REGION 11

CHICAGO EMS SYSTEM

MEDICATION TABLE

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GENERIC NAME	Adenosine
TRADE NAME	Adenocard
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 / ROUTE	• Antecubital IV access, if possible • 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

REGION 11 CHICAGO EMS SYSTEM MEDICATION TABLE	Medication Name: Albuterol
	Approved: EMS Medical Directors Consortium
	Effective: August 1, 2022

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

REGION 11 CHICAGO EMS SYSTEM MEDICATION TABLE	Medication Name: Amiodarone
	Approved: EMS Medical Directors Consortium
	Effective: August 1, 2022

GENERIC NAME	Amiodarone
TRADE NAME	Pacerone, Cordarone
CLASSIFICATION	Antiarrhythmic
DOSAGE FORMS	150 mg/3ml, Injection, Vial
ACTION(S)	• 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 • Decreases AV conduction and sinus node function
INDICATIONS	• Cardiac arrest with shock refractory ventricular fibrillation (V-Fib) or pulseless ventricular tachycardia (V-Tach)
CONTRAINDICATIONS	• No Contraindications in pulseless cardiac arrest • Do not administer to patients with return of spontaneous circulation/pulse
ADULT DOSE / ROUTE	• 300 mg IV/IO bolus after 3rd defibrillation. Repeat dose of 150 mg IV/IO bolus after 4th defibrillation if patient remains in pulseless shockable rhythm
PEDIATRIC DOSE / ROUTE	• Ventricular Fibrillation/Pulseless Ventricular Tachycardia: Amiodarone 5 mg/kg IV/IO. May Repeat x2. • Max dose 300mg
SIDE EFFECTS	• Common side effects include hypotension, bradycardia, AV block, dysrhythmias, nausea, vomiting • QT prolongation

REGION 11 CHICAGO EMS SYSTEM MEDICATION TABLE	Medication Name: Aspirin
	Approved: EMS Medical Directors Consortium
	Effective: August 1, 2022

GENERIC NAME	Aspirin
TRADE NAME	Ecotrin, Bayer
CLASSIFICATION	Antiplatelet agent
DOSAGE FORMS	81 mg, chewable, bottle
ACTION(S)	• Inhibits synthesis of prostaglandin by cyclooxygenase • 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

REGION 11 CHICAGO EMS SYSTEM MEDICATION TABLE	Medication Name: Atropine - Symptomatic Bradycardia
	Approved: EMS Medical Directors Consortium
	Effective: March 6, 2025

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

REGION 11 CHICAGO EMS SYSTEM MEDICATION TABLE	Medication Name: Atropine – Nerve Agent & Organophosphate Poisoning
	Approved: EMS Medical Directors Consortium
	Effective: August 1, 2022

GENERIC NAME	Atropine: Nerve Agent and Organophosphate Poisoning
TRADE NAME	Atropine, AtroPen, component of Mark 1 Kits and DuoDote
CLASSIFICATION	Anticholinergic, antidote for organophosphate and nerve agent poisoning
DOSAGE FORMS	• Chempak atropine: 0.4mg/ml (20 mg vial) • Duodote: 2 mg atropine • Mark 1 Kit: 2 mg atropine
ACTION(S)	• 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 • Dries secretions
INDICATIONS	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, bradycardia, weakness, shortness of breath, unconsciousness, convulsions, paralysis and apnea
CONTRAINDICATIONS	Known or documented hypersensitivity in non-ACLS/nerve agent/organophosphate scenarios
ADULT DOSE / ROUTE	• Nerve Agent/Organophosphate Poisoning: 2 mg IM and titrate until desired effect (drying of tracheobronchial secretions, improvement of breathing and bradycardia) • No max dose.
PEDIATRIC DOSE / ROUTE	• Pediatric nerve agent/organophosphate exposure dosages are not included in the Medication Table • See Acetylcholinesterase Inhibitors Exposure – BLS/ALS Protocol
SIDE EFFECTS	Decreased secretions/dry mouth, intense facial flushing and hot skin temperature, blurred vision or pupil dilation, photophobia, tachycardia, restlessness

REGION 11 CHICAGO EMS SYSTEM MEDICATION TABLE	Medication Name: Calcium Chloride 10%
	Approved: EMS Medical Directors Consortium
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GENERIC NAME	Calcium Chloride 10%
TRADE NAME	NONE
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
INDICATIONS	• Suspected hyperkalemia with cardiac arrest or dysrhythmia • Renal patients with QRS>0.12 seconds • Crush injuries with victim still entrapped when QRS widens, peaked T waves, or ectopy
CONTRAINDICATIONS	• Known or documented hypersensitivity • Known or suspected digoxin toxicity • 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.

REGION 11 CHICAGO EMS SYSTEM MEDICATION TABLE	Medication Name: Dextrose
	Approved: EMS Medical Directors Consortium
	Effective: August 1, 2022

GENERIC NAME	Dextrose
TRADE NAME	D10, Glucose
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
CONTRAINDICATIONS	• Known or documented hypersensitivity to dextrose, corn or corn products • Hyperglycemia
ADULT DOSE / ROUTE	• Dextrose 10% (D10) 100 mL IV boluses until mental status improves or BS > 60mg/dL • Note: 250 mL of D10 = 25 g glucose
PEDIATRIC DOSE / ROUTE	• All Ages: Dextrose 10% (D10) 5 mL/kg (0.5 g/kg) slow IV/IO using buretrol. Repeat slow IV as indicated • Max 250 ml (25g) • Newly born/Neonate: 15mL of Dextrose 10% (D10) slow IV/IO using buretrol. Repeat as indicated.
SIDE EFFECTS	Hyperglycemia, warmth/burning from IV injection, diuresis, thrombophlebitis, tissue necrosis if IV/IO infiltrates

REGION 11 CHICAGO EMS SYSTEM MEDICATION TABLE	Medication Name: Diphenhydramine
	Approved: EMS Medical Directors Consortium
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GENERIC NAME	Diphenhydramine
TRADE NAME	Benadryl
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
INDICATIONS	• Allergic reactions and anaphylaxis • Urticaria and itching related to allergic reactions
CONTRAINDICATIONS	• Known or documented hypersensitivity • Caution in presence of CNS depressants like alcohol and drugs
ADULT DOSE / ROUTE	50 mg IM or slow IV
PEDIATRIC DOSE / ROUTE	• 1 mg/kg IM or slow IV/IO • Max dose 50 mg
SIDE EFFECTS	Drowsiness/sedation, dizziness, excitable state (paradoxical reaction in some children), wheezing/thickening of bronchial secretions, dry mouth

REGION 11 CHICAGO EMS SYSTEM MEDICATION TABLE	Medication Name: Epinephrine – Allergic Reaction and/or Anaphylaxis
	Approved: EMS Medical Directors Consortium
	Effective: March 6, 2025

GENERIC NAME	Epinephrine: Allergic Reaction and/or Anaphylaxis
TRADE NAME	Epinephrine, Adrenalin, EpiPen, EpiPen Jr
CLASSIFICATION	Adrenergic agonist
DOSAGE FORMS	• 1 mg/1ml, injection, vial • 1 mg/10ml, injection, prefilled syringe (0.1 mg/1 ml)
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/1ml vial) May repeat x1 in 5-10 min. • **ALS Only** – For sustained severity or deterioration: administer 0.1 mg IV (1 ml) of the 1 mg/10 ml prefilled syringe. May repeat every 5 minutes as indicated.
PEDIATRIC DOSE / ROUTE	• **ALS** – 0.01 mg/kg (or 0.01 ml/kg) of 1 mg/1ml vial, IM. Max dose 0.3 mg. May repeat x1 in 5-10 min. For sustained severity or deterioration administer 0.01 mg/kg (or 0.1 ml/kg) of the 1 mg/10ml prefilled syringe, IV/IO May repeat every 5 minutes as indicated. • **BLS** - If length < 48 inches, 0.15 mg (or 0.15 ml) of 1 mg/1ml vial, IM If length ≥ 48 inches, 0.3 mg (or 0.3 ml) of 1 mg/1ml vial, IM If second dose indicated, contact OLMC
SIDE EFFECTS	Palpitations, tachycardia, hypertension, angina, anxiety, tremors, headache

REGION 11 CHICAGO EMS SYSTEM MEDICATION TABLE	Medication Name: Epinephrine – Cardiac Arrest
	Approved: EMS Medical Directors Consortium
	Effective: March 6, 2025

GENERIC NAME	Epinephrine: Cardiac Arrest
TRADE NAME	Epinephrine
CLASSIFICATION	Adrenergic agonist
DOSAGE FORMS	1 mg/10 ml, Injection, Prefilled syringe (0.1 mg/1 ml)
ACTION(S)	Stimulates alpha and beta receptors increasing coronary and cerebral perfusion pressure during CPR
INDICATIONS	Cardiac arrest
CONTRAINDICATIONS	None in cardiac arrest.
ADULT DOSE / ROUTE	• 1 mg of the 1 mg/10ml prefilled syringe, IV/IO • Repeat every 3-5 min while pulseless
PEDIATRIC DOSE / ROUTE	• 0.01 mg/kg (or 0.1 ml/kg) of the 1 mg/10 ml prefilled syringe, IV/IO • Repeat every 3-5 min while pulseless
SIDE EFFECTS	None in cardiac arrest

GENERIC NAME	Epinephrine: Neonatal Resuscitation
TRADE NAME	Epinephrine
CLASSIFICATION	Adrenergic agonist
DOSAGE FORMS	1 mg/10 ml, Injection, Prefilled syringe (0.1 mg/1 ml)
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 / ROUTE	• 0.3 ml of the 1 mg/10 ml prefilled syringe, IV/IO • Repeat every 3-5 minutes while pulseless
SIDE EFFECTS	None in cardiac arrest

REGION 11 CHICAGO EMS SYSTEM MEDICATION TABLE	Medication Name: Epinephrine – Pediatric Bradycardia Approved: EMS Medical Directors Consortium Effective: March 6, 2025

GENERIC NAME	Epinephrine: Pediatric Bradycardia
TRADE NAME	Epinephrine
CLASSIFICATION	Adrenergic agonist
DOSAGE FORMS	1 mg/10 ml, Injection, Prefilled syringe (0.1 mg/1 ml)
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 / ROUTE	• 0.01 mg/kg (or 0.1 ml/kg) of the 1 mg/10 ml prefilled syringe, IV/IO (Max 1 mg) • Repeat every 3-5 min during bradycardia/cardiorespiratory compromise
SIDE EFFECTS	Palpitations, tachycardia, hypertension, angina, anxiety, tremors, headache

REGION 11 CHICAGO EMS SYSTEM MEDICATION TABLE	Medication Name: Epinephrine – Severe Respiratory Distress
	Approved: EMS Medical Directors Consortium
	Effective: March 6, 2025

GENERIC NAME	Epinephrine: Severe Respiratory Distress
TRADE NAME	Epinephrine, Adrenalin
CLASSIFICATION	Adrenergic agonist
DOSAGE FORMS	1 mg/1ml, 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 (or 0.3 ml) of the 1 mg/1ml vial, IM
PEDIATRIC DOSE / ROUTE	• 0.01 mg/kg (or 0.01 ml/kg) of the 1 mg/1ml vial, IM • Maximum 0.3 mg per single dose
SIDE EFFECTS	Palpitations, tachycardia, hypertension, angina, anxiety, tremors, headache

REGION 11 CHICAGO EMS SYSTEM MEDICATION TABLE	Medication Name: Fentanyl
	Approved: EMS Medical Directors Consortium
	Effective: August 1, 2022

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

REGION 11 CHICAGO EMS SYSTEM MEDICATION TABLE	Medication Name: Glucagon
	Approved: EMS Medical Directors Consortium
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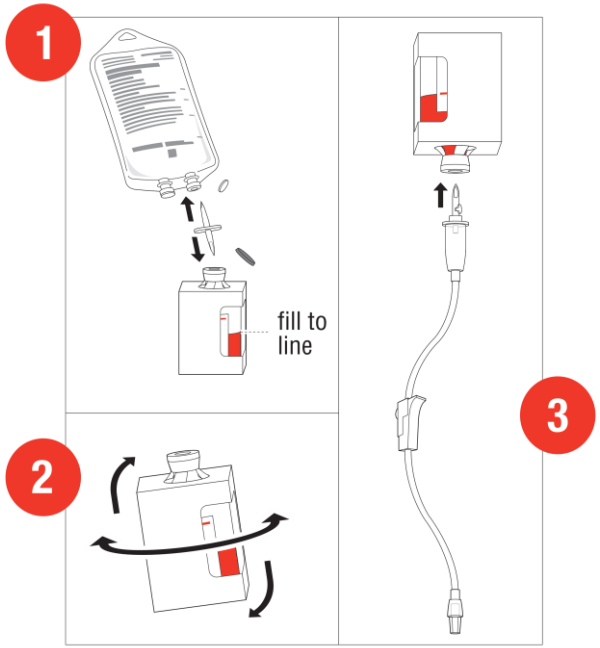
GENERIC NAME	Glucagon
TRADE NAME	GlucaGen, Glucagon
CLASSIFICATION	Glucose elevating agent
DOSAGE FORMS	1 mg Solvent with 1 mL solute (kit only), injection
ACTION(S)	Causes a breakdown of stored glycogen to raise blood glucose levels
INDICATIONS	Hypoglycemic patient without venous access and inability to administer oral glucose paste (see Glucose, oral)
CONTRAINDICATIONS	Known or documented hypersensitivity to glucagon
ADULT DOSE / ROUTE	1 mg IM/IN
PEDIATRIC DOSE / ROUTE	• ≤ 8 yo = 0.5 mg IM • > 8 yo = 1 mg IM
SIDE EFFECTS	Nausea/vomiting, dizziness, headache

REGION 11 CHICAGO EMS SYSTEM MEDICATION TABLE	Medication Name: Glucose Gel
	Approved: EMS Medical Directors Consortium
	Effective: August 1, 2022

GENERIC NAME	Glucose Gel
TRADE NAME	Glutose 15
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)
PEDIATRIC DOSE / ROUTE	• 1 mo- 4 years: 1/4 tube • 4- 8 years: 1/2 tube • >8 years: 1 tube
SIDE EFFECTS	Nausea, potential for aspiration in patients with impaired airway reflexes

GENERIC NAME	**Hydroxocobalamin**
TRADE NAME	Cyanokit
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 AND • 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 / ROUTE	• IV infusion • 70 mg/kg (reconstitute concentration is 25 mg/mL) • Max dose 5 grams (one kit)
SIDE EFFECTS	• Risk of anaphylaxis or other hypersensitivity reaction: Common reactions include new onset chest tightness, edema, urticaria, pruritis, dyspnea, or rash. • Risk of renal injury: Acute renal failure with acute tubular necrosis, renal impairment, and urine calcium oxalate crystals have been reported after Cyanokit administration. • Risk of substantially increased blood pressure: 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. • Reconstitute: Place the vial in an upright position. Add 200 ml of 0.9% Sodium Chloride Injection to the vial using the transfer spike. Fill to the line.

	• Mix: The vial should be repetitively inverted or rocked, not shaken, for at least 60 seconds prior to infusion. Visually inspect the solution for particulate matter and color prior to administration. Discard solution if particulate matter is present or solution is not dark red. • Infuse vial: Using vented intravenous tubing, hang and infuse over 15 minutes. 

REGION 11 CHICAGO EMS SYSTEM MEDICATION TABLE	Medication Name: Ipratropium
	Approved: EMS Medical Directors Consortium
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GENERIC NAME	Ipratropium
TRADE NAME	Atrovent
CLASSIFICATION	Bronchodilator, Anticholinergic
DOSAGE FORMS	0.02%, 0.5 mg/2.5 mL, inhalation, vial
ACTION(S)	• Anticholinergic agent • Results in bronchial smooth muscle relaxation and bronchodilation
INDICATIONS	• Asthma • Bronchitis with bronchospasm • 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
SIDE EFFECTS	Common side effects include palpitations, tachydysrhythmia, anxiety, tremors, nausea/vomiting Rarely, paradoxical bronchospasm can occur

GENERIC NAME	Magnesium
TRADE NAME	Magnesium Sulfate (MgSO4)
CLASSIFICATION	Electrolyte
DOSAGE FORMS	Magnesium Sulfate in Water for Injection 2 grams/50 ml (40 mg/ml), Intravenous Bag
ACTION(S)	1. Eclampsia and Pre-Eclampsia: Blocks calcium flow to receptors in the brain which causes cerebral vasodilation and decreases the neuro-excitation that causes eclamptic seizures 2. Bronchospasm: Relaxation smooth muscle in constricted bronchioles 3. Torsades de Pointes: Stabilizes the cardiac membrane
INDICATIONS	1. Eclampsia and Pre-Eclampsia – Prevention and control of seizures in pre-eclampsia and eclampsia 2. Bronchospasm 3. Torsades de Pointes
CONTRAINDICATIONS	Hypersensitivity to magnesium
ADULT DOSE / ROUTE	1. For Eclampsia and Pre-Eclampsia: Administer 4 grams in 100 ml water (2 bags), IV or IO infusion over 15 minutes (goal) 2. For Bronchospasm: Administer 2 grams in 50 ml water infusion over 10 minutes 3. For Torsades de Pointes: Administer 2 grams in 50 ml water as a slow IV push (over 1-2 minutes)
PEDIATRIC DOSE / ROUTE	For Bronchospasm: Administer 40 mg/kg over 10 minutes
SIDE EFFECTS	Minimal side effects with standard doses, facial flushing, and hypotension with rapid administration

REGION 11 CHICAGO EMS SYSTEM MEDICATION TABLE	Medication Name: Midazolam
	Approved: EMS Medical Directors Consortium
	Effective: August 1, 2022

GENERIC NAME	Midazolam
TRADE NAME	Versed
CLASSIFICATION	Benzodiazepine, sedative-hypnotic, anticonvulsant
DOSAGE FORMS	10 mg/2 mL, injection, vial
ACTION(S)	• Suppresses seizures, causes sedation and muscle relaxation • Enhances effects of GABA neurotransmitter
INDICATIONS	• Active seizure • Behavioral emergency not responsive to verbal de-escalation
CONTRAINDICATIONS	• 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 medication use
ADULT DOSE / ROUTE	• 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** 5mg IN/IM (Age > 60 contact OLMC for approval)
PEDIATRIC DOSE / ROUTE	• Seizures 0.1 mg/kg slow IV/IO/IM or 0.2 mg/kg IN. If seizures continue > 5 minutes, may repeat X1. • Maximum total dose: < 6 years = 6 mg ≥ 6 years = 10 mg
SIDE EFFECTS	Excessive CNS depression, apnea, amnesia, confusion, ataxia, hypotension, euphoria, and rarely paradoxical reactions (aggressiveness, restlessness)

REGION 11 CHICAGO EMS SYSTEM MEDICATION TABLE	Medication Name: Naloxone
	Approved: EMS Medical Directors Consortium
	Effective: August 1, 2022

GENERIC NAME	Naloxone
TRADE NAME	Narcan
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
ADULT DOSE / ROUTE	• ALS 1-2 mg IV/IO/IM or 2mg nebulized OR IN • BLS 2 mg IN
PEDIATRIC DOSE / ROUTE	• ALS ≤ 20 kg: 0.1 mg/kg IV/IO/IM/IN up to 2 mg. >20 kg: 2 mg IV/IO/IM/IN • BLS 0-4 years old: 1 mg IN >4 years old 2 mg IN
SIDE EFFECTS	Withdrawal symptoms (agitation, nausea, vomiting), tachycardia, hypertension, seizures.

REGION 11 CHICAGO EMS SYSTEM MEDICATION TABLE	Medication Name: Nitroglycerin
	Approved: EMS Medical Directors Consortium
	Effective: August 1, 2022

GENERIC NAME	Nitroglycerin
TRADE NAME	Nitrostat
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
CONTRAINDICATIONS	• 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 • Caution in patients with concern for inferior wall/right ventricular myocardial infarction
ADULT DOSE / ROUTE	• **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 continued CP if systolic BP ≥ 100. (Max 3 doses)
PEDIATRIC DOSE / ROUTE	N/A
SIDE EFFECTS	Headache, hypotension, nausea/vomiting, flushing, orthostatic hypotension/syncope

REGION 11 CHICAGO EMS SYSTEM MEDICATION TABLE	Medication Name: Ondansetron
	Approved: EMS Medical Directors Consortium
	Effective: August 1, 2022

GENERIC NAME	Ondansetron
TRADE NAME	Zofran
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
CONTRAINDICATIONS	• Known or documented hypersensitivity • Congenital heart surgery or congenital heart disease • Severe hepatic impairment • 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 / ROUTE	• > 1 year old and 10 kg: consider 0.15 mg/kg slow IV max dose 4mg • > 25 kg: 4 mg oral disintegrating tablet (ODT). No oral dose for < 25 kg
SIDE EFFECTS	• Diarrhea, headache, lightheadedness. • May prolong QT interval

REGION 11 CHICAGO EMS SYSTEM MEDICATION TABLE	Medication Name: Oxygen
	Approved: EMS Medical Directors Consortium
	Effective: August 1, 2022

GENERIC NAME	Oxygen
TRADE NAME	N/A
CLASSIFICATION	Medical gas
ACTION(S)	Raises the amount of oxygen in the blood and, therefore, the amount delivered to the tissues
INDICATIONS	• Hypoxemia • Respiratory distress • Shock (decreased oxygenation of tissues) from any cause • Smoke inhalation • Carbon monoxide poisoning • 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 / ROUTE	• For any critically ill patient (respiratory distress, shock, smoke inhalation, carbon monoxide poisoning or cardiac arrest) 15 L per minute non-rebreather mask
SIDE EFFECTS	• Drying and irritating to mucous membranes • Mild euphoria

REGION 11 CHICAGO EMS SYSTEM MEDICATION TABLE	Medication Name: Pralidoxime
	Approved: EMS Medical Directors Consortium
	Effective: August 1, 2022

GENERIC NAME	Pralidoxime
TRADE NAME	2-PAM
CLASSIFICATION	Oxime, antidote for organophosphate and nerve agent poisoning
DOSAGE FORMS	• Duodote: 600 mg IM • Mark 1 Kit: 600 mg IM • 20 ml vial containing 1 gram powder (50 mg/ml) (must be reconstituted with sterile water).
ACTION(S)	• Binds to organophosphates and breaks alkyl phosphate-cholinesterase bond to restore activity of acetylcholinesterase
INDICATIONS	• 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. • 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 / ROUTE	• Pediatric nerve agent/organophosphate exposure dosages are not included in the Medication Table. • See Acetylcholinesterase Inhibitors Exposure – BLS/ALS Protocol
SIDE EFFECTS	Hypertension, tachycardia, dizziness, blurred vision

REGION 11 CHICAGO EMS SYSTEM MEDICATION TABLE	Medication Name: Sodium Bicarbonate 8.4%
	Approved: EMS Medical Directors Consortium
	Effective: August 1, 2022

GENERIC NAME	**Sodium Bicarbonate 8.4%**
TRADE NAME	N/A
CLASSIFICATION	Electrolyte replacement, alkalinizing agent
DOSAGE FORMS	50 mEq/50 ml, injection, prefilled syringe
ACTION(S)	• Buffers acidosis in chronic renal failure/dialysis patients who are unstable or in cardiac arrest • Shifts potassium into cells • Slows uptake of cyclic antidepressants.
INDICATIONS	• 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. • Adult crush injuries with victim still entrapped
CONTRAINDICATIONS	None for indications as listed
ADULT DOSE / ROUTE	• Adults - Cardiac Arrest/Wide Complex Tachycardia: Sodium Bicarbonate 8.4% 50 mEq/50 mL injection of prefilled syringe IV/IO • Adultsd - Crush injury with victim still entrapped: Sodium bicarbonate 8.4% 1 mEq/kg (maximum dose of 50 mEq) IV/IO
PEDIATRIC DOSE / ROUTE	Call OLMC
SIDE EFFECTS	Minimal when used as indicated.

GENERIC NAME	Tranexamic acid
TRADE NAME	Cyklokapron; Lysteda
CLASSIFICATION	Antifibrinolytic Agent; Antihemophilic Agent; Hemostatic Agent; Lysine Analog
DOSAGE FORMS	1000 mg / 10 mL, Injection, Vial
ACTION(S)	Forms a reversible complex that displaces plasminogen from fibrin resulting in inhibition of fibrinolysis which stabilizes already formed blood clots.
INDICATIONS	1. Injury within 3 hours with any of the following: • Trauma (blunt or penetrating) with signs of hemorrhagic shock per Trauma Field Triage Criteria • Penetrating torso trauma • Significant blood loss • Amputation proximal to the ankle or wrist 2. Obstetric hemorrhage with signs of shock
CONTRAINDICATIONS	• Hypersensitivity to tranexamic acid • Injury ≥ 3 hours • Traumatic arrest
ADULT DOSE / ROUTE	For Trauma: 2 grams IV/IO push For Obstetric: 1 gram IV/IO push
PEDIATRIC DOSE / ROUTE	<u>For Trauma:</u> • Age < 12 years: 15 mg/kg IV/IO push. Maximum dose 1 gram • Age 12-15 years: 1 g IV/IO push • Age ≥ 16 years: 2 g IV/IO push
SIDE EFFECTS	Seizure, headache, abdominal pain