONS	NOTES
A-Fib w/ RVR **IV/IO** SLOW PUSH	*Online Medical Control* 0.25 mg/kg	N/A	IV/IO slow push over 2 minutes Draw the dose volume from the bag with a syringe. Do **not** infuse medicated bag directly into patient.	Atrial Fibrillation with RVR	Bradycardia Hypotension Wolff-Parkinson-White Syndrome	Requires 12 lead transmitted to OLMC via EMSCOMM. ✓
	Concentration: 25 mg in 5 mL -OR- 100 mg in 100 mL					

25mg/ 5mL

Weight (kg)	≤40	50	60	70	80	90	100
Dose (mg)	N/A	12.5	15	17.5	20	22.5	25
A-Fib w/ RVR (0.25 mg/kg)	**N/A**	**2.5 mL**	**3 mL**	**3.5 mL**	**4 mL**	**4.5 mL**	**5 mL**

100mg/100mL

Weight (kg)	≤40	50	60	70	80	90	100
Dose (mg)	N/A	12.5	15	17.5	20	22.5	25
A-Fib w/ RVR (0.25 mg/kg)	**N/A**	**12.5 mL**	**15 mL**	**17.5 mL**	**20 mL**	**22.5 mL**	**25 mL**

DIPHENHYDRAMINE

DIPHENHYDRAMINE	ADULT DOSE	PEDIATRIC DOSE	ADMINISTRATION GUIDELINE	INDICATIONS	CONTRAINDICATIONS	NOTES
Anaphylaxis/Vomiting **IV/IO** SLOW PUSH **IM**	25 mg	1 mg/kg Max Dose 25 mg	IV/IO **slow** push given over 2 minutes IM	Anaphylaxis Active Vomiting		✓
	Concentration: 50 mg in 1 mL					

Weight (kg)	5	10	15	20	25	30	35	40	≥ 45
Dose (mg)	5	10	15	20	25	25	25	25	25
Anaphylaxis (1 mg/kg)	**0.1 mL**	**0.2 mL**	**0.3 mL**	**0.4 mL**	**0.5 mL**	**0.5 mL**	**0.5 mL**	**0.5 mL**	**0.5 mL**

EPINEPHRINE

EPINEPHRINE	ADULT DOSE	PEDIATRIC DOSE	ADMINISTRATION GUIDELINE	INDICATIONS	CONTRAINDICATIONS	NOTES
Anaphylaxis IM	**0.3 mg**	**0.15 mg** (less than 30 kg)	Vastus lateralis preferred site IM	Anaphylaxis	No absolute contraindications in a life-threatening situation	Never give this concentration IV or IO ✓
	Concentration: 1 mg **(1:1,000)** in 1 mL Do NOT exceed 0.3 mL					
Bronchiolitis Croup NEB	**5 mg**	**2.5 mg**	Nebulized	Severe bronchiolitis Moderate croup Anaphylaxis	Caution with heart rate over 180	Never give this concentration IV or IO ✓
	Concentration: 1 mg **(1:1,000)** in 1 mL					
Cardiac Arrest IV/IO BOLUS	**1 mg**	**0.1 mL/kg** Max dose 10 mL	IV or IO bolus given over 10 seconds	Cardiac arrest		✓
	Concentration: 1 mg **(1:10,000)** in 10 mL					

Weight (kg)	5	10	15	20	25	30	35	40	≥ 45
Dose (mg)	0.05	0.1	0.15	0.2	0.25	0.3	0.35	0.4	1
Cardiac Arrest (0.1 mL/kg)	**0.5 mL**	**1 mL**	**1.5 mL**	**2 mL**	**2.5 mL**	**3 mL**	**3.5 mL**	**4 mL**	**10 mL**

FENTANYL

FENTANYL	ADULT DOSE	PEDIATRIC DOSE	ADMINISTRATION GUIDELINE	INDICATIONS	CONTRAINDICATIONS	NOTES
Analgesia **IV/IO** **SLOW PUSH** **IM/IN**	**0.5-1 mcg/kg** Max Dose 100 mcg Max Total: 300 mcg	**0.5-1 mcg/kg** Max Dose 100 mcg Max Total: 300 mcg	IV/IO **slow** push given over 1 minute IM/IN	Pain Management	Respiratory Depression Refractory Hypotension	✓
	Concentration: 100 mcg in 2 mL					

Weight (kg)	5	10	15	20	25	30	35	40	50	60	70	80	90	100
Dose (mcg)	5	10	15	20	25	30	35	40	50	60	70	80	90	100
Analgesia (0.5-1 mcg/kg)	**0.1 mL**	**0.2 mL**	**0.3 mL**	**0.4 mL**	**0.5 mL**	**0.6 mL**	**0.7 mL**	**0.8 mL**	**1 mL**	**1.2 mL**	**1.4 mL**	**1.6 mL**	**1.8 mL**	**2.0 mL**

GLUCAGON						
GLUCAGON	ADULT DOSE	PEDIATRIC DOSE	ADMINISTRATION GUIDELINE	INDICATIONS	CONTRAINDICATIONS	NOTES
Hypoglycemia Anaphylaxis IM/IN	1 mg	<20kg: 0.5mg >20kg: 1 mg	Reconstitute 1 mg/mL IM/IN	Hypoglycemia Anaphylaxis		✔
	Concentration: 1mg reconstituted in 1mL					

GLUCOSE						
GLUCOSE	ADULT DOSE	PEDIATRIC DOSE	ADMINISTRATION GUIDELINE	INDICATIONS	CONTRAINDICATIONS	NOTES
Hypoglycemia PO	15g q 5 min Max Total: 45g	1g/kg q 5 min Max 15g/dose Max Total: 45g	PO	Hypoglycemia	Impaired Swallowing	✔
	Concentration: 15 g/tube					

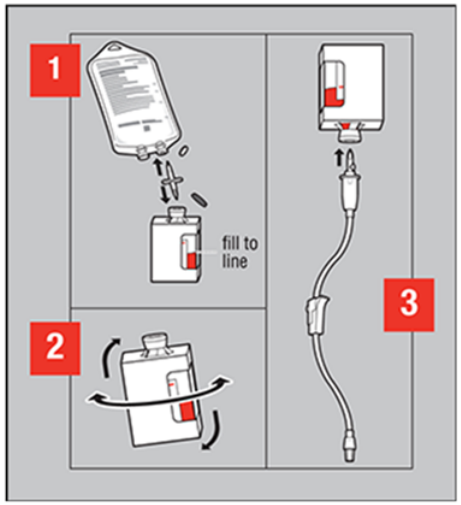
HYDROXOCOBALAMIN (CYANOKIT)

HYDROXOCOBALAMIN	ADULT DOSE	PEDIATRIC DOSE	ADMINISTRATION GUIDELINE	INDICATIONS	CONTRAINDICATIONS	NOTES
Cyanide Exposure **IV/IO** INFUSION	5g	70 mg/kg Max Dose 5g	Reconstitute 5 g / 200mL IV/IO 15 min infusion	Suspected Cyanide Poisoning Enclosed smoke inhalation with unstable vitals	Not routinely used during resuscitation until ROSC is achieved	Incompatible with most drugs – flush thoroughly
	Concentration: 5g reconstituted in 200mL					

Weight (kg)	5	10	15	20	25	30	35	40	50	60	≥ 70
Dose (mg)	350	700	1050	1400	1750	2100	2450	2800	3500	4200	5000
Cyanide Exposure (70mg/kg)	**14 mL**	**28 mL**	**42 mL**	**56 mL**	**70 mL**	**84 mL**	**98 mL**	**112 mL**	**140 mL**	**168 mL**	**200 mL**

Reconstitution Instructions

1. Transfer 200 mL of 0.9% NS to the glass vial using the transfer spike in the box.
2. Remove the transfer spike and gently rock vial to mix drug.
   a. Pediatric Note – Remove excess dosing prior to beginning infusion (for a 25 kg patient, you would remove 130 mL of solution from the vial).
3. Insert **vented** spike tubing into the vial and infuse drug over 15 minutes.



KETAMINE

KETAMINE	ADULT DOSE	PEDIATRIC DOSE	ADMINISTRATION GUIDELINE	INDICATIONS	CONTRAINDICATIONS	NOTES
Patient Restraint IM	1st Dose: 3 mg/kg (300 mg max) 2nd Dose: 1 mg/kg (100 mg max) **Concentration:** 500 mg in 5 mL		Do not dilute	Excited Delirium Immediate threat of harm to self or others	This dosing is not to be used for Post Airway Sedation	✓

Weight (kg)	5	10	15	20	25	30	35	40	50	60	70	80	90	100
Dose (mg)	15	30	45	60	75	90	105	120	150	180	210	240	270	300
Patient Restraint (3.0mg/kg)	0.2 mL	0.3 mL	0.5 mL	0.6 mL	0.8 mL	0.9 mL	1.1 mL	1.2 mL	1.5 mL	1.8 mL	2.1 mL	2.4 mL	2.7 mL	3 mL

Post Airway Sedation IV/IO SLOW PUSH	**0.3 mg/kg** Max Dose 30 mg **Concentration:** **Dilute:** 100 mg in 100 mL	Dilute 100 mg into 100 mL bag. Slow push given over 2 minutes	Sedation following Airway Insertion		✓

Weight (kg)	5	10	15	20	25	30	35	40	50	60	70	80	90	100
Dose (mg)	1.5	3	4.5	6	7.5	9	10.5	12	15	18	21	24	27	30
Post Airway Sedation (0.3mg/kg)	1.5 mL	3 mL	4.5 mL	6 mL	7.5 mL	9 mL	10.5 mL	12 mL	15 mL	18 mL	21 mL	24 mL	27 mL	30 mL

Analgesia IM	**0.5 mg/kg** Max Dose 50 mg **Concentration:** 500 mg in 5 mL	Do not dilute	Pain Control		✓

Weight (kg)	5	10	15	20	25	30	35	40	50	60	70	80	90	100
Dose (mg)	0	5	8	10	13	15	18	20	25	30	35	40	45	50
Analgesia (0.5mg/kg)	0 mL	0.1 mL	0.1 mL	0.1 mL	0.1 mL	0.2 mL	0.2 mL	0.2 mL	0.3 mL	0.3 mL	0.4 mL	0.4 mL	0.5 mL	0.5 mL

Analgesia IV/IO SLOW PUSH	**0.1 mg/kg** Max Dose 10 mg **Concentration:** **Dilute:** 100 mg in 100 mL	Dilute 100 mg into 100 mL bag. Slow push given over 2 minutes	Pain Control		✓

Weight (kg)	5	10	15	20	25	30	35	40	50	60	70	80	90	100
Dose (mg)	0.5	1	1.5	2	2.5	3	3.5	4	5	6	7	8	9	10
Analgesia (0.1mg/kg)	0.5 mL	1 mL	1.5 mL	2 mL	2.5 mL	3 mL	3.5 mL	4 m	5 mL	6 mL	7 mL	8 mL	9 mL	10 mL

KETOROLAC

KETOROLAC	ADULT DOSE	PEDIATRIC DOSE	ADMINISTRATION GUIDELINE	INDICATIONS	CONTRAINDICATIONS	NOTES
Analgesia IV/IO SLOW PUSH	**15 mg**	**0.5 mg/kg** Max Dose 15 mg	IV/IO **slow** push given over 2-3 minutes	Pain Management	NSAID use within 6 hours Anticoagulation use GI bleed Known pregnancy Major bleeding	✓
	Concentration: 30 mg in 1 mL					

Weight (kg)	5	10	15	20	25	30	35	40	≥ 45
Dose (mg)	2.5	5	7.5	10	12.5	15	15	15	15
Analgesia IV/IO (0.5 mg/kg)	**0.1 mL**	**0.2 mL**	**0.3 mL**	**0.3 mL**	**0.4 mL**	**0.5 mL**	**0.5 mL**	**0.5 mL**	**0.5 mL**

Analgesia IM	**1 mg/kg** Max Dose 60 mg	**1 mg/kg** Max Dose 60 mg	IM	Pain Management	NSAID use within 6 hours Anticoagulation use GI bleed Known pregnancy Major bleeding	✓
	Concentration: 30 mg in 1 mL					

Weight (kg)	5	10	15	20	25	30	35	40	≥ 45
Dose (mg)	5	10	15	20	25	30	35	40	60
Analgesia IM (1 mg/kg)	**0.2 mL**	**0.3 mL**	**0.5 mL**	**0.7 mL**	**0.8 mL**	**1 mL**	**1.2 mL**	**1.3 mL**	**2 mL**

LIDOCAINE

LIDOCAINE	ADULT DOSE	PEDIATRIC DOSE	ADMINISTRATION GUIDELINE	INDICATIONS	CONTRAINDICATIONS	NOTES
Local Analgesia **IO** **SLOW PUSH**	**40 mg**	**1 mg/kg** Max Dose 40 mg	IO slow push given over 2 minutes	Pain management for conscious IO	Heart block Junctional arrhythmia Brady arrhythmia	✓
	Concentration: 100 mg in 5 mL					

Weight (kg)	5	10	15	20	25	30	35	40	≥ 45
Dose (mg)	5	10	15	20	25	30	35	40	40
Local Analgesia (1 mg/kg)	**0.3 mL**	**0.5 mL**	**0.8 mL**	**1 mL**	**1.3 mL**	**1.5 mL**	**1.8 mL**	**2 mL**	**2 mL**

MIDAZOLAM

MIDAZOLAM	ADULT DOSE	PEDIATRIC DOSE	ADMINISTRATION GUIDELINE	INDICATIONS	CONTRAINDICATIONS	NOTES
Seizure IM	10 mg	0.25 mg/kg	IM	Seizure	Hypotension	Will need more than 1 injection site due to large adult volume ✓
	Concentration: 5 mg in 5 mL					

Weight (kg)	5	10	15	20	25	30	35	40	≥ 45
Dose (mg)	1.25	2.5	3.75	5	5	5	5	5	10
Seizure IM (0.25 mg/kg)	**1.3 mL**	**2.5 mL**	**3.8 mL**	**5 mL**	**5 mL**	**5 mL**	**5 mL**	**5 mL**	**10 mL**

Seizure IV/IO/IN BOLUS	4 mg	0.1 mg/kg	IV/IO bolus given over 10 seconds IN			✓
	Concentration: 5 mg in 5 mL					

Weight (kg)	5	10	15	20	25	30	35	40	≥ 45
Dose (mg)	0.5	1	1.5	2	2.5	3	3.5	4	4
Seizure IV/IO/IN (0.1 mg/kg)	**0.5 mL**	**1 mL**	**1.5 mL**	**2 mL**	**2.5 mL**	**3 mL**	**3.5 mL**	**4 mL**	**4 mL**

Procedural Sedation IV/IO/IM/IN BOLUS	2 mg	0.1 mg/kg	IV/IO bolus given over 10 seconds IM/IN	Cardioversion Pacing	Hypotension	✓
	Concentration: 5 mg in 5 mL					

Weight (kg)	5	10	15	20	25	30	35	40	≥ 45
Dose (mg)	0.5	1	1.5	2	2	2	2	2	2
Procedural Sedation (0.1 mg/kg)	**0.5**	**1 mL**	**1.5 mL**	**2 mL**	**2 mL**	**2 mL**	**2 mL**	**2 mL**	**2 mL**

Post Airway Sedation IV/IO BOLUS	2 mg	0.1 mg/kg	IV/IO bolus given over 10 seconds	Advanced Airway Placement	Hypotension	✓
	Concentration: 5 mg in 5 mL					

Weight (kg)	5	10	15	20	25	30	35	40	≥ 45
Dose (mg)	0.5	1	1.5	2	2	2	2	2	2
Post Airway Sedation (0.1 mg/kg)	**0.5 mL**	**1 mL**	**1.5 mL**	**2 mL**	**2 mL**	**2 mL**	**2 mL**	**2 mL**	**2 mL**

NALOXONE						
NALOXONE	ADULT DOSE	PEDIATRIC DOSE	ADMINISTRATION GUIDELINE	INDICATIONS	CONTRAINDICATIONS	NOTES
Opioid Overdose **IV/IO/IM/IN** BOLUS	1.0 mg IN 0.5 mg IV/IO/IM	0.5 mg	IV/IO bolus given over 10 seconds IM/IN	Opioid Overdose		✓
	Concentration: 2 mg in 2 mL					

NITROGLYCERIN						
NITROGLYCERIN	**ADULT DOSE**	**PEDIATRIC DOSE**	**ADMINISTRATION GUIDELINE**	**INDICATIONS**	**CONTRAINDICATIONS**	**NOTES**
Acute Coronary Syndrome **SL**	**400 mcg** q 5 min PRN	**N/A**	SL until symptom improvement unless SBP < 100 mm/Hg	Chest Discomfort Acute Coronary Syndrome	SBP < 100 mm/hg Inferior STEMI Phosphodiesterase inhibitor within last 48 hours HR <50 or >120 w/o heart failure	✔
	Concentration: 400 mcg per spray/tablet					
Normotensive or Hypertensive CHF **SL**	**1200 mcg (hypertensive only)** then **400 mcg** q 3 min PRN	**N/A**	SL until symptom improvement unless SBP < 100 mm/Hg	CHF	SBP < 90 mm/Hg Inferior STEMI Phosphodiesterase inhibitor within last 48 hours HR <50 or >120 w/o heart failure	The 1,200 mcg initial dose should be reserved only for the hypertensive patients. All patients will receive the 400 mcg dose q 3 min if they meet criteria.
	Concentration: 400 mcg per spray/tablet					

NOREPINEPHRINE

NOREPINEPHRINE	ADULT DOSE	PEDIATRIC DOSE	ADMINISTRATION GUIDELINE	INDICATIONS	CONTRAINDICATIONS	NOTES
Hypotension **IV/IO** **INFUSION**	**8-12 mcg/min** MAP > 65 mm/Hg	***Online Medical Control*** **0.1-1 mcg/kg/min** Age appropriate SBP	Start at 8 mcg / min, adjust q 2 min 8 mcg / min = 30 gtts 10 mcg / min = 38 gtts 12 mcg / min = 45 gtts	Hypotension unresponsive to fluid boluses	Hypovolemic Shock	Proximal IV site preferred. Label the bag Administer 0.9%NS in conjunction with Norepinephrine ✓
	Concentration: 4 mg in 250 mL bag					

Weight (kg)	5	10	15	20	25	30	35	40	50	60	70	80	90	100
Dose (mcg/min)	0.5	1	1.5	2	2.5	3	3.5	4	8	8	8	8	8	8
Starting Drops per Minute	**2**	**4**	**6**	**8**	**10**	**12**	**14**	**15**	**30**	**30**	**30**	**30**	**30**	**30**
Dose (mcg/min)	5	10	15	20	25	30	35	40	12	12	12	12	12	12
Max Drops per Minute	**19**	**37**	**56**	**75**	**94**	**112**	**131**	**150**	**45**	**45**	**45**	**45**	**45**	**45**

NORMAL SALINE

NORMAL SALINE	ADULT DOSE	PEDIATRIC DOSE	ADMINISTRATION GUIDELINE	INDICATIONS	CONTRAINDICATIONS	NOTES
Fluid Administration **IV/IO** VARIABLE	20-30 mL/kg	20-30 mL/kg	Rates may vary, pressure bag may be needed for IO	Hypotension Dehydration Shock	Signs of heart failure with respiratory distress	✓
	Concentration: 0.9% NS in 1,000; 500; 250; and 100 mL					

Weight (kg)	5	10	15	20	25	30	35	40	50	60	70	80	90	100
Fluid Bolus (20 mL/kg)	**100 mL**	**200 mL**	**300 mL**	**400 mL**	**500 mL**	**600 mL**	**700 mL**	**800 mL**	**1000 mL**	**1200 mL**	**1400 mL**	**1600 mL**	**1800 mL**	**2000 mL**
Sepsis (30 mL/kg)	**150 mL**	**300 mL**	**450 mL**	**600 mL**	**750 mL**	**900 mL**	**1050 mL**	**1200mL**	**1500 mL**	**1800 mL**	**2100 mL**	**2400 mL**	**2700 mL**	**3000 mL**

ONDANSETRON

ONDANSETRON	ADULT DOSE	PEDIATRIC DOSE	ADMINISTRATION GUIDELINE	INDICATIONS	CONTRAINDICATIONS	NOTES
Nausea **ODT**	**8 mg**	**4 mg** (15-30 kg only)	ODT	Nausea Vomiting	History of congenital/acquired prolonged QTc syndrome Known QTc >470 ms	✓
	Concentration: 4 mg oral dissolving tablets					
Nausea **IV/IO** SLOW PUSH	**4 mg**	**0.1 mg/kg** Max Dose 4 mg	IV/IO **slow** push given over 2 minutes	Nausea Vomiting	History of congenital/acquired prolonged QTc syndrome Known QTc >470 ms	✓
	Concentration: 4 mg in 2 mL					

Weight (kg)	5	10	15	20	25	30	35	40	≥ 45
Dose (mg)	0.5	1	1.5	2	2.5	3	3.5	4	4
Nausea (0.1 mg/kg)	**0.3 mL**	**0.5 mL**	**0.8 mL**	**1 mL**	**1.3 mL**	**1.5 mL**	**1.8 mL**	**2 mL**	**2 mL**

SODIUM BICARBONATE

SODIUM BICARBONATE	ADULT DOSE	PEDIATRIC DOSE	ADMINISTRATION GUIDELINE	INDICATIONS	CONTRAINDICATIONS	NOTES
Acidosis **IV/IO** BOLUS	*Online Medical Control* 50 mEq	*Online Medical Control* 1 mEq/kg Max Dose 50 mEq	IV/IO bolus given over 30 seconds	Acidosis		Do not mix with other medications as precipitate may form Flush thoroughly. ✓
	Concentration: 50 mEq in 50 mL					

Weight (kg)	5	10	15	20	25	30	35	40	≥ 45
Dose (1mEq/kg)	5	10	15	20	25	30	35	40	50
Acidosis (1 mEq/kg)	**5 mL**	**10 mL**	**15 mL**	**20 mL**	**25 mL**	**30 mL**	**35 mL**	**40 mL**	**50 mL**

Medication Cross Check

EMT-Basic
Advanced EMT
Paramedic

ADAPTED WITH PERMISSION FROM WICHITA-SEDGWICK COUNTY EMS SYSTEM

The MACC must be completed prior to the administration of any medication. Both providers MUST have visible access to the cross-check

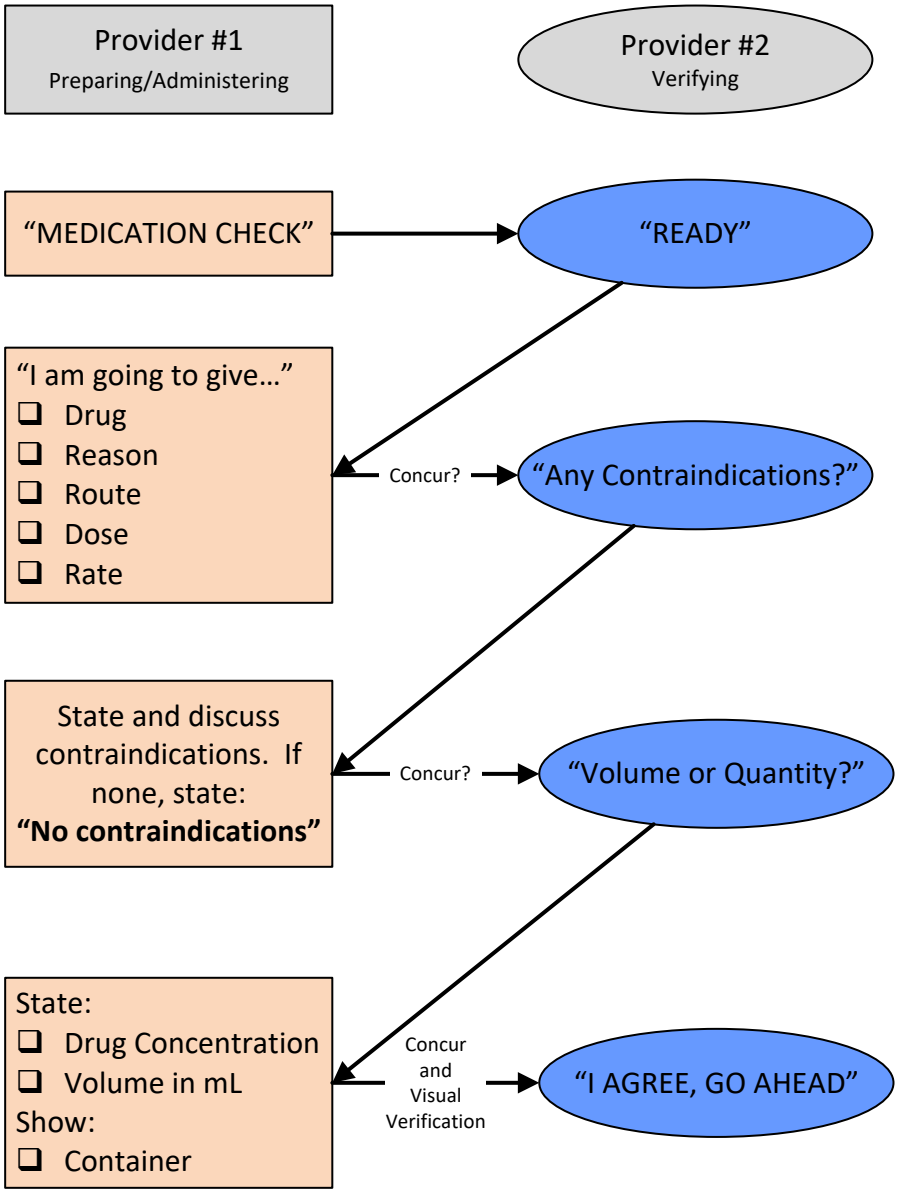
If a discrepancy, disagreement, or need for clarification is encountered – it MUST be resolved before continuing the cross-check.

If there is an interruption or change in patient condition of any kind, the process must be re-initiated by Provider #1.

Contraindications include:
- ❑ **Expiration date**
- ❑ **Known patient allergy**
- ❑ **Verification of appropriate vital signs**
- ❑ **Protocol exclusion criteria**

Avoid ambiguous statements of confirmation like 'okay or yep'.

Essentially, only provider 2 can authorize the administration of a medication.



RED RULE of Medication Administration
(A Duty to Avoid Causing UNJUSTIFIABLE Harm)
NEVER give the contents of a syringe that is not labeled or without visualizing the container from which it was immediately drawn

Return to Medication List

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