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Drug Name: Adenosine Approved: EMS Medical Directors Consortium Effective: August 1, 2022

DRUG NAME -	
GENERIC	Adenosine
DRUG NAME - TRADE	Adenocard
DRUG	
CLASSIFICATION	Antiarrhythmic
DOSAGE FORMS	6 mg/2 mL, Injection, Prefilled syringe or vial
ACTION(S)	Slows conduction through AV node and interrupts AV reentry pathways to restore normal sinus rhythm
INDICATIONS	For Stable Patients: Treatment of regular, narrow complex supraventricular tachycardia (SVT)
CONTRAINDICATIONS	 Known or documented hypersensitivity
	Sick sinus syndrome
	2nd or 3rd degree AV block
	 Poison or drug-induced tachycardia
	Atrial fibrillation/flutter
	Ventricular tachycardia
	 Wolff-Parkinson-White (WPW) syndrome
	Use with caution in asthma and COPD
ADULT DOSE / ROUTE	Antecubital IV access
	• Initial dose: 6 mg rapid IV (over 1-2 seconds) followed immediately by 10 mL rapid saline flush and
	extremity elevation
	• If first dose does not terminate dysrhythmia in 1-2 minutes, give 12 mg rapid IV followed by 10 mL
	rapid saline flush and extremity elevation
PEDIATRIC DOSE /	Antecubital IV access, if possible
ROUTE	 Initial dose of 0.1 mg/kg rapid IV/IO over 1-2 seconds followed immediately by 2- 5 mL rapid saline
	flush and extremity elevation
	• Max initial dose 6 mg
	• If first dose does not terminate SVT in 1-2 minutes, give 0.2 mg/kg rapid IV/IO followed immediately by
	2- 5 mL rapid saline flush and extremity elevation. Max repeat dose 12 mg
SIDE EFFECTS	• Common reactions are generally mild and short-lived: sense of impending doom, flushing, chest
	pressure, throat tightness, numbness
	• Patients may have a brief episode of one or more transient dysrhythmias, which may include asystole
	 Adenosine is a respiratory stimulant; can exacerbate asthma and COPD



Drug Name: Albuterol Approved: EMS Medical Directors Consortium Effective: August 1, 2022

DRUG NAME -	
GENERIC	Albuterol
DRUG NAME - TRADE	Proventil, Ventolin, Proair
DRUG	
CLASSIFICATION	Bronchodilator, beta agonist
DOSAGE FORMS	0.083%, 2.5 mg/3 mL, inhalation, vial
ACTION(S)	Bronchial smooth muscle relaxation via beta-2 receptors.
	Asthma
	 Bronchitis with bronchospasm
	COPD with wheezing
INDICATIONS	 Allergic reaction/anaphylaxis with wheezing
	 Known or documented hypersensitivity
	• Use with caution in patients with cardiovascular disease history, tachycardia secondary to cardiac
CONTRAINDICATIONS	condition, croup
ADULT DOSE / ROUTE	
PEDIATRIC DOSE /	2.5 mg of 0.083% (3 mL) via nebulizer (6 LPM oxygen) until mist stops, usually 5-15 minutes.
ROUTE	
	 Common side effects include palpitations, tachydysrhythmia, anxiety, tremors, nausea/vomiting
SIDE EFFECTS	Rarely, paradoxical bronchospasm can occur



Drug Name: Amiodarone Approved: EMS Medical Directors Consortium Effective: August 1, 2022

DRUG NAME - GENERIC	Amiodarone
DRUG NAME - TRADE	Pacerone, Cordarone
DRUG	
CLASSIFICATION	Antiarrhythmic
DOSAGE FORMS	150 mg/3ml, Injection, Vial
	 Class III antiarrhythmic which inhibits adrenergic stimulation
	 Affects sodium, potassium, and calcium channels
	• Increases the cardiac refractory period and prolongs action potential and repolarization in myocardium
ACTION(S)	Decreases AV conduction and sinus node function
	• Cardiac arrest with shock refractory ventricular fibrillation (V-Fib) or pulseless ventricular tachycardia
INDICATIONS	(V-Tach)
	 No Contraindications in pulseless cardiac arrest
CONTRAINDICATIONS	 Do not administer to patients with return of spontaneous circulation/pulse
	• 300 mg IV/IO bolus after 3 rd defibrillation. Repeat dose of 150 mg IV/IO bolus after 5 th defibrillation if
ADULT DOSE / ROUTE	patient remains in pulseless shockable rhythm
PEDIATRIC DOSE /	• Ventricular Fibrillation/Pulseless Ventricular Tachycardia: Amiodarone 5 mg/kg IV/IO. May Repeat x2.
ROUTE	Max dose 300mg
	Common side effects include hypotension, bradycardia, AV block, dysrhythmias, nausea, vomiting
SIDE EFFECTS	QT prolongation



Drug Name: Aspirin Approved: EMS Medical Directors Consortium Effective: August 1, 2022

DRUG NAME - GENERIC	Aspirin
DRUG NAME - TRADE	Ecotrin, Bayer
DRUG CLASSIFICATION	Antiplatelet agent
DOSAGE FORMS	81 mg, chewable, bottle
	Inhibits synthesis of prostaglandin by cyclooxygenase
ACTION(S)	 Inhibits platelet aggregation Has antipyretic and analgesic activity
INDICATIONS	 Suspected acute coronary syndrome (ACS) or chest pain suspicious for cardiac origin
CONTRAINDICATIONS	 Known or documented hypersensitivity to aspirin or NSAIDS Bleeding diathesis, hemophilia, GI Bleeding/active ulcers, hemorrhagic stroke, history of bleeding or clotting disorders
ADULT DOSE / ROUTE	 324 mg (4 x 81 mg chewable tablets), chewed and swallowed
PEDIATRIC DOSE /	
ROUTE	N/A
SIDE EFFECTS	 Possible side effects include bleeding, stomach irritation, nausea and vomiting



Drug Name: Atropine - Symptomatic Bradycardia Approved: EMS Medical Directors Consortium Effective: August 1, 2022

DRUG NAME - GENERIC	Atropine: Symptomatic Bradycardia
DRUG NAME - TRADE	Atropine
DRUG	
CLASSIFICATION	Anticholinergic
DOSAGE FORMS	1 mg/10 mL, Injection, Prefilled syringe
	 Reverses cholinergic-mediated decreases in heart rate
ACTION(S)	 Increases SA and AV node conduction
INDICATIONS	Symptomatic bradycardia
CONTRAINDICATIONS	No absolute contraindications for ACLS
ADULT DOSE / ROUTE	Bradycardia: 0.5 mg rapid IV q 3-5 minutes up to 3 mg total
PEDIATRIC DOSE /	 Bradycardia: 0.02 mg/kg rapid IV/IO
ROUTE	 Max single dose 0.5 mg. May repeat once.
	Decreased secretions/dry mouth, intense facial flushing and hot skin temperature, blurred vision or pupil
SIDE EFFECTS	dilation, photophobia, tachycardia, restlessness



Drug Name: Atropine – Nerve Agent & Organophosphate Poisoning Approved: EMS Medical Directors Consortium Effective: August 1, 2022

DRUG NAME -	
GENERIC	Atropine: Nerve Agent and Organophosphate Poisoning
DRUG NAME - TRADE	Atropine, AtroPen, component of Mark 1 Kits and DuoDote
DRUG	
CLASSIFICATION	Anticholinergic, antidote for organophosphate and nerve agent poisoning
	 Chempak atropine: 0.4mg/ml (20 mg vial)
	Duodote: 2 mg atropine
DOSAGE FORMS	Mark 1 Kit: 2 mg atropine
	Competitively inhibits action of acetylcholine at muscarinic receptor sites. Receptors affected include
	salivary, bronchial, sweat glands, eyes, heart and GI tract (most-to-least sensitive)
	 Increases SA and AV node conduction
ACTION(S)	Dries secretions
	For the management of toxicity caused by organophosphate insecticides and nerve agents poisoning
	(e.g. tabun, sarin, soman) including muscle fasiculations, nausea and vomiting, copious secretions,
INDICATIONS	bradycardia, weakness, shortness of breath, unconsciousness, convulsions, paralysis and apnea
CONTRAINDICATIONS	Known or documented hypersensitivity in non-ACLS/nerve agent/organophosphate scenarios
	 Nerve Agent/Organophosphate Poisoning: 2 mg IM and titrate until desired effect (drying of
	tracheobronchial secretions, improvement of breathing and bradycardia)
ADULT DOSE / ROUTE	No max dose.
PEDIATRIC DOSE /	 Pediatric nerve agent/organophosphate exposure dosages are not included in the Drug Appendi
ROUTE	 See Protocol: HAZ MAT / NERVE AGENTS - PEDIATRIC - ALS
	Decreased secretions/dry mouth, intense facial flushing and hot skin temperature, blurred vision or pupil
SIDE EFFECTS	dilation, photophobia, tachycardia, restlessness



Drug Name: Calcium Chloride 10% Approved: EMS Medical Directors Consortium Effective: August 1, 2022

DRUG NAME -	
GENERIC	Calcium Chloride 10%
DRUG NAME - TRADE	NONE
DRUG	
CLASSIFICATION	Calcium Salt, Electrolyte replacement
DOSAGE FORMS	10%, 1 gram/10 mL, Injection, Prefilled syringe
ACTION(S)	Stabilize cardiac cell membrane in patients with hyperkalemia who are unstable or in cardiac arrest
	 Suspected hyperkalemia with cardiac arrest or dysrhythmia
	 Renal patients with QRS>0.12 seconds
INDICATIONS	 Crush injuries with victim still entrapped when QRS widens, peaked T waves, or ectopy
	 Known or documented hypersensitivity
	Known or suspected digoxin toxicity
CONTRAINDICATIONS	NOTE: Ensure proper IV function. IV extravasation is toxic to soft tissues.
ADULT DOSE / ROUTE	Calcium Chloride 10% 1 gram/10mL injection of prefilled syringe IV/IO
PEDIATRIC DOSE /	
ROUTE	20 mg/kg IV/IO slow push (0.2 mL/kg of 10% solution. Max single dose 10 ml)
SIDE EFFECTS	Minimal when used as indicated.



Drug Name: Dextrose Approved: EMS Medical Directors Consortium Effective: August 1, 2022

DRUG NAME -	
GENERIC	Dextrose
DRUG NAME - TRADE	D10, Glucose
DRUG	
CLASSIFICATION	Glucose elevating agent
DOSAGE FORMS	Dextrose 10% (D10), 25 grams/250 ml water OR 50 grams/500 mL water, injection
ACTION(S)	Increase in blood glucose concentrations
INDICATIONS	Hypoglycemia
	 Known or documented hypersensitivity to dextrose, corn or corn products
CONTRAINDICATIONS	Hyperglycemia
	 Dextrose 10% (D10) 100 mL IV boluses until mental status improves or BS > 60mg/dL
ADULT DOSE / ROUTE	• Note: 250 mL of D10 = 25 g glucose
	• All Ages: Dextrose 10% (D10) 5 mL/kg (0.5 g/kg) slow IV/IO using buretrol. Repeat slow IV as
	indicated
PEDIATRIC DOSE /	• Max 250 ml (25g)
ROUTE	• Newly born/Neonate: 15mL of Dextrose 10% (D10) slow IV/IO using buretrol. Repeat as indicated.
	Hyperglycemia, warmth/burning from IV injection, diuresis, thrombophlebitis, tissue necrosis if IV/IO
SIDE EFFECTS	infiltrates



Drug Name: Diphenhydramine Approved: EMS Medical Directors Consortium Effective: August 1, 2022

DRUG NAME -	
GENERIC	Diphenhydramine
DRUG NAME - TRADE	Benadryl
DRUG	
CLASSIFICATION	Antihistamine
DOSAGE FORMS	50 mg/1 mL, injection, vial
ACTION(S)	Binds and blocks histamine-1 receptors on skin, lungs, blood vessels, and GI smooth muscle
	 Allergic reactions and anaphylaxis
INDICATIONS	 Urticaria and itching related to allergic reactions
	 Known or documented hypersensitivity
CONTRAINDICATIONS	 Caution in presence of CNS depressants like alcohol and drugs
ADULT DOSE / ROUTE	50 mg IM or slow IV
PEDIATRIC DOSE /	• 1 mg/kg IM or slow IV/IO
ROUTE	 Max dose 50 mg
	Drowsiness/sedation, dizziness, excitable state (paradoxical reaction in some children),
SIDE EFFECTS	wheezing/thickening of bronchial secretions, dry mouth



Drug Name: Epinephrine – Allergic Reaction and/or Anaphylaxis Approved: EMS Medical Directors Consortium Effective: August 1, 2022

DRUG NAME - GENERIC	Epinephrine: Allergic Reaction and/or Anaphylaxis
DRUG NAME - TRADE	Epinephrine, Adrenalin, EpiPen, EpiPen Jr
DRUG CLASSIFICATION	Adrenergic agonist
DOSAGE FORMS	 1:1,000 (1 mg/mL), injection, vial 1:10,000 (0.1 mg/mL), injection, prefilled syringe
ACTION(S)	Stimulates alpha and beta receptors resulting in increased blood pressure, increased heart rate, bronchodilation
INDICATIONS	Allergic reaction and/or anaphylaxis
CONTRAINDICATIONS	 None in anaphylaxis Use with caution if patient has history of hypertension, angina, cardiac disease or hyperthyroidism
ADULT DOSE / ROUTE	 ALS and BLS - 0.3 mg IM (0.3 mL of 1 mg/mL concentration [1:1,000]) May repeat x1 in 5-10 min. ALS Only - Sustained severity or deterioration: 0.1 mg IV (1 ml of 0.1mg/mL concentration [1:10,000]). May repeat every 5 minutes as indicated.
PEDIATRIC DOSE / ROUTE	 ALS - 0.01 mg/kg IM (0.01 mL/kg of 1mg/mL concentration [1:1,000]). May repeat x1 in 5-10 min. Sustained severity or deterioration: 0.01 mg/kg IV/IO (0.1 mL/kg of 0.1 mg/mL concentration [1:10,000]). May repeat every 5 minutes as indicated. BLS - If length < 48 inches, 0.15mg IM (0.15 mL of 1mg/mL concentration [1:1,000]) If length ≥ 48 inches, 0.3 mg IM (0.3 mL of 1mg/mL concentration [1:1,000]) If second dose indicated, contact OLMC
SIDE EFFECTS	Palpitations, tachycardia, hypertension, angina, anxiety, tremors, headache



Drug Name: Epinephrine – Cardiac Arrest Approved: EMS Medical Directors Consortium Effective: August 1, 2022

DRUG NAME - GENERIC	Epinephrine: Cardiac Arrest
DRUG NAME - TRADE	Epinephrine
DRUG	
CLASSIFICATION	Adrenergic agonist
DOSAGE FORMS	1:10,000 (0.1 mg/mL), Injection, Prefilled syringe
ACTION(S)	Stimulates alpha and beta receptors increasing coronary and cerebral perfusion pressure during CPR
INDICATIONS	Cardiac arrest
CONTRAINDICATIONS	None in cardiac arrest.
	 1 mg (10 mL of the 0.1mg/mL concentration [1:10,000]) IV/IO
ADULT DOSE / ROUTE	Repeat q 3-5min while pulseless
PEDIATRIC DOSE /	.01 mg/kg (0.1 mL/kg of the 0.1mg/mL concentration [1:10,000]) IV/IO
ROUTE	Repeat q 3-5 min while pulseless
SIDE EFFECTS	None in cardiac arrest



Drug Name: Epinephrine: Neonatal Resuscitation Approved: EMS Medical Directors Consortium Effective: August 1, 2022

DRUG NAME -	
GENERIC	Epinephrine: Neonatal Resuscitation
DRUG NAME - TRADE	Epinephrine
DRUG	
CLASSIFICATION	Adrenergic agonist
DOSAGE FORMS	1:10,000 (0.1 mg/mL), Injection, Prefilled syringe
ACTION(S)	Stimulates alpha and beta receptors increasing coronary and cerebral perfusion pressure
INDICATIONS	Neonatal/newborn bradycardia/cardiac arrest
CONTRAINDICATIONS	None in cardiac arrest
ADULT DOSE / ROUTE	N/A
PEDIATRIC DOSE /	 0.3 mL IV/IO of the 0.1mg/mL concentration (1:10,000)
ROUTE	 Repeat q 3-5 minutes while pulseless
SIDE EFFECTS	None in cardiac arrest



Drug Name: Epinephrine – Pediatric Bradycardia Approved: EMS Medical Directors Consortium Effective: August 1, 2022

DRUG NAME -	
GENERIC	Epinephrine: Pediatric Bradycardia
DRUG NAME - TRADE	Epinephrine
DRUG	
CLASSIFICATION	Adrenergic agonist
DOSAGE FORMS	1:10,000 (0.1 mg/mL), Injection, Prefilled syringe
ACTION(S)	Stimulates alpha and beta receptors increasing heart rate and blood pressure
INDICATIONS	Pediatric: Bradycardia pulse <60 AND severe cardiorespiratory compromise
CONTRAINDICATIONS	None
ADULT DOSE / ROUTE	N/A
PEDIATRIC DOSE /	 0.01 mg/kg (0.1 mL/kg of the 0.1mg/mL concentration [1:10,000]) IV/IO
ROUTE	 Repeat q 3-5 min during bradycardia/cardiorespiratory compromise
SIDE EFFECTS	Palpitations, tachycardia, hypertension, angina, anxiety, tremors, headache



Drug Name: Epinephrine – Severe Respiratory Distress Approved: EMS Medical Directors Consortium Effective: August 1, 2022

DRUG NAME -	
GENERIC	Epinephrine: Severe Respiratory Distress
DRUG NAME - TRADE	Epinephrine, Adrenalin
DRUG	
CLASSIFICATION	Adrenergic agonist
DOSAGE FORMS	1:1,000 (1 mg/mL), injection, vial
ACTION(S)	Stimulates alpha and beta receptors resulting in bronchodilation
INDICATIONS	Rescue therapy for severe respiratory distress from bronchospasm associated with asthma, COPD
CONTRAINDICATIONS	Use with caution if patient has history of hypertension, angina, cardiac disease or hyperthyroidism
ADULT DOSE / ROUTE	0.3 mg IM (0.3 mL of 1 mg/mL concentration [1:1,000])
PEDIATRIC DOSE /	 0.01 mg/kg IM (0.01 mL/kg of 1 mg/mL concentration [1:1,000])
ROUTE	Maximum 0.3 mg per single dose
SIDE EFFECTS	Palpitations, tachycardia, hypertension, angina, anxiety, tremors, headache



Drug Name: Fentanyl Approved: EMS Medical Directors Consortium Effective: August 1, 2022

DRUG NAME - GENERIC	Fentanyl
DRUG NAME - TRADE	Sublimaze
DRUG	
CLASSIFICATION	Opioid analgesic
DOSAGE FORMS	100 mcg/2 mL, injection, vial
	Opioid agonist
ACTION(S)	 Potent narcotic analgesic with rapid onset and short duration (30-60 minutes)
	 Pain related to acute coronary syndrome unresponsive to nitroglycerin.
	Pain related to burns.
	Pain related to trauma.
	 Pain related to cardioversion or pacing
INDICATIONS	Severe pain as per Pain Management protocol
	 Known or documented allergy to fentanyl or other opioid analgesics
	 Pregnancy with active labor
	Dental pain
	 Chronic pain patients who are not part of hospice or palliative care
	 Hypoventilation or respiratory depression
	 Pediatrics less than 1 year of age
CONTRAINDICATIONS	USE WITH CAUTION in the following patients: GCS<15, hypotension, hypoxia
	• 1 mcg/kg IV or IM/IO/IN.
	 ≤ 65 years of age – Max dose 100 mcg
ADULT DOSE / ROUTE	 > 65 years of age – Max dose 50 mcg
PEDIATRIC DOSE /	• Must be > 1 year old
ROUTE	 1 mcg/kg IV or IM/IO/IN, not to exceed adult max dose. No repeat dose.
	 Respiratory depression, hypotension, bradycardia, muscle rigidity, delirium, dizziness, headache,
	nausea, vomiting
SIDE EFFECTS	Rapid infusion may cause chest wall rigidity



REGION 11 CHICAGO EMS SYSTEM

Drug Name: Glucagon

DRUG TABLE

Approved: EMS Medical Directors Consortium

DRUG NAME - GENERIC	Glucagon
DRUG NAME - TRADE	GlucaGen, Glucagon
DRUG CLASSIFICATION	Glucose elevating agent
DOSAGE FORMS	1 mg Solvent with 1 mL solute (kit only), injection
ACTION(S)	- Causes a breakdown of stored glycogen to raise blood glucose levels
INDICATIONS	- Hypoglycemic patient without venous access and inability to administer oral glucose paste (see
	Glucose, oral)
CONTRAINDICATIONS	- Known or documented hypersensitivity to glucagon
ADULT DOSE / ROUTE	- 1 mg IM/IN
PEDIATRIC DOSE /	- ≤ 8 yo = 0.5 mg IM
ROUTE	> 8 yo = 1 mg IM
SIDE EFFECTS	- Nausea/vomiting, dizziness, headache



Drug Name: Glucose Gel Approved: EMS Medical Directors Consortium Effective: August 1, 2022

DRUG NAME - GENERIC	Glucose Gel
DRUG NAME - TRADE	Glutose 15
DRUG	
CLASSIFICATION	Glucose elevating agent
DOSAGE FORMS	Net weight of gel 37.5 grams, oral, tube
ACTION(S)	Increases serum glucose level
INDICATIONS	Hypoglycemia in alert patients who are able to follow commands and swallow
CONTRAINDICATIONS	Uncooperative or depressed mental status
ADULT DOSE / ROUTE	One Tube (15 g)
	• 1 mo- 4 years: 1/4 tube
PEDIATRIC DOSE /	• 4- 8 years: 1/2 tube
ROUTE	• >8 years: 1 tube
SIDE EFFECTS	Nausea, potential for aspiration in patients with impaired airway reflexes



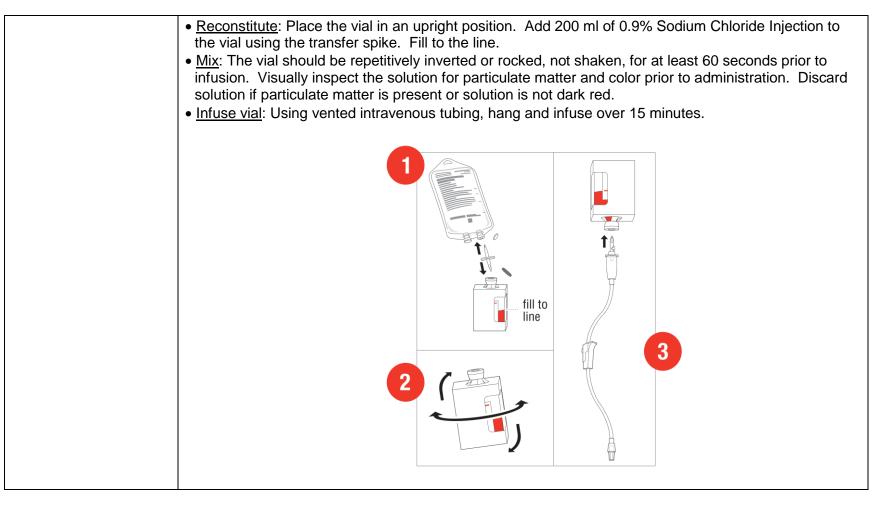
Drug Name: Hydroxocobalamin

Approved: EMS Medical Directors Consortium

Effective: December 6, 2023

DRUG NAME -	
GENERIC	Hydroxocobalamin
DRUG NAME - TRADE	Cyanokit
DRUG	
CLASSIFICATION	Antidote for cyanide exposure
DOSAGE FORMS	One kit - 5 gram hydroxocobalamin dark red crystalline powder in a vial to be reconstituted with 200 ml of 0.9% Sodium Chloride
ACTION(S)	 Contains cobalt compounds that bind to and detoxify cyanide before it inhibits cellular respiration
INDICATIONS	 Exposure to products of combustion with smoke inhalation from closed-space fires <u>AND</u>
	 One or more significant cyanide exposure signs or symptoms, such as markedly altered level of consciousness, seizures, respiratory depression or respiratory arrest, cardiac dysrhythmias and hypotension.
CONTRAINDICATIONS	 Hypersensitivity to hydroxocobalamin, cyanocobalamin or cobalt
ADULT DOSE / ROUTE	IV infusion
	 Initial dose: 5 grams (one kit) administered over 15 minutes, slow IV
	 After reconstitution, the vial contains hydroxocobalamin for injection with concentration 25 mg/mL
	Considered safe for treatment in pregnant patients
PEDIATRIC DOSE /	IV infusion
ROUTE	 70 mg/kg (reconstitute concentration is 25 mg/mL)
	Max dose 5 grams (one kit)
SIDE EFFECTS	 <u>Risk of anaphylaxis or other hypersensitivity reaction</u> - Common reactions include new onset chest
	tightness, edema, urticaria, pruritis, dyspnea, or rash.
	 <u>Risk of renal injury</u> – Acute renal failure with acute tubular necrosis, renal impairment, and urine
	calcium oxalate crystals have been reported after Cyanokit administration.
	 <u>Risk of substantially increased blood pressure</u> – Monitor blood pressure during treatment.
	• Red coloring of the urine (chromaturia) and skin (erythema) - This flushing should not be interpreted
	as an allergic reaction.
	Other side effects – headache or infusion site reaction.
PREPARATION	Visually inspect hydroxocobalamin solutions for particulate matter and color prior to administration. If
	the reconstituted solution is not dark red or if particulate matter is observed after the solution has been appropriately mixed, the solution should be discarded.
	 Any reconstituted product not used within 6 hours should be discarded.
	Use a separate IV line for administration of hydroxocobalamin.







Drug Name: Ipratropium Approved: EMS Medical Directors Consortium Effective: August 1, 2022

DRUG NAME -	
GENERIC	Ipratropium
DRUG NAME - TRADE	Atrovent
DRUG	
CLASSIFICATION	Bronchodilator, Anticholinergic
DOSAGE FORMS	0.02%, 0.5 mg/2.5 mL, inhalation, vial
	Anticholinergic agent
ACTION(S)	 Results in bronchial smooth muscle relaxation and bronchodilation
	Asthma
	 Bronchitis with bronchospasm
INDICATIONS	COPD with wheezing
CONTRAINDICATIONS	Known or documented hypersensitivity
ADULT & PEDIATRIC	
DOSE / ROUTE	0.5 mg (2.5 mL) via nebulizer (6 LPM oxygen) mixed with albuterol until mist stops, usually 5-15 minutes
	Common side effects include palpitations, tachydysrhythmia, anxiety, tremors, nausea/vomiting
SIDE EFFECTS	Rarely, paradoxical bronchospasm can occur



Drug Name: Midazolam Approved: EMS Medical Directors Consortium Effective: August 1, 2022

DRUG NAME -	
GENERIC	Midazolam
DRUG NAME - TRADE	Versed
DRUG	
CLASSIFICATION	Benzodiazepine, sedative-hypnotic, anticonvulsant
DOSAGE FORMS	10 mg/2 mL, injection, vial
	 Suppresses seizures, causes sedation and muscle relaxation
ACTION(S)	 Enhances effects of GABA neurotransmitter
	Active seizure
INDICATIONS	 Behavioral emergency not responsive to verbal de-escalation
	 Known or documented allergey/hypersensitivity
	 Acute narrow angle glaucoma
	 Severe respiratory depression (except during mechanical ventilation)
	• Caution in COPD, renal failure, CHF, elderly, pregnancy, concomitant alcohol or CNS depressant
CONTRAINDICATIONS	medication use
	 Seizure: 2 - 5mg IV/IO, may repeat X1 after 5 minutes if seizures persist (10mg max) OR
	10 mg IN or 5mg IM
	 Behavioral Emergency: 2mg IV, may repeat X1 after 5 minutes OR
ADULT DOSE / ROUTE	5mg IN/IM (Age > 60 contact OLMC for approval)
	• Seizures 0.1 mg/kg slow IV/IO/IM or 0.2 mg/kg IN. If seizures continue > 5 minutes, may repeat X1.
PEDIATRIC DOSE /	 Maximum total dose: < 6 years = 6 mg
ROUTE	≥ 6 years = 10 mg
	Excessive CNS depression, apnea, amnesia, confusion, ataxia, hypotension, euphoria, and rarely
SIDE EFFECTS	paradoxical reactions (aggressiveness, restlessness)



Drug Name: Naloxone Approved: EMS Medical Directors Consortium Effective: August 1, 2022

DRUG NAME - GENERIC	Naloxone
DRUG NAME - TRADE	Narcan
DRUG	
CLASSIFICATION	Opioid antagonist
DOSAGE FORMS	2 mg/2 ml, injection, Prefilled Syringe
ACTION(S)	Binds the opioid receptor and blocks the effects of opioids
INDICATIONS	Reversal of acute respiratory depression from suspected opioid toxicity
CONTRAINDICATIONS	None
	ALS 1-2 mg IV/IO/IM or 2mg nebulized OR IN
ADULT DOSE / ROUTE	• BLS 2 mg IN
PEDIATRIC DOSE /	 ALS ≤ 20 kg: 0.1 mg/kg IV/IO/IM/IN up to 2 mg. >20 kg: 2 mg IV/IO/IM/IN
ROUTE	• BLS 0-4 years old: 1 mg IN >4 years old 2 mg IN
SIDE EFFECTS	Withdrawal symptoms (agitation, nausea, vomiting), tachycardia, hypertension, seizures.



Drug Name: Nitroglycerin Approved: EMS Medical Directors Consortium Effective: August 1, 2022

DRUG NAME -	
GENERIC	Nitroglycerin
DRUG NAME - TRADE	Nitrostat
DRUG	
CLASSIFICATION	Vasodilator
DOSAGE FORMS	0.4 mg sublingual tablet, bottle
ACTION(S)	Smooth muscle relaxant resulting in peripheral vasodilation
INDICATIONS	Ischemic chest pain (angina, AMI), pulmonary edema
	• SBP < 100 mm Hg
	Known or documented hypersensitivity
	• Recent use of erectile dysfunction medications (sildenafil (Viagra® – within last 24 hours), tadalafil
	(Cialis® – within last 48 hours), vardenafil (Levitra® – within last 48 hours), or other
	phopsphodiesterase-5 inhibitors
	 Pulmonary hypertension medications (Revatio, Adempas, sildenafil, riociguat) may increase the effects of nitrates
CONTRAINDICATIONS	 Caution in patients with concern for inferior wall/right ventricular myocardial infarction
	• BLS Cardiac Chest Pain: Assist patient with 0.4 mg sublingual tablet. May repeat q 3-5 minutes for
	continued chest pain if systolic BP ≥ 100. (Max 3 doses)
	• ALS Suspected ACS/Pulmonary Edema: 0.4 mg sublingual tablet. May repeat q 3-5 minutes for
ADULT DOSE / ROUTE	continued CP if systolic BP ≥ 100. (Max 3 doses)
PEDIATRIC DOSE /	
ROUTE	N/A
SIDE EFFECTS	Headache, hypotension, nausea/vomiting, flushing, orthostatic hypotension/syncope



Drug Name: Ondansetron Approved: EMS Medical Directors Consortium Effective: August 1, 2022

DRUG NAME -	
GENERIC	Ondansetron
DRUG NAME - TRADE	Zofran
DRUG	
CLASSIFICATION	Antiemetic
DOSAGE FORMS	4 mg/2 mL, injection, vial OR 4 mg oral disintegrating tablet (ODT)
ACTION(S)	Selective serotonin 5- HT3 receptor antagonist
INDICATIONS	Nausea, vomiting
	 Known or documented hypersensitivity
	 Congenital heart surgery or congenital heart disease
	Severe hepatic impairment
CONTRAINDICATIONS	 Known or suspected prolonged QT interval
ADULT DOSE / ROUTE	4 mg IV or 4 mg ODT (place on top of tongue and allow to dissolve, then swallow with saliva)
PEDIATRIC DOSE /	 > 1 year old and 10 kg: consider 0.15 mg/kg slow IV max dose 4mg
ROUTE	 > 25 kg: 4 mg oral disintegrating tablet (ODT). No oral dose for < 25 kg
	Diarrhea, headache, lightheadedness.
SIDE EFFECTS	May prolong QT interval



Drug Name: Oxygen Approved: EMS Medical Directors Consortium Effective: August 1, 2022

DRUG NAME -	
GENERIC	Oxygen
DRUG NAME - TRADE	N/A
DRUG	
CLASSIFICATION	Medical gas
ACTION(S)	Raises the amount of oxygen in the blood and, therefore, the amount delivered to the tissues
	Hypoxemia
	Respiratory distress
	 Shock (decreased oxygenation of tissues) from any cause
	Smoke inhalation
	Carbon monoxide poisoning
INDICATIONS	Cardiac Arrest
CONTRAINDICATIONS	None
ADULT DOSE / ROUTE	• Administer oxygen to maintain an oxygen saturation of >94%. 1 L to 15 L per minute (nasal cannula
	or non-rebreather mask as needed)
PEDIATRIC DOSE /	• For any critically ill patient (respiratory distress, shock, smoke inhalation, carbon monoxide poisoning
ROUTE	or cardiac arrest) 15 L per minute non-rebreather mask
	 Drying and irritating to mucous membranes
SIDE EFFECTS	Mild Euphoria



Drug Name: Pralidoxime Approved: EMS Medical Directors Consortium Effective: August 1, 2022

DRUG NAME -	
GENERIC	Pralidoxime
DRUG NAME - TRADE	2-PAM
DRUG	
CLASSIFICATION	Oxime, antidote for organophosphate and nerve agent poisoning
	Duodote: 600 mg IM
	Mark 1 Kit: 600 mg IM
DOSAGE FORMS	• 20 ml vial containing 1 gram powder (50 mg/ml) (must be reconstituted with sterile water).
	Binds to organophosphates and breaks alkyl phosphate-cholinesterase bond to restore activity of
ACTION(S)	acetylcholinesterase
	• For the management of toxicity caused by organophosphate insecticides and nerve agent poisoning
	(e.g. tabun, sarin, soman) including muscle fasciculations, nausea and vomiting, copious secretions,
	bradycardia, weakness, shortness of breath, unconsciousness, convulsions, paralysis and apnea.
INDICATIONS	MUST be used in conjunction with atropine
CONTRAINDICATIONS	Documented hypersensitivity
ADULT DOSE / ROUTE	600 mg IM, may repeat x 2 for total of 1800 mg
PEDIATRIC DOSE /	• Pediatric nerve agent/organophosphate exposure dosages are not included in the Drug Appendix.
ROUTE	 See Protocol: HAZ MAT / NERVE AGENTS - PEDIATRIC - ALS
SIDE EFFECTS	Hypertension, tachycardia, dizziness, blurred vision



Drug Name: Sodium Bicarbonate 8.4% Approved: EMS Medical Directors Consortium Effective: August 1, 2022

DRUG NAME -	
GENERIC	Sodium Bicarbonate 8.4%
DRUG NAME - TRADE	N/A
DRUG	
CLASSIFICATION	Electrolyte replacement, Alkalinizing Agent
Dosage Forms	50 mEq/50 ml, injection, prefilled syringe
	 Buffers acidosis in chronic renal failure/dialysis patients who are unstable or in cardiac arrest
	Shifts potassium into cells
ACTION(S)	Slows uptake of cyclic antidepressants.
	 Cardiac arrest or wide complex tachycardia with pulse AND suspected hyperkalemia
	Consider with wide complex tachycardia or cardiac arrest secondary to suspected tricyclic
	antidepressant overdose.
INDICATIONS	Adult crush injuries with victim still entrapped
CONTRAINDICATIONS	None for indications as listed
	 Adults - Cardiac Arrest/Wide Complex Tachycardia: Sodium Bicarbonate 8.4% 50 mEq/50 mL
	injection of prefilled syringe IV/IO
	Adults - Crush injury with victim still entrapped: Sodium bicarbonate 8.4% 1 mEq/kg (maximum dose
ADULT DOSE / ROUTE	of 50 mEq) IV/IO
PEDIATRIC DOSE /	
ROUTE	Call OLMC
SIDE EFFECTS	Minimal when used as indicated.